IEI and IEI Worldwide

IEI Technology Corp., a leading industrial computing service provider, integrates computing platforms and customization services. IEI supplies hundreds of industrial computer boards, systems and peripherals for various customer applications, in addition to supporting OEM/ODM services. By reducing customers' design time and accelerating product development, IEI helps customers advance beyond their market competition.

IEI has an innovative R&D team, effective management system, quality assurance and over 400 products passing through more than 100 distributors in order to provide customers with the fastest time-to-market services all over the world.

China

IEI Technology (Shanghai) Co., Ltd.

515, Shen Fu Rd., Xin Zuang Industrial
Develop Zone, Shanghai, 201108, China
http://www.ieiworld.com.cn

Headquarters

IEI Technology Corp.

No. 29, Zhongxing Rd., Xizhi Dist.,
New Taipei City 221, Taiwan
http://www.ieiworld.com

United States

IEI Technology USA Corp.

138 University Parkway, Pomona, CA 91768
http://www.usa.ieiworld.com

AFOLUX
Panel PC

Medical
Display
Solutions

Mobile
Solution

Industrial
PPC

AFOLUX Vertical
Market Panel PC

IEI Product and Market Coverage

Comprehensive quality assurance tests are performed on all IEI products throughout the product development cycle. Testing is initiated in the research and development phase of a product and continued throughout the manufacturing phase. Quality assurance testing throughout the product development cycle ensures all IEI products are able to provide stable performance in the industrial environments they are used.

■ In-house Reliability Testing Facilities

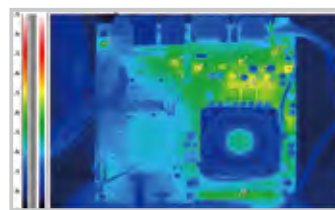Temperature Testing

ESD Testing

Vibration Testing
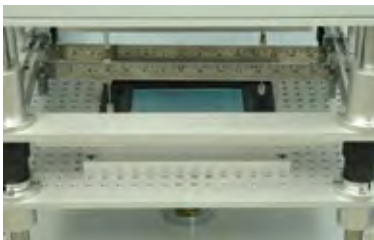

Power Consumption Testing

IP 65 Testing

Drop Testing

Thermal Testing

Safety Testing

■ Mobile System In-house Reliability Testing Facilities
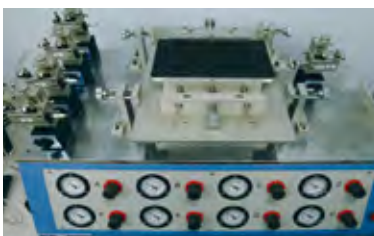
iEiMobile®

Keypad Life Test/Touch Panel Tap Test

Presses the keypad button and taps the touch panel 1,000,000 times using a test fixture. Measures the force and pressure of the keypad button and touch panel to observe potential damage.

I/O Connector and Connector Rubber Insert/ Remove Test

Ensures the I/O functions after 5000 times.

Touch Panel Scratch Test

Ensures the touch panel resists deformation, surface defects, color-off, spots and scratches by testing the surface 15000 times.

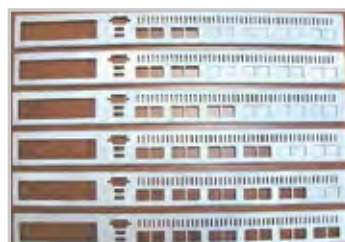**Sunshine Super Long-life Weather Meter**

Simulates sunlight environments to estimate the lifespan of the materials.
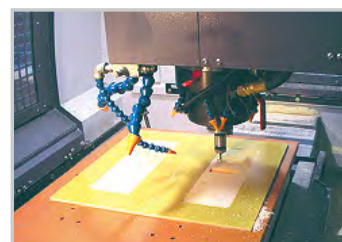
Flexible Customization Service

Example:

Front panel customization according to expansion adaptor selections

Front panel sample by in-house CNC in 2 days

Complete Line of Innovative Display Solutions

Rich Variety to Match Diversified Applications

IEI invests significantly in research and development to provide more consumer-oriented and application-specific products. Extensive design and production experience allows IEI to create products for a diverse range of industries including health care, retail, factory and home automation.

1. Mobile Systems

iEMobile®

■ Tablet PC

ICEFIRE 2
New
RFID 123456789

Mobile Clinic Assistant
- 10.4" TFT XGA LCD
- Intel® Atom™ N2600 CPU
- Windows® Embedded Standard 7 OS

ICEFIRE-ET
New

Enterprise Tablet PC
- Intel® Atom™ D525 dual-core 1.8GHz CPU
- Microsoft ® Windows Embedded Standard 7 P OS
- Wi-Fi, Bluetooth 2.1 and Ethernet LAN

ICECARE
New

Mobile Field Assistant
- TI OMAP3 AM3715 CPU and Android 2.3 OS
- 1D Laser/ 2D Imager Scan Engine, RFID Reader
- Bluetooth 2.1 , Wi-Fi, 3.5G wireless with built-in GPS
- IP54 and 1M Drop Test

■ Industrial PDA

MODAT-100
Thermal Printer

3.5" Mobile POS/Ticketing
- Marvell® PXA 310 624MHz CPU
- Built-in Windows® Mobile 6.5 OS
- 1D Barcode reader, SCR, MSR and 2" thermal Printer
- Wi-Fi, Bluetooth 2.1 , 3.5G and GPS

MODAT-200
Order Entry PDA
- 667 MHz ARM11 CPU
- Built-in Windows® Mobile 6.5 OS/Windows® CE 6.0 Optional
- USB 1.1 Host/Client 2.0
- Built-in Wi-Fi and Bluetooth wireless communication

MODAT-335A
New
RFID 123456789

Field Service Terminal
- Marvell® PXA 310 624MHz CPU
- Built-in Windows® Mobile 6.5 OS
- 1D/2D Barcode reader, RFID, Handle Grip and UHF
- Wi-Fi, Bluetooth 2.1 , 3.5G and GPS

■ In-Vehicle Computing

VTT-1000-WiFi
New

Vehicle Tracking Terminal
- 3.5" TFT LCD touch screen
- Embedded with ARM9 400MHz CPU
- Pre-installed Windows® CE 6.0
- Built-in GSM/GPRS and Wi-Fi

iKarPC-Lite
New

7" In-Vehicle Computer
- TI Sitarta ARM Cortex A8 CPU
- Android 2.3.4 OS
- Bluetooth, Wi-Fi, 3G and GPS
- CAN-bus supports OBD-II

AVL-3000
GPS CAN UHF

Auto Data Server
- Intel® Atom™ N2600 Cedar View
- Microsoft ® Windows Embedded Standard 7 E OS
- UHF RFID Reader and 4 Channel Video Capture
- CAN-bus support OBD-II/FMS/J1939

2. Medical Solutions

PACSmate®

■ Diagnostic Monitor

12bit **32bit** **DICOM**

TAIWAN EXCELLENCE 2008

- 5MP/3MP/2MP 12-bit Grayscale Diagnostic Monitors
- 3MP/2MP 30-bit High-Brightness Color Diagnostic Monitors
- 4MP 30" Dual-Input Color Diagnostic Monitor
- 2MP 20.1" Grayscale & Color Image Review Monitors

MMD Series

Reviewing Color

■ Medical Panel PC
- 15"~19" All-in-One Medical Panel PC Platform
- Slim & Compact Size for Easy Installation
- Medically Certified for Safety Requirements

POC Series

■ Medication Cart
- Battery System Integrated for max. 8hrs operation time
- Easy-to-Use & Easy-to-Clean
- Flexible Configuration for Storage Space

pCART Series

■ Interactive Bedside Station
New
- 2nd Generation Intel Core i platform
- 19" PMVA Wide Viewing Angle LED backlight display
- Video Conferencing, Digital TV, Nursing Call for Bedside Applications
- RFID, Smart Card Reader, DICOM GSDF Compliant for Clinical Applications
- Visual Annunciation with LED Dash Light

IBS Series

3. Display Systems

■ X86-Based Panel PC

Light Industrial Panel PC

General Purpose

AFL2-W21A

New

AFOLUX GEN 2 Series
- W7"~W21.5" stylish flat bezel design with plastic housing
- Resistive touch or projected capacitive touch for option
- EM/Mifare RFID reader built-in
- Front panel IP 64 protection

Vertical Market

AFL-412A

AFOUX Vertical Market Series
- In-wall mounting easy to install with changeable front bezel
- Webcam/speaker/digital microphone built-in

Heavy Industrial Panel PC

General Purpose

PPC-5152A

PPC Series
- 8.4"~19" rugged Panel PC with metal housing
- IP 64/IP65 protection
- Flexible expansion interface

Vertical Market

UPC-V315

New

PPC Vertical Market Series
- Redundant power backup
- Sunlight readable LCD
- I65/I67 complete waterproof

■ RISC-Based Panel PC

4.3"
Multi-Touch

IOVU-430M

IOVU series
- RISC-based processor
- Built-in Windows® CE embedded OS
- Fanless system
- IP 64 front panel compliant

---

4. Display Monitor

SRM-150GS

- **DM series** - Industrial monitors
- **SRM series** - Sunlight readable monitors
- **TDM series** - Extended temperature display monitors
- **LCD-KIT Series** - Open frame LCD monitors
- **AFOLUX monitor** - Multiple video input monitors

5. Display Workstation

WS-612GS

- **WS series** -
  Heavy-duty and expandable with different CPU performance configuration
- **RPC/EC series** -
  Easy rack-mount industrial workstation

6. Display Console

LKM-9268

- **LKM series** -
  1 or 8 Port LCD KVM switch

---

7. Video Wall Controller/Splitter

iVW-122

■ Full HD (1080P) Resolution Video Wall Box
- Resolution up to 1920 x 1200
- Video wall array: 2 x 2 / 3 x 3
- Supports GeniMask bezel masking technology
- Digital signage layout designer, server and player support

GeniMask™

iVW-FD-122

■ Ultra High Resolution (Above 1080P) Video Wall Box
- Resolution up to 3840 x 2400 / 4080 x 2304 / 4096 x 768
- Video wall controller* Supported video wall array: 2 x 2 / 3 x 3 / 1 x 3 / 1 x 4 / 3 x 1 / 4 x 1 / 1 x 2 (LCD) / 1 x 2 (projector)
- Supports GeniMask bezel masking technology
- Digital signage layout designer, server and player suppport

Solution Table

Solution	Mobile System			X86-Based Panel PC			RISC-Based Panel PC	Display Monitor	Display Workstation	Display Console	Medical Display Solutions		
	Tablet PC	In-Vehicle Computing	Industrial PDA	AFOLUX Gen II	AFOLUX PPC	PPC	IOVU SERIES	DM SERIES	WS SERIES	LKM SERIES	Diagnostic Mono Display	Diagnostic Color Display	Medical Panel PC
LCD SIZE	8.0"/10.4"	8.0"	2.8"/3.5"	7"~W21.5"	5.7"~W19"	6.5"~19"	4.3"~W7"	6.5"~19"	10.4"~17"	15"/17"	W20.1"/ 21.3"	21.3"/30"	15"~19"

2013 New Product Highlight

FULL HD 21.5" AFOLUX 2 PPC

AFL2-W21A-H61 Introduction

AFL2-W21A features an all-in-one computing system equipped with 21.5"(16:9) wide format 1920x1080 FHD resolution, projective capacitive based LCD panel. Versatile key peripheral functions built-in for diversified self-service and promotion usage in different application areas, such as retailing, hotel, education and public space and so on.

Flat and Narrow Bezel Design
- Complete flat bezel, easy to clean , avoid dust accumulation
- Narrow bezel design and symmetric bezel width allows landscape & Portrait screen mode support different application.
- Stylish outlook

Innovation "Light Fanless" System
- Real-time monitors environmental temperature by EC control K-type thermal couple built-in
- Smart Fan function automatically activated by light fanless control setting
- Efficiently manage system

NFC/RFID-ready System
- Optional NFC payment device allows transaction between consumer handheld devices
- EM/Mifare RFID module for option

Interaction with System
- Visual management by LED dash board
- Fast hot key setting
- WEBCAM/MIC./DisplayPort bi-direction communication

AFL2 PPC Product Family

IEI announces its new strategy for the AFL2-series product family with the advent of the new member for the AFL2-W21A of products. From small to large size, entry performance to high performance, IEI one-stop-shopping strategy lets you easier to make the best buying decision.

- W7 to 21.5-inches full-range of display sizes
- Providing projective capacitive touch solutions for 15, wide 15, wide 7, wide19 and 21.5-inches, no matter you need, be it scenario control, interactive touch computers, there is sure to be a perfect touch solution which is the right one for your project needs.

Performance (Light Fanless)
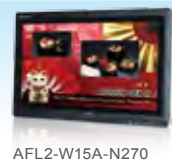
| AFL2-W21A-H61 | AFL2-W19A-H61 | AFL2-17A-H61 | AFL2-W15B-H61 | AFL2-15A-H61 |

Mainstream

| AFL2-12A-D525 | AFL2-12A-HM65 |

Entry (Fanless)

| AFL2-W07A-N26 | AFL2-08A-N26 | AFL2-10A-N28 | AFL2-W10A-N28 | AFL2-W15A-N270 |

15" UPS Panel PC with Intel® 3rd Generation Core i3

Fanless Slim Body!

UPC-V315-QM77 Introduction

Powerful Management by UPS Function

The UPC product family provides the UPS (Uninterruptible Power Supply) function, ensuring the UPC products reliably used for automation and vehicle application. The built-in battery allows standby power for data backup and management under sudden power shut-down situation, increasing redundancy for real-time record processing.

Full IP 65 | Touch Screen | Redundant Dual DC | Fanless | -20°C ~ 60°C | Wireless 802.11 b/g/n | Speakers | Microphone | Camera

Redundant DC Backup

PWR1 : 9 V (+/-0.3 V) ~ 36 V
PWR2 : 10.5 V (+/-0.3 V) ~36 V

-20°C ──────── **60°C**

PWR2   PWR1

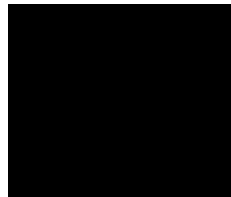## Fully IP65 Water and Dust Resistance

Sealed aluminum alloy body tightly screwed by secured M4 screws and I/O connectors is protected by cover and waterproof rubber coil.

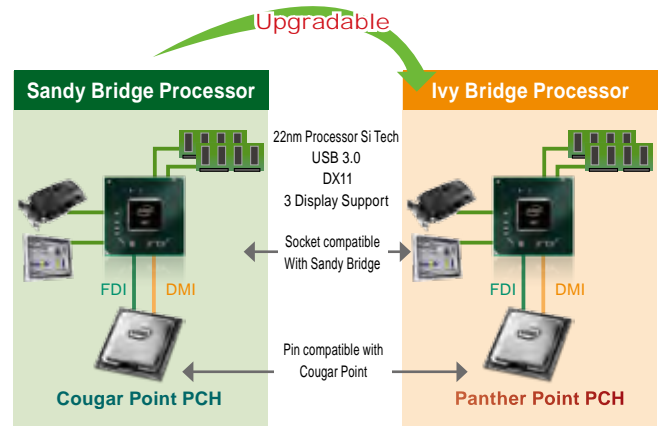Block out | Slaughter House Factory | Forklift Management | Flower Market Management

The UPC-V315 is a high performance fanless PC with Intel® 3rd Generation Core i3-3217UE and DDR3 up to 8 GB, and support DirectX11, OpenGL3.1, OpenCL1.1, dual independent display among LVDS/VGA/HDMI. Reliable system design especially ideal for harsh environment application.

45nm Process Technology		32nm Process Technology		22nm Process Technology
Penryn	**Nehalem**	**Westmere**	**Sandy Bridge**	**Ivy Bridge**
Intel® Core™ Microarchitecture	NEW Intel® Microarchitecture (Nehalem)	Intel® Microarchitecture (Nehalem)	NEW Intel® Microarchitecture (Sandy Bridge)	Intel® Microarchitecture (Sandy Bridge)
TICK	TOCK	TICK	TOCK	TICK

Ivy Bridge:
First Microprocessor on Intel's latest 22nm Process Technology

Upgradable

Sandy Bridge Processor → **Ivy Bridge Processor**

22nm Processor Si Tech
USB 3.0
DX11
3 Display Support

Socket compatible With Sandy Bridge

FDI   DMI

Pin compatible with Cougar Point

FDI   DMI

Cougar Point PCH   **Panther Point PCH**

Product	UPC-12A-GM45	UPC-V312A-D525	UPC-15A-QM77
LCD Size	12.1" (4:3)	12.1" (4:3)	15" (4:3)
Brightness	600 nits/1000 nits	600 nits	400 nits
Platform	Intel® GM45	Intel® D525	Intel® QM77
UPS	Yes, Built-in battery for UPS function	Yes, external lead acid battery	Yes, external lead acid battery
Featured I/O	4 x COM 6 x USB 2.0 2 x GbE LAN 1 x VGA	1 x COM 4 x USB 1 x GbE LAN 1 x VGA 2.0	4 x COM 4 x USB 2 x GbE LAN 1 x VGA 2.0 1 x HDMI
Expansion	Either one PCI or one PCIe expansion slot	N/A	N/A
IP Protection	Front IP65	Complete IP65	Complete IP65

Short-range Communication Technologies

Comparison of short-range communication technologies

Technology	Standard	Frequency	Range	Data Rate
RFID	ISO 10536	13.56MHz	0 ~ 2 mm	9.6 Kbps
	ISO 14443	13.56MHz	0 ~ 10 cm	106, 212, 424Kbps
	ISO 15693	13.56MHz	0 ~ 70 cm	26 Kbps
NFC	ECMA-340, 352, 356, ISO/IEC 18092, 2148, 1ETSI TS 102 190	13.56MHz	0 ~ 20cm	106, 212, 424Kbps
Infrared	IrFM	405 THz - 300 GHz	20 ~ 30cm low power to 1 ~ 2m	9.6 Kbps ~ 4 Mbps
Bluetooth	Bluetooth v1.2	2.4GHz	10 ~ 80m	720Kbps

RFID: ISO Standards

ISO Standard	Band	Wavelength	Application
ISO 18000-2	Under 135KHz	LF	Animal identification, ID cards, factory data collection
ISO 11784/5	Under 135KHz	LF	Animal identification, ID cards, factory data collection
ISO14443A/B	13.56MHz	HF	Smart cards, transportation
ISO 15693	13.56MHz	HF	ID cards
ISO 18000-3	13.56MHz	HF	Logistics
ISO 18000-7	433MHz	UHF	Cargo
ISO 18000-6	860-960MHz 922-928MHz	UHF	Global supply chain management
ISO 18000-4	2.45GHz	MW	Real time location system, electronic toll collection

What is NFC?

- NFC is an open-platform technology, which is being standardized in the NFC Forum.
  - Initiated by Philips(Mifare) , Sony(Felica), Samsung, Nokia to form NFC(Near Field Communication) alliance.
- NFC is based on and extends on RFID. It operates on 13.56 MHz frequency.
  - Compatible with today's field proven contactless Mifare® and FeliCa™ smart cards
- NFC communication range is up to 10 cm.
- NFC standard supports different data transmission rates such as 106kbps, 212 kbps, and 424 kbps.

■ NFC Tag

The tag is a thin simple device containing antenna and small amount of memory. It is a passive device, powered by magnetic field. Depending on the tag type the memory can be read only, re-writable, and writable once.

■ NFC Reader

The reader is an active device, which generates radio signals to communicate with the tags. The reader powers the passive device in case of passive mode of communication.

NFC-related specifications

	ISO 14443		NFCIP-1	MIFARE	FeliCa	
Command protocol	ISO 14443-4		NFCIP-1 command protocol	MIFARE command protocol	ISO 18092	Felica
Framing and low-level protocol	ISO 14443-3-A	ISO 14443-3-B	ISO 14443-3	ISO 14443-3-A	ISO 14443-3	
Radio	ISO 14443-2-A	ISO 14443-2-B	ISO 14443-2	ISO 14443-2-A	ISO 14443-2	

■ NFC Operating Modes

Card Emulation mode
An NFC-enabled device acts as reader when in contact with tags. In this mode, the device can act as a tag or contactless card for existing readers.

Reader/Writer mode
The NFC enabled device can read or write data to any of the supported tag types in a standard NFC data format.
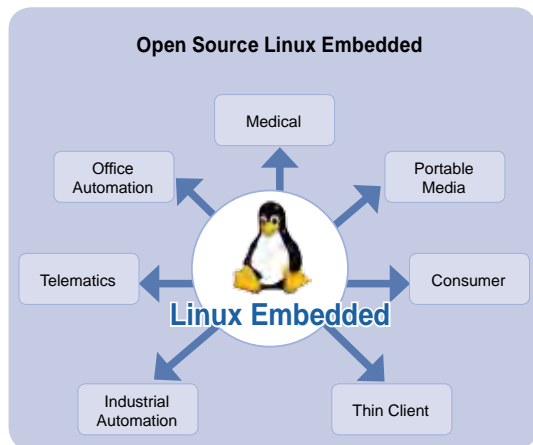
Peer-to-peer mode
Two NFC-enabled devices can exchange data. Peer-to-Peer mode is standardized on the ISO/IEC 18092 standard.

Complete Embedded OS Support

IEI embedded systems offer customer the turnkey OS solution to reduce OS platform design efforts and accelerate the product time to market. IEI product development focus on consistently offering customers the leading and innovative industrial computing products, therefore IEI support Linux Embedded and the complete range of Microsoft Windows Embedded solutions to the embedded computing market. This support optionally includes the licensed embedded OS , and the CD pack contains all necessary SDK (Software Development Kit) materials and user manuals.

1. IEI Linux Embedded

Open Source Linux Embedded

- Medical
- Portable Media
- Consumer
- Thin Client
- Industrial Automation
- Telematics
- Office Automation

Linux Embedded

2. Microsoft Windows® Embedded Family

Flexibility, Source Level Control, Multiple CPU Architectures

Fixed Features, Express Development, Windows Desktop Compatibility

3. Windows® Embedded Categories

	Windows® Embedded Enterprise	Windows® Embedded Standard 7	Windows® Embedded Compact 7
On-device ROM	XP Pro: 128 MB RAM; 1.5 GB Hard Drive Vista: 1 GB RAM; 40 GB Hard Drive Windows 7: 1GB RAM (32Bit) 2GB RAM Windows 7: 1GB (64Bit), 16GB Hard Drive	Reduced Footprint 12,000 Individual Components 560MB at smallest	700 components, 500KB at smallest
Supported Processors	XP Pro: 300 MHz 32-bit (X86) Vista: 1 GHz 32-bit (X86)/64-bit(X64) Windows 7: 1GHz 32Bit (X86)/ 64-Bit (X64)	X86, X64	ARM MIPS SH4 X86
Real-Time OS	Yes, Via Third Party Plug-in	Yes, Via Third Party Plug-in	32-bit Native Real-Time Support, Unified Kernel
Embedded Device Management	No	Yes, with Windows Embedded Device Manager 2011	No
Application Support	Existent or Customized Win 32 Applications or Win 64 Applications (on 64-bit editions of Vista and Windows® 7)	Full Win 32 Application compatibility	Customized Win 32 Applications
Application	Control, Automation, ATM	Bulletin, Automation, Surveillance, Networked Media Devices	Digital Media Adapter, GPS navigation, terminal client device

	XP Professional	XP Professional for Embedded Systems
Function	Full XP Professional	Full XP Professional
Authorization Type	PC OEM	Embedded Channels
Life Cycle (end date)	2009/1/31	2016/12/31
Technical Support	No	Yes
Recovery CD	Only OS Recovery	Total Recovery (Include AP,OS, Driver)

## 4. Windows® Embedded Standard 7

Features: * Features will all comply in Windows Embedded 8.

Componentized version of Windows 7 Ultimate for embedded systems
- Reduced BOM cost: Reduced image size using components (Minimum Footprint > 400MB, Minimum RAM > 512 MB)
- Processor Supports Insert space between (x86), and 32-bit/64-bit
- Multi-Language Packages Multi-touch Support

Embedded enabling features
- Enhanced Write Filter & File Based Write Filter
- USB Boot
- Hibernate Once Resume Many
- Custom Shell

USB Boot   Custom Shell
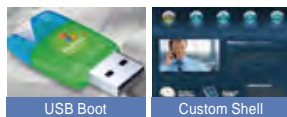
System protection with file or OS read only set up function to prevent improper operation

Functionality	EWF(RAM Mode)	FBWF
Write Through Capability	None	File and Folder Write Through
Commit	Commit Whole Overlay	File Commit Only
HORM	Yes	No
Relative Protection	Higher Protection (Lower in I/O stack)	Less Protection (Higher in I/O stack)

■ Componentized version of Windows® 7 Ultimate for embedded systems

Componentization Technical Concepts
- Embedded Core
- Feature Sets
- Drivers
- Languages

Image-Based Setup on the device

Embedded OS

■ Image configuration editor

IEI One Key Recovery Solution

IEI's unique One Key Recovery solution allows you to recover and backup your operating system without a lot of complicated settings. One Key Recovery comes bundled with every IEI SBC, embedded system, and all-in-one panel PC product.
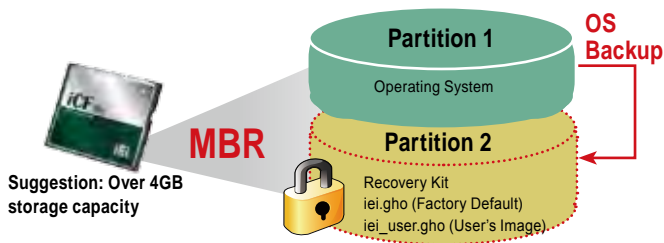
F3 One Key Recovery

iEi symantec.

Recovery Tool for IEI Products Only

Supports Auto Recovery Mode!

The IEI recovery CD was developed exclusively by IEI using Windows PE 2.0. It allows users to do a full system backup and restore from system failures. One Key Recovery keeps costs low, because it eliminates the need to buy additional system backup and recovery tools.

F3 One Key Recovery
iEi symantec.

One Key
System back up/ System recovery

Automatic/ Remote
System recovery

Decrease downtime of system failure and enhance efficiency of system management.

■ Recovery Partition

A hidden partition is a logical section of a disk which is not accessible to the operating system. After building partitions for OS and one key recovery, and execute one key recovery set up proccess, the partition for one key recovery will be hidden. It may be used to protect confidential data or store backup of the system.

Partition 1
Operating System

OS Backup

MBR

Partition 2
Recovery Kit
iei.gho (Factory Default)
iei_user.gho (User's Image)

Suggestion: Over 4GB storage capacity

IEI Recovery Solution Advantages:
- No need to make recovery discs by yourself or follow trivial imaging procedures
- Simple steps to backup or restore the system. No IT personnel required.
- Backup/Restore system easily through unique multi-menu
- One key to make recovery disc
- One key to restore system

■ IEI Products Only

SYMC GSS
OneKey Recovery

☑ **IEI Certified Sticker**

The IEI recovery CD is only for IEI products. A message will show to warn "you are an illegal user" if using the CD for non-IEI products. This protection is detected through the BIOS of the IEI boards.

Benefits

Remote maintenance reduces the cost of IT infrastructure

All migration tasks can be performed remotely from a central management console. This saves cost by reducing physical visits.

F3 One Key Recovery
iEi symantec.

2 Use the recovery tool to restore your OS at the local site

1 The system is infected by virus or has a blue screen

Alert

One Key Restore + Remote KVM

3

Remote Troubleshooting

OK
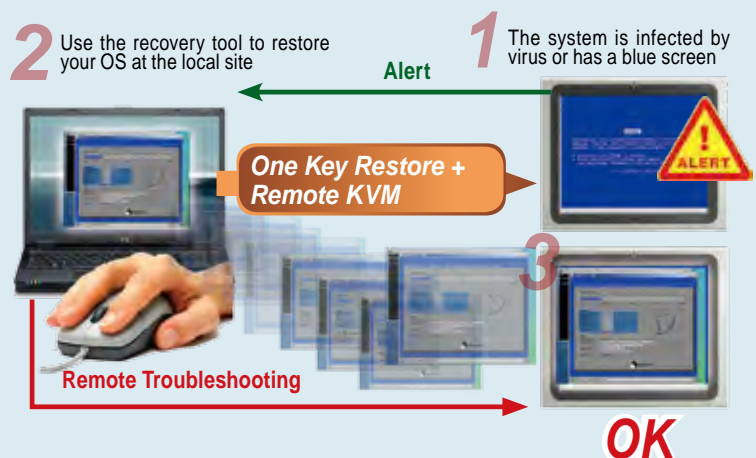
Rapid Recovery and Restoration Ensures Seamless Workflow

A. Local operation: Fix problems at your finger tips via hot key

By pressing F3, users can access the backup/recovery process easily. One Key Recovery simplifies the imaging and migration process, increasing efficiency in system maintenance.
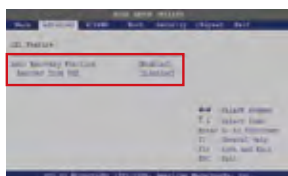
One Key Backup / Restore

● **One-Key Recovery**
● Factory restore: restore your system to default setting (iei.gho)
● Restore your last backup: recover the last system configuration (iei_user.gho)

● **One-Key Backup**
Backup your operating system to the secure hidden partition. You can create your own ghost image as "iei_user.gho" including your application programs set-ups.

Support OS List	
Windows® XP	Windows® Vista
Windows® 7	Windows® CE 5.0
Windows® CE 6.0	Windows® XP Embedded
Linux OS 1.RedHat 9 2.RedHat RHEL- 5.4 3.Fedora Core 7, 8, 10, 11, 12	4.Ubuntu 6.10, 7.10 , 8.10 5.Debien 4.0, 5.0 6. SuSe 10.3, 11.2

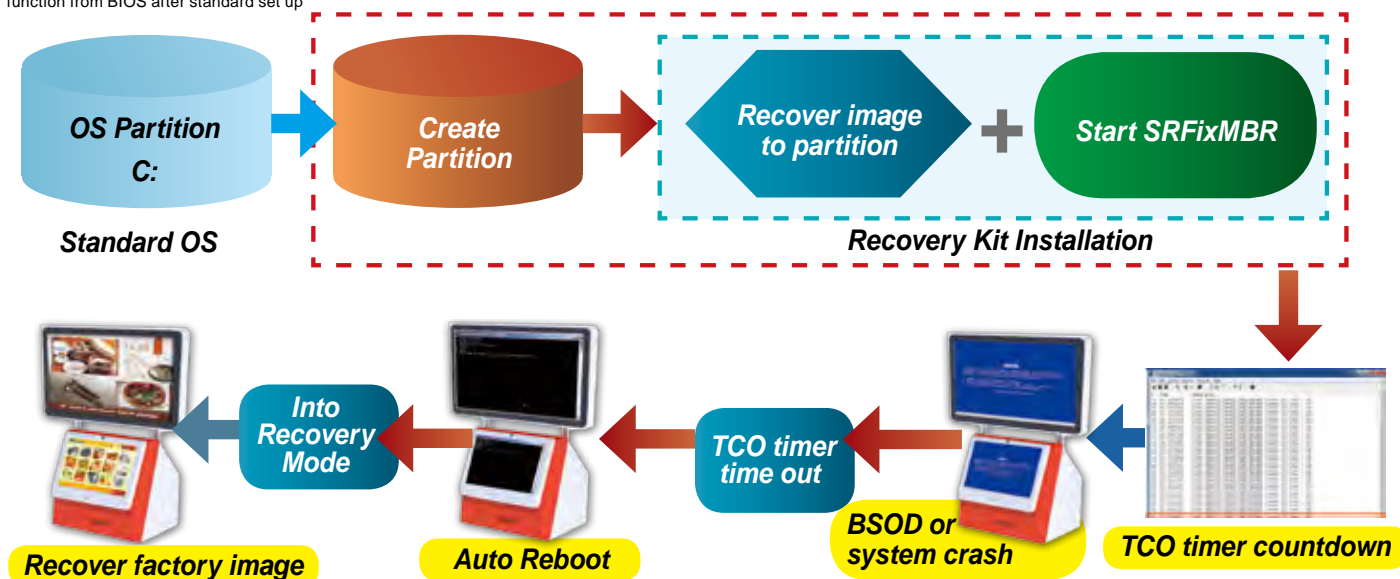## B. Auto scheduling: Instant problem solving from auto recovery New

Make sure to enable auto recovery function from BIOS after standard set up

When the system encounters a Blue Screen of Death (BSoD) or hangs for 10 minutes [Default setting is 10 minutes , If want to change the time setting please contact us], the auto recovery function enables the factory default image automatically. This function shortens repair downtime, ensuring continuous work.

Support OS List	
Windows 2000	Windows XP Embedded
Windows XP	Windows Embedded Standard 7
Windows Vista	

Optional function, support by request.

OS Partition C: → **Create Partition** → **Recover image to partition** + **Start SRFixMBR**

Standard OS **Recovery Kit Installation**

Recover factory image ← **Into Recovery Mode** ← **Auto Reboot** ← **TCO timer time out** ← **BSOD or system crash** ← **TCO timer countdown**

C. Network: Remote recovery through LAN New

One key Recovery also provides a remote recovery function. IT professionals can easily maintain client device through the network. When the system has a Blue Screen of Death (BSoD) or hangs for 10 minutes [Default setting is 10 minutes , If want to change the time setting please contact us], the default factory system image can be restored from server to ensure seamless workflow.

Install utility from One Key Recover CD for server → **Install setup from One Key Recover CD for client device** → **Restart client through LAN**

Server requirement

Linux server with DHCP, TFTP and HTTP function

Client Operation System support	
Windows 2000	Windows 7
Windows XP	Windows Embedded
Windows Vista	Windows Embedded Standard 7

Optional function, support by request.

www.ieiworld.com

IEI Complete Touch Options

IEI offers complete touch screen options in diverse product lines and sizes.
IEI develops user-friendly products.

■ New Touch, More Strength

There are two main types of touch panels in the industrial PC industry: resistive type and capacitive type. IEI debuts their resistive and projected capacitive touch screen which incorporates state-of-the-art ID design with a slim PPC solution.
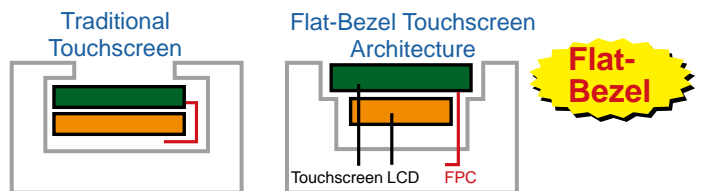
Type	Resistive			Capacitive	
	4-wire	5-wire	Touch window	Surface capacitive	Projected capacitive
Input Method	Hand or Stylus	Hand or Stylus	Hand or Stylus	Hand	Hand
Glove	Yes	Yes	Yes	No	Yes (Medical glove)
Single/Multi-touch	Single	Single	Single	Single	Multiple
Hardness	3H	3H	3H	6H	6H
Transparency	78%	78%	80%	85%	85%

■ Touch Window Technology

Flat-bezel design utilizes an additional film on the touch panel and cover the circuit on the edge with printing. It eliminates the need of a traditional touch screen bezel.

Features:
● 100% usable area on front screen
● Slim and trendy look
● Easy to clean screen prevents dirt, water, and grease accumulation

Traditional Touchscreen

Flat-Bezel Touchscreen Architecture

Touchscreen LCD   FPC

Flat-Bezel

■ Projected Capacitive Touch
Combines benefits from resistive touch and surface capacitive touch

Projected capacitive touch technology forms an X-Y grid by etching a single layer to form a grid pattern of electrodes, or by etching two separate, perpendicular layers of conductive material with parallel lines or tracks to form the grid.

Features:
● 6H vandal proof glass surface against damages
● Glove operation outperforms the limits of surface capacitive touch
● Up to 90% transparency provides better visual experience than resistive touch
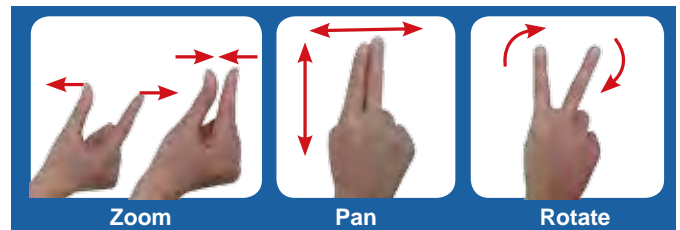● Supports Windows® 7 multi-touch function

Glove friendly operation   **6H vandal proof glass**

Multi-touch Scenarios on Windows® 7

Windows 7

Multi-touch Scenarios:
● Navigating the internet
● Reading and sorting email
● Viewing photos and video
● Playing casual games
● Navigating and arranging files, folders and windows

Zoom   **Pan**   **Rotate**

IEI Touch Screen Solution Guide

All AFOLUX GEN II PPCs provide either resistive type or projected capacitive type touch screen

Ordering instruction
● Resistive type touch are denoted with an **R** after the CPU. i.e., AFL2-15A-H61/**R**
● Projected capacitive type touch are denoted with a **PC** after the CPU. i.e., AFL2-15A-H61/**PC**

| Type of Touch	7"	8"	10"	W10"	12"	15"	W15"	17"	W19"	21.5"
Resistive Touch Screen	AFL2-W07A-CV/R	AFL-F08A-N270/R AFL2-08A-CV/R	AFL2-10A-CV/R	AFL2-W10A-CV/R	AFL2-12A-D525/R AFL2-12A-HM65/R	AFL2-15A-H61/R	AFL2-W15A-N270/R AFL2-W15A-780/R AFL2-15A-H61/R AFL2-W15B-H61/R	AFL2-17A-H61/R	AFL2-W19A-H61/R	
Projected Capacitive Touch Screen		AFL-F08A-N270/PC		AFL2-W10A-CV/PC	AFL2-12A-D525/PC AFL2-12A-HM65/PC	AFL2-15A-H61/PC	AFL2-W15A-N270/PC AFL2-15A-H61/PC AFL2-W15B-H61/PC	AFL2-17A-H61/PC	AFL2-W19A-H61/PC	AFL2-W21A-H61/PC

Waterproof Certification Laboratory

IEI ruggedized LCD products follow standard testing procedures (UL 50) and are designed for high reliability. We mainly provide IP 64, IP 65 and the latest IP 67 specifications for various mechanical dust and water resistant designs, ideal for outdoor and harsh environment applications.

IEI's LCD products are front sealed and tested in the certified house chamber under UL's Witnessed Test Data Program (WTDP).

IP 66 / UL 50
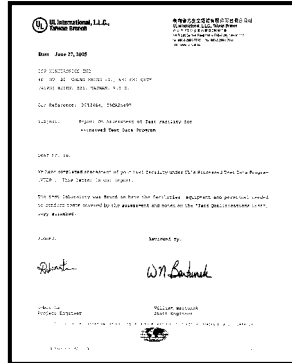
IP 64

IP 65

IP67

IP 67

UL 50 Certificate
Chamber strickly approved by Underwriters Laboratories Inc.
IEI's in-house water resistance chamber is approved by the UL organization commonly recognized in North America.

The IP Code defined in international standard IEC 60529 classifies the degrees of protection provided against the intrusion of solid objects, dust, accidental contact, and water in electrical enclosures. It consists of the letters IP followed by two digits and an optional letter. The digits indicate conformity with the conditions summarized in the tables below.

First digit
The first digit indicates the level of protection that the enclosure provides against access to hazardous parts

Level		Object size protected against	Effective against
0		-	No protection against contact and ingress of objects
1	Ø50mm	>50 mm	Any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part
2	Ø12.5mm	>12.5 mm	Fingers or similar objects
3	2.5mm	>2.5 mm	Tools, thick wires, etc.
4	1mm	>1 mm	Most wires, screws, etc.
5		dust protected	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment; complete protection against contact
6		dust tight	No ingress of dust; complete protection against contact

Second digit
Protection of the equipment inside the enclosure against harmful ingress of water.

Level		Protected against	Details
0		not protected	—
1		dripping water	Dripping water (vertically falling drops) shall have no harmful effect
2		dripping water when tilted up to 15°	Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position
3		spraying water	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect
4		splashing water	Water splashing against the enclosure from any direction shall have no harmful effect
5		water jets	Water projected by a nozzle against enclosure from any direction shall have no harmful effects
6		powerful water jets	Water projected in powerful jets against the enclosure from any direction shall have no harmful effects
7		immersion up to 1 m	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1 m of submersion)
8		immersion beyond 1 m	The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer

IEI light Fanless System

Performance & Fanless is no Longer a Tradeoff!!

IEI LIGHT FANLESS SYSTEM is a highly effective smart system. Running on Intel H61 platform, it provides stable fanless running system and strengthens the system protection. IEI LIGHT FANLESS SYSTEM embedded smart sensor can tests the ambient temperature automatically. CPU fan can changes the speed according to ambient temperature and be adapted to the condition which needs complete fanless system. For example, it can be used in high performance and silent both in need situation, such as: multimedia platform next to patient bedside, gaming, airport kiosk, restaurant ordering system.....and so on.

Benefits
- **Power Saving**
  Auto switch on/off fan can reduce redundant power consumption
- **Expanding system lifecycle**
  Helping users to run system more effectively, It runs system more effective, enhancing the life cycle of CP.
- **Effectively manage system environment**
  User can monitor the information of system easily
- **High performance with noiseless**
 IEI supports noiseless situation for the user having quiet and high performance circumstance.

Accommodate in these module
- AFL2-15A-H61
- AFL2-W15B-H61
- AFL2-17A-H61
- AFL2-W19A-H61
- AFL2-W21A-H61

■ Light Fanless Operation Features

- Automatic switch between Smart Fan Mode and Light Fanless Mode
- Fan protection for temperature hysteresis in +-2C
- Strengthen system protection by auto fan switching on when reaching the temperature set by user

Environment Temperature (°C)

iCMC Setting (default: 32°C)

Smart-Fan Mode
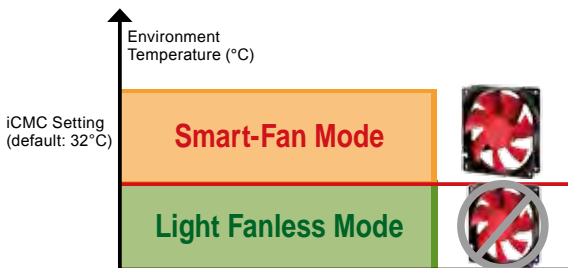
Light Fanless Mode

Automatically switched on/off

Cold air
Heat emission

Smart fan operation automatically turns on when environment temperature is higher than 32C (default setting)

■ Smart Temperature Sensor ensures System Stabilization

AFOLUX Gen II light fanless technology utilizes K-type thermocouple temperature sensor to detect environment temperature and control fan operation, enhancing system stability and remote environment control. When the environment is lower than temperature setting by user, the fan will be switched off, showing the advantage of quite and dust free from fanless mode. While the environment temperature is higher, the smart fan mode will be turned on to speed up heat emission.

■ Environmental Temperature Detection

Thermocouple signal		Temperature	Thermic electromotive force (mV)	Material	
				+	-
High Temperature	K	-200~1200	-5.89/-200°C / 48.8/1200	Cr, Ni	Al, Mn, Si
Medium Temperature	E	-200~800	-8.82/-200°C / 61.02/800	Cr, Ni	Ni, Cu
	J	-200~350	72.28/750 / -7.89/-200°C	Fe	Ni, Cu
Low Temperature	T	-200~350	17.82/350 /-5.6/-200°C	Cu	Ni, Cu

JST PHR-2

External Environment Sensor
External sensor can use k-type sensor to measure the external environment which is surrounding machine.

Embedded Environment Sensor
K type thermocouples is made by nickel chromium or aluminium plated nickel

■ IEI Light Fanless Application

Patient Bedside Entertainment System
Supporting high performance in audio entertainment system. Fanlesss system reduce dust accumulation do not spread disease by air.

Clean room
In clean room, it's difficult to have sound transmission, having light signal can displays the notification to help the operator running work

Semi-outdoor kiosk
Ticket selling machines used in semi-outdoor kiosk have warning light can help buyer to follow the buying process

iCMC (IEI Cooling Management Console)

Key embedded functions are configured through API or by a DEMO utility. IEI is happy to provide our customers with the release of this suite of software APIs (Application Programming Interfaces). These offer not only the underlying drivers required but also a rich set of user-friendly, intelligent and integrated interfaces, which speeds development, enhances security and offers add-on value for AFOLUX2 series.

Smart API

Real-Time Monitoring

Secured Administration
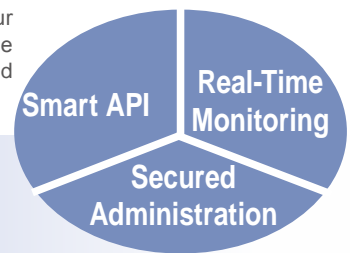
Benefits
- **Enhance System Reliability**
  - Auto adjust the fan speed, based on the environmental temperature
  - Real-time monitoring of system status
- **Thermal Protection**
  The fan will turn on automatically to cool down the system when the CPU temperature exceeds 80 ºC, no matter the Temperature of Fanless is enabled or not.

IEI's AFL2 PPC series come equipped with iCMC, a micro controller that provides embedded features for system integrators. Embedded features have been moved from the BIOS level to the system level, to increase reliability and simplify integration.

Real-time Monitoring
- CPU T-junction temperature
- System Internal Air
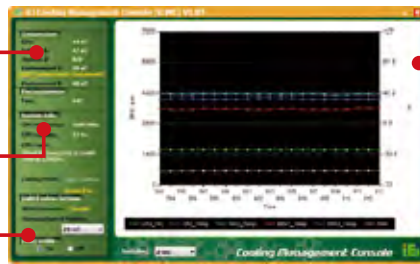- Environmental temperature
- CPU fan speed

CPU Information
- CPU specifications
- CPU loading (%)

Light Fanless Settings
- Trigger temperature of light fanless settings:
  Under the temperature , light fanless mode kicks in. Above this temperature, smart fan mode kicks in.
- Configurable trigger temperature: Disable/4°C/8°C /12°C /16°C /20°C /24°C /28°C /32°C (default)/36°C /40°C

Graphical Data
- Green: CPU frequency
- Pink: CPU temperature
- Blue: System temperature
- Yellow: Environment temperature 1
- Red: Environment temperature 2
- Purple: Fan speed

LED Light Visual Management

AFL2 17",W19",W21" system embedded effective brightness LED dash board. Each LED IC can be set by the user in multiple functions such as brightness, color, form to be a visual management tool. It can be adapted to product line signal, patient emergency signal in hospital, advertising machine...etc.

Features
- LED 256 programmable colors
- Signaling light display user demand
- Manual scripts for LED lighting programs
- 100% software programmable for colors, light duration, and light patterns
- Totally 34 light sections for AFL2-W19A-H61 and AFL2-W21A-H61; 30 light sections for AFL2-17A-H61; Each light section can be configured independently.

■ IEI Exclusive Light Bar Simulator

Support LED Light Bar control API for the customer to suit their own software program. Light bar signals are corresponded to the light buttons. User can customizes their own necessary to suit different condition.

Function Button
Add/Insert/Copy/Delete/Up/ Down/Loop Start/Loop End

30/34 light buttons
User can choose the light of position to display LED Light Bar

Display time adjustment
User can insert the necessary time to display light show. (between one to twenty seconds)

Access Key
One-key setting function help users easily customize.

Scripts
Showing the detail information about lighting display

Full Colors
User can choose the optimal color

■ LED Dash Board for Visual Alarm System/Status Notification!!

Helping product line to be fluent

Having the light bar signal to announce specific problem in product process. Assist the operator to run production.

Browsing medical list to be convenient

Patients' history case can show on the screen. With the light bar, it can notice doctors to pay attention on specific illness.
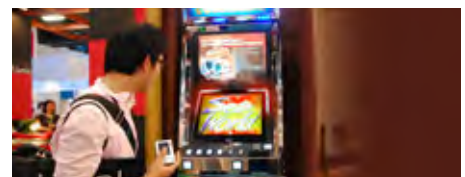
Showing appealing light simulation

Gaming machine shows appealing visual effect in entertainment arena. Displaying light effect in gaming machine to catch people's attention creating nice atmosphere.

IEiMobile®

A Professional Mobile Solution Provider

About IEIMobile

IEIMobile was established as an independent business unit by IEI Technology and the ICP group. We are a professional mobile solution provider seeking to revolutionize the way people work. Our goal is to provide our customers with reliable, affordable and ready-to-use mobile devices by developing mobile industrial products with the most advanced communications and easy-to-use mobile applications.

Our comprehensive product portfolio includes tablet PCs, industrial PDAs and in-vehicle (automotive) computing devices. We serve the needs of a wide range of industries such as retail, logistics, healthcare, construction, manufacturing, transportation and hospitality. By integrating design and innovation technologies with exceptionally-made mobile devices and manufacturing know-how, IEIMobile offers a superior production model for clients requiring design, engineering and Original Design Manufacturing (ODM) services.

At the heart of our designs is a celebration of the true spirit of mobile technology – the idea that businesses should be empowered to operate with greater autonomy, efficiency and imagination. More value-added features can be customized and integrated by using our products as a service-oriented wireless platform. IEIMobile is here to help businesses realize their full potential.

Our Roots, Our History:
Industry Insight and Expertise

For the first time in 2004, one out of every six people was connected wirelessly anywhere, anytime, enabling people around the world to expand their personal relations into powerful networks and unparalleled business opportunities. As a leading industrial computer solution provider, IEI Technology recognized this record breaking event as a defining trend towards mobile computing in the industrial sector that will be met with explosive growth as mobile communication in the consumer market reaches maturity.

Instead of evolving and expanding organically in response to new market demands, and being limited by the scope of existing product lines and services, IEI Technology sought to utilize its extensive industry experience and indisputable expertise by creating an independent business unit - IEIMobile.

Being rooted in IEI Technology and the ICP Group, we are blessed with years of industry insight and expertise. Through our ability to identify market opportunities and trends, as well as develop affordable, high quality devices, IEIMobile focuses on creating a valued brand worldwide.

Partner for Growth

To seize opportunities in the fast-growing mobile computing market, IEIMobile, part of IEI Technology and the ICP Group, seeks partners that deliver both a competitive advantage and a bottom-line impact to our clients. We approach collaborative relationships with the same passion and commitment that we invest in our client relationships. Building on a legacy of quality and industry leadership, we offer opportunities for new venture creation as well as professional ODM services to meet individual client needs.

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions
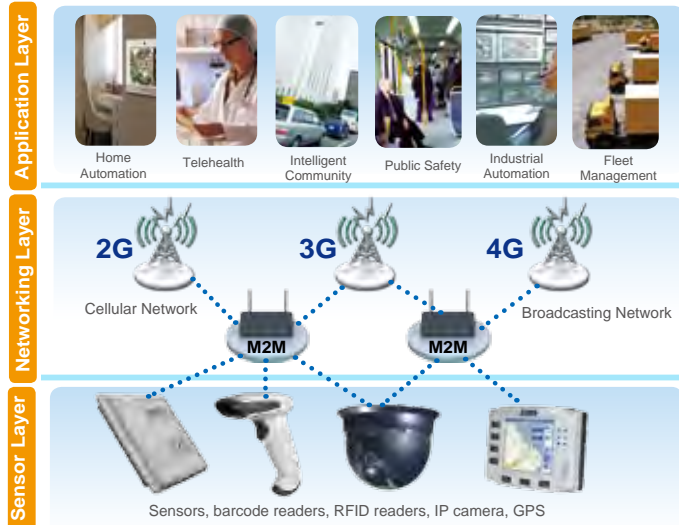
4 PACSmate Medical Solutions

5 Optional Peripherals

The Internet of Things

By definition, "The Internet of Things" is literally having every "thing" connected in a vast, gigantic network, consisting of three layers: sensor layer, network layer, application layer.

What makes the IOT feasible is the world's advancement in data capture and wireless technologies. Adoption of data capture technologies have seen a stable growth in the market during the past few years. Wireless technologies on the other hand, which is the cornerstone of turning captured information into business intelligence, has undergone many innovative developments. Amongst these, Wi-Fi and mobile broadband technologies are the most popular for mobile applications.

Application Layer

Home Automation · Telehealth · Intelligent Community · Public Safety · Industrial Automation · Fleet Management

Networking Layer

2G — Cellular Network · 3G · 4G — Broadcasting Network · M2M · M2M

Sensor Layer

Sensors, barcode readers, RFID readers, IP camera, GPS

Wi-Fi

Commonly known by its trademark name "Wi-Fi", the range of products using the IEEE 802.11 family of standards allows electronic devices to exchange data wirelessly over a computer network. A device with Wi-Fi functions, such as a laptop, smartphone, or tablet pc, can connect to a network resource such as the Internet through a wireless network access point.
Although Wi-Fi has become a popular option for connecting industrial devices, the issues that face mobile industrial applications are quite different from the issues encountered in a typical commercialized application. Industrial application requires greater energy efficiency and undisrupted Wi-Fi connection to ensure optimal business operation. To meet these requirements, IEIMobile's Wi-Fi enabled devices provides the following:
Power saving mode while the device is on suspend and Wi-Fi communication is in idle.
Auto connection to exiting wireless LAN.
Seamless wireless roaming and auto-switching.

Mobile Broadband

Mobile broadband refers to high-speed wireless Internet access through a portable modem. Traditional broadband services utilize cable modem, DSL, which are wired to buildings, greatly limits the mobility of internet access. By contrast, mobile broadband that utilizes cellular networks for wireless access. 3G and 4G are the most common in use today.

Since 2003, cellular providers have been rolling out 3G networks with improved data download and upload speeds. With the rapid evolution of wireless technology, the 4th Generation (4G) wireless network was first introduced in 2010 and is expected to be the successor of previous 2G and 3G networks. Currently,the Long Term Evolution (LTE) is the 4G network being deployed worldwide.

	Data Rate	
	3G	4G
High Mobility Communication (moving vehicle)	384 kbit/s	100 Mbit/s
Low Mobility Communication (walking / stationary)	2Mbit/s	1 Gbit/s

180 operators in 70 countries investing in LTE
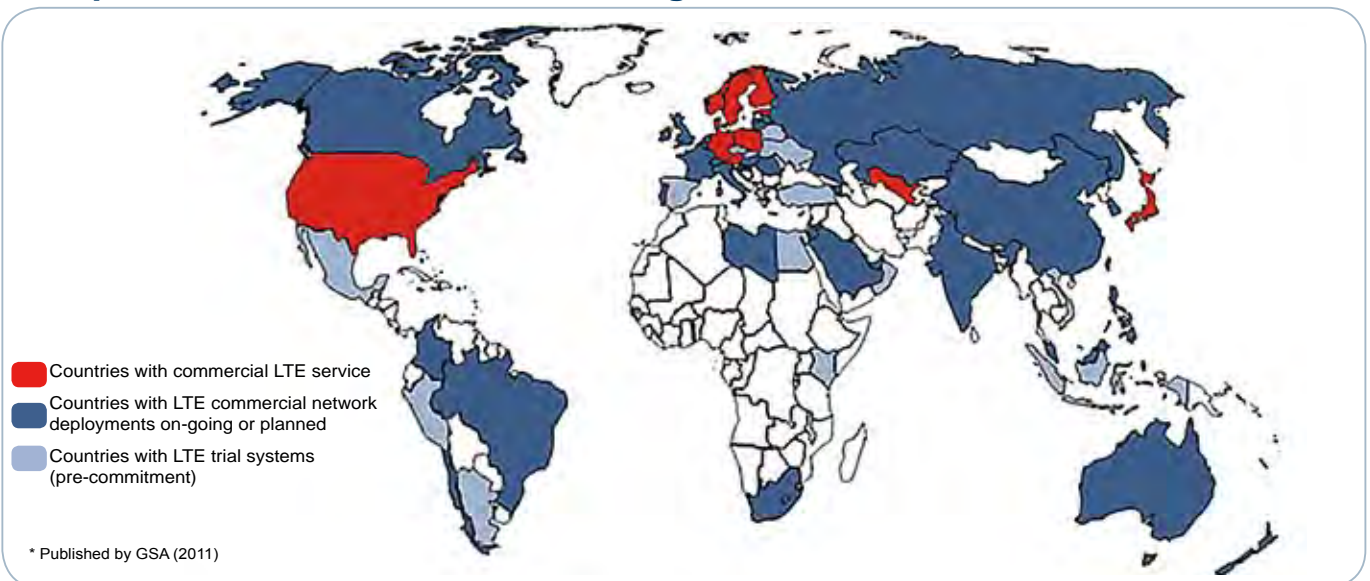
Countries with commercial LTE service

Countries with LTE commercial network deployments on-going or planned

Countries with LTE trial systems (pre-commitment)

* Published by GSA (2011)

1 — IEIMobile Solutions

2 — Automation Panel Solutions

3 — RISC-based Solutions

4 — PACSmate Medical Solutions

5 — Optional Peripherals

Mobile Wireless Technology Trends

Wireless technologies play an important role in the Internet of Things (IOT). The demand for mobility and automation has caused breakthrough innovations that will change the market and the world's infrastructure. Currently, two definitive trends in the wireless industry can be seen

My Wi-Fi (MiFi)

A mobile Wi-Fi hotspot device is called a MiFi Hotspot. It turns 3G signals from a SIM card into Wi-Fi signals and creates a personal Wi-Fi hotspot. This means that users can connect up to five different Wi-Fi enabled devices to the internet at once.

Compared to the alternative mobile broadband connectivity for wireless communication, it is a more cost-efficient options. Advantages include:

1. Connect multiple devices
2. Choice of carriers – including regional carriers
3. Potential discount if added to an existing service plan (depends on carrier)
4. Optional 4G connection (depends on carrier)
5. Potential for contract-free/prepaid service which is beneficial if service is not needed all the time
6. Ease of upgrade from 3G

Internet

HSPDA
EVDO
UMTS

EDGE
CDMA
WIMAX

Back end office

Municipal Wireless Network (Muni-Fi)

Muni-Fi is the concept of turning an entire city into a wireless access zone, giving rise to the "wireless city". It requires the deployment of hundreds to thousands of hotspots in the city and allows Wi-Fi enabled devices to make connections automatically. Earlier initiatives charged users for access. As wireless becomes increasingly ubiquitous, users can expect free access to Wi-Fi hotspots regardless of location as governments worldwide are engaged in related developments already.
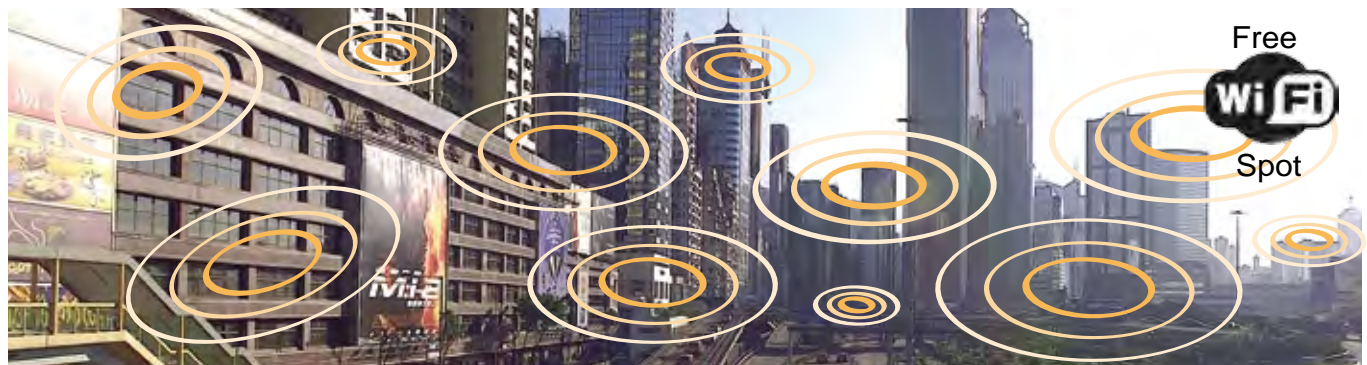
Free
Wi Fi
Spot

IEIMobile Applications

The Internet of Things (IOT) holds an enormous amount of opportunity and value for the industry. Having information available anytime anywhere can enhance the decision making process, increase information accuracy, and decrease costs associated with traditional business practices:

As Wi-Fi technology and infrastructure become increasingly ubiquitous and mature, the adoption of mobile devices with Wi-Fi connections will be a standard. With built-in Wi-Fi modules and internal antennas, IEIMobile's devices can connect to Wi-Fi hotspots (MiFi, Muni-Fi) and enable information obtained by mobile field workers to be transferred to the back end office.

However, in situations where Wi-Fi hotspots (MiFi, Muni-Fi) are unavailable, mobile broadband modems can be used to access wireless communication. IEIMobile's devices integrated with mobile broadband modules (such as 3G) offer fast, powerful, and stable wireless connections for users on the move.

1
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Panel
Solutions

3
RISC-
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4
PACSmate
Medical
Solutions

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Optional
Peripherals

Our Dedicated Product Lines

Tablet PC

ICE Series -
Your cutting-edge digital assistant

With a focus on ergonomic design and features, the ICE series tablet PC offers versatility in application and field-proven durability.

The ICE Series tablet PC features exceptional ergonomics, industrial sealing and high drop resistance for withstanding the most extreme industry-specific environment. Our obsessive attention to detail and passion for quality create a winning formula that promises to delight and inspire your staff on-the-go. It is the ultimate productivity tool for field services.

Industrial PDA (EDA)

Modat Series -
Your data manager on the go

The Modat series industrial PDA (EDA) brings real-time mobile computing and cost-effective mobility in one customizable, robust package.

The next generation of industrial PDA (EDA), the Modat Series, provides a total wireless solution with Windows® Embedded Handheld or Android operating system. The Modat Series industrial PDA features a full range of wireless communication options and optimal suites of data capture technologies in one lightweight, versatile and robust package. It is specially suited to solutions in the retail, hospitality and logistics environment.

Automotive PC

Automotive PC Series -
Your reliable companion on the road

Raising the bar for premier in-vehicle infotainment systems, the automotive PC series optimizes user comfort and the power of sophisticated navigation technologies for your mobile work fleet.

The automotive PC series is a CAN-bus integrated mobile computing device that promises to answer all your field force automation needs. Empowered by the latest and most advanced navigation technologies available, your fleet operation is secured and optimized at minimal cost.

1
IEIMobile
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iEiMobile®

Integrated Service Platform

1

IEIMobile
Solutions

2

Automation
Panel
Solutions

3

RISC-
based
Solutions

4

PACSmate
Medical
Solutions

5

Optional
Peripherals

Tablet PC

Tablet PC

The Coming of a New Age

At the mention of the 'Tablet PC', one cannot help but form images of Apple's iPad and its flawless touch screen features in their minds. The success of this fancy computing object, released in April 2010, was made possible by a combination of technological innovations and marketing expertise. With sales totaling 15 million in 2010, the iPad is symbolic of the coming of a new age. Indeed, over 80 new tablets were announced to compete with the iPad in early 2011 – the year of the tablet PC.

For the few that have yet to catch up with technological advancements, a tablet PC is a medium-sized computer in a slate enclosure without a keyboard or a mouse. It features a touch screen display that utilizes a stylus, digital pen, or fingertip as the primary input method. This concept of mobile computing is nothing new. Microsoft® and others developed their version of the tablet PC in the 90s, but were often criticized to be underpowered, bulky, and plagued by inefficient use of stylus or digital pen.

Along with the stable growth of tablet PCs in the consumer market, R&D breakthroughs have continuously resolved problems encountered by past designs and ensured the usability of such devices. Nowadays, a low power consumption fan-less CPU provides better system reliability; the availability of lightweight embedded OS greatly enhances computing power; the development of sophisticated touch-screen technology offers a more intuitive way of working with computers; and the penetration and integration of wireless technology makes communication effortless. In addition, due to its mobility, ease of use, and wide applications, the tablet PC is becoming and will be the most natural adoption for the enterprise sectors.

For example, in the healthcare industry, getting the right information at the right time can often mean the difference between life and death. It is imperative for clinicians to receive the most up-to-the-minute information throughout all stages of the care delivery process. The mobility of the tablet PC not only improves the accuracy of patient data entry, it also offers quick access to complete patient data and reference materials at point-of-care. The result is safer, more efficient and higher quality patient care.

In the construction industry where workers are accustomed to computing while standing or walking, a full function tablet PC combined with rugged durability greatly increases productivity and reduces risks. It allows for real time data capture and verification of inspections, punch lists, and schedule updates while keeping projects on time and within budget. Engineers can access and mark-up plans and drawings from anywhere in the field, enabling faster decision-making and up-to-date information gathering. Job site safety is constantly monitored, minimizing litigation risks.

For sales representatives expected to work from anywhere, a tablet PC offers more than just a way to create and deliver engaging presentations. It allows the user to maintain and access accurate customer information on the road, complete contracts, upload orders remotely, and track asset transfers instantly. By using a tablet PC to automate forms and file sales reports, salespeople no longer need to re-key data back in the office.

IEIMobile believes the tablet PC will inspire unfathomable innovations and we are here to provide a platform where industries can explore unlimited opportunities.

iEiMobile®

1
IEIMobile Solutions

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Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

IEIMobile for Automatic Identification and Data Capture (AIDC)

Equipped with leading barcode and RFID reading technologies, IEIMobile's extensive product portfolio offers solutions across a broad range of application areas.
Barcode Reading: **The successful adoption of technology involves more than choosing the right fit. IEIMobile has rich experiences in resolving related design and system integration issues such as:**

- Power Management
- Housing and Optical Design
- Wavefront Distortion
- Exit Window Materials
- Laser and Collection Clear Aperture

- Abrasion Resistance and Anti-Reflection (AR) Coatings
- Exit Windows Distance, Angle, and Decode Zone
- Pitch, Skew, Roll, Bi-Directional, and Omni-Directional
- Aggressive Decoding Algorithms

IEIMobile adopts the leading barcode brand

Intermec
Honeywell
Symbol
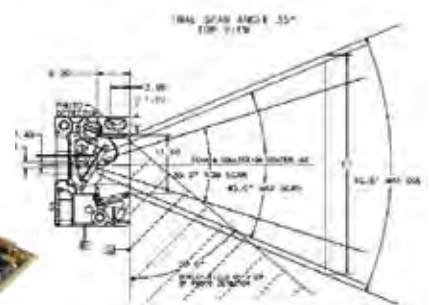
In addition, IEIMobile's bundled Software Development Kit (SDK) provides a user manual, demo source codes, and an easy-to use API to control barcode reader performance in areas such as:

- Data Baud Rate
- Transmission Speed
- Trigger Mode
- Data Options, Prefix and Suffix Values
- Beeper Settings
- Laser Beam Options
- LED On/Off
- Power Mode Settings
- Enable or Disable Symbology Decode Support

The leading barcode engine provides the best decoding technology.

Damaged **Non linear distortion** **Overburn** **Low contrast**

1D/2D Barcode

Barcoding is a mature technology that has been around since the 1960s. Almost all fields of business today use barcoding to identify and track commodities, allowing for a more automated business process that reduces human error and increases productivity. It is widely accepted because of the low cost of barcode labels and internationally established standards such as UPC (Universal Product Code) for grocery items, ISBN for books, and ISSN for periodicals that facilitate unique product identification. Barcodes, therefore, have become unique and universal and can be recognized anywhere in the world.

Barcodes are read by barcode scanners using optical laser or imaging software technology. Linear or 1D barcodes are a series of parallel vertical lines, while 2D matrix codes come in patterns of dots, squares, and other geometric patterns. 2D barcodes typically stores more data than 1D barcodes. Since information on barcodes cannot be updated and require a direct line-of-sight between the code and the reader in order to be read individually, its use has been replaced by RFID in industries where products are relatively complex and expensive such as the IT and the freight industry. However, barcoding can still find its place in retail point of sale environments, payment transactions, ownership transitions, or in applications which require decisions in material flow.

RFID – Radio Frequency Identification

RFID (Radio Frequency Identification) is an automatic identification technology that uses radio waves to access digital data encoded in an RFID tag. Information is sent to and read from RFID tags by a reader using an attached antenna. An RFID reader is basically a radio frequency transmitter and receiver, controlled by a microprocessor or digital signal processor. Therefore, data can be captured simultaneously from many tags within range of the antenna regardless of their position and placement. With a single tag on each product item or pallet, every object can be automatically identified and tracked from factory to shelf without breaking any security sealing or tearing any packaging. RFID is ideal for work-in-process tracking, closed-loop asset management, and security and access control systems.

RFID tags are comprised of an integrated circuit (IC) with an attached antenna. Their sizes and forms are determined by the application requirements. Some of them can be as small as a grain of rice, making them ideal for theft prevention. Information is stored in the IC and transmitted through the antenna to a reader. Tags can be read-only or allow for both read and write function. In situations where a tagged item needs to be monitored, tracked and reviewed at every phase, a writable RFID tag allows for real-time information updates as it moves through the supply chain.

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IEIMobile Solutions

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Optional Peripherals

Applications

Healthcare

Barcodes are traditionally used in medical environments to prevent medication and surgical errors during the patient-care process. Barcode technology can aid in dispensing and administrating medication and blood products, collecting and tracking specimen tests and x-rays as well as managing and locating medical files and equipments. On every incoming patient's wrist, there is a barcode that holds identity information, reasons for admittance, allergies and medication prescribed. The barcode is scanned to verify the patient's identity before medication is administered or before the patient undergoes a medical procedure.

In the medical field, the RFID technology helps to eliminate medical mistakes. For example, when a tissue or fluid sample is collected from a patient at a hospital, an RFID tag can be automatically tracked through various preparation stages, therefore reducing data entry errors or mishandling. A pathologist can then retrieve patient records directly from the tag to the computer screen to ensure accurate patient and sample identification.

Logistics

It is in logistics warehousing that RFID technology offers the greatest potential for scalability and application development. International logistics giants such as FedEx, DHL and UPS are all actively involved in the experimentation and implementation of RFID technology to streamline operations and optimize performance. Storage management systems, automatic data acquisition, and real-time asset tracking are among the many RFID applications that benefit businesses today.

Retail

Wal-Mart, Zara and other leading retailers were among the first to apply RFID technology to inventory management. Reduced labor cost is one immediate value brought by RFID implementation, as merchandize is recorded and tracked automatically, eliminating the need for human handling. Out-of-stock is decreased and overstock is prevented through improved visibility from RFID-enabled distribution systems. Not only can retailers keep more items on stock, they can also greatly improve shelf availability, leading to more sales and improved revenue.

Self-service
● Allow customer to check price, obtain product related information or even motivate them by providing promotional information

Customer Loyalty Program
● Customers can access their loyalty card to see their accumulated credit and reward programs

Advertising
● Play multimedia video to grab customers' attention and make shopping more interesting
● In DVD rental stores, customers can watch movie preview by scanning a DVD barcode

Production Line Information
● Operator can scan barcodes on a WIP carrier to get production information and update production status

Access Control

Compared with traditional access control systems, like barcode and magnetic stripe readers, RFID technology provides complete hands-free access to secured areas. People carrying packages, and those with disabilities, no longer have to struggle in front of the reader, trying to make closer contact. Hands-free access provides quick entry during inclement weather and makes attendance management more convenient. Electronic vehicle registration at car parks further ensures that only authorized personnel are admitted. Any unauthorized access can be recorded in real-time, triggering security to respond to an alert.

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5 Optional Peripherals

Tablet PC

Model		ICEROCK	ICEFIRE	ICEFIRE 2	ICECARE
Display	LCD Size	8.0" TFT LCD	10.4" TFT LCD	10.4" TFT LCD	7" TFT LCD
	Brightness (cd/m²)	350 cd/m²	350 cd/m²	350 cd/m²	500 cd/m²
	Max. Resolution	800 x 600 pixels SVGA	1024 x 768 pixels XGA	1024 x 768 pixels XGA	800 x 480 pixels WVGA
	Viewing Angle	70/70/60/70 Deg.	88/88/88/88 Deg.	88/88/88/88 Deg.	60/70/70/70 Deg.
	Touch Screen	5-wire Resistive Type Touch	Resistive Supports Multi-touch and Gesture	Resistive Supports Multi-touch and Gesture	Projective Capacitive Touch
	Digitizer	N/A	2048 levels @ full scale Pressure Resolution	2048 levels @ full scale Pressure Resolution	N/A
System	CPU	Intel® Atom™ Z530 1.6GHZ	Intel® Atom™ D525 1.8GHz	Intel® Atom™ N2800 1.86GHz	TI Sitara AM3715
	Chipset	Intel® SCH US15WP	Intel® ICH8M	Intel® NM10	N/A
	Operating System	Microsoft® Windows XP Embedded	Microsoft® Windows Embedded Standard 7 P(WES7P)	Microsoft® Windows Embedded Standard 7 P(WES7P)	Android 2.3.4
	Memory	2GB DDR2 on board	2GB 1333MHz DDR3 SDRAM	4GB 1333MHz DDR3	4GB eMMC Flash + 512MB SDRAM
	Storage	CompactFlash® slot SD card slot	1.8" 32G SSD	mSATA 8G SLC	SD Slot
Communication	Wireless LAN	Wi-Fi 802.11 b/g/n	Wi-Fi 802.11 a/b/g/n	Wi-Fi 802.11 b/g/n	Wi-Fi 802.11 b/g/n
	Bluetooth	Bluetooth V3.0 + HS (Class II)	Bluetooth V2.1 + EDR (Class II)	Bluetooth V3.0 + EDR (Class II)	Bluetooth 2.1 + EDR
	Modem	WCDMA/HSUPA (option)	WCDMA/HSUPA (option)	WCDMA/HSUPA (option)	WCDMA/HSDPA
	GPS	Option	N/A	Option	GPS w/ internal antenna
Data Collection	Camera	1.3 megapixels	3 megapixels and LED light	1.3 M CMOS camera (front) / 3 M CMOS camera (rear)	2 M CMOS camera (front)/ 5 megapixels CMOS camera (rear)
	Light Sensor	Ambient Light Sensor	N/A	N/A	N/A
	Barcode	1D Laser/2D Imager Scan Engine	1D Laser/2D Imager Scan Engine	1D Laser/2D Imager Scan Engine	1D Laser/2D Imager Scan Engine
	RFID	13.56 MHz RFID support ISO 14443A (Mifare) ISO 15693	13.56 MHz RFID support ISO 14443A (Mifare) ISO 15693	13.56 MHz RFID support ISO 14443A (Mifare) ISO 15693	13.56 MHz RFID support ISO 14443A (Mifare) ISO 14443B (Felica) ISO 15693 NFC
Indicators & Buttons	LED Indicators	Power/ Wi-Fi/Bluetooth/HDD/ 3.75G Status LED	Power/ Wi-Fi/Bluetooth/ RFID/ Battery Status LED	Power/ Wi-Fi/Bluetooth/ RFID/ Battery Status LED	Charging/Full battery LED (Orange / Green) BT enable / disable LED (Blue) Wi-Fi enable / disable LED (Green) 3.5G enable / disable LED (Green)
	Hot Keys	5-way navigation key 8 x Programmable function keys	5-way navigation key Barcode Scanner/ RFID / LED Torch/ Camera/ Wi-Fi/ Bluetooth/ SAS/Function Key	5-way navigation key Barcode Scanner/ RFID / LED Torch/ Camera/ Wi-Fi/ Bluetooth/ SAS/Function Key	Power on/off switch Reset key 4 x Function keys (Home / Menu / Back / Search)
I/O Interface	USB	2 x USB 2.0 Full Speed 1 x Mini USB	1 x USB 2.0 Full Speed	1 x USB 3.0	2 x USB 2.0
	LAN	1 x 10M/100M/1G LAN	1 x 10M/100M LAN	1 x 10M/100M/1G LAN	1 x 10M/100M LAN
	Audio	2 x 1.5W Speaker	1 x 2W Speaker	1 x 2W Speaker	1 x 1.5W Speaker
		1 x Mic in	1 x Mic in	N/A	1 x Digital Mic
	LED Torch	N/A	1 x LED Torch	1 x LED Torch	N/A
Power	Power Adapter	12V @ 5A @ 60W	12V @ 5A @ 60W	12V @ 5A @ 60W	19V @ 2.1A @ 40W
	Docking Power Adapter	N/A	19V@ 4.74A @ 90W	19V@ 4.74A @ 90W	N/A
	Battery	7.4V 2400 mAh Li-ion Battery	Dual 11.1V 1880mAh Li-ion Battery	Dual 11.1V 1880mAh Li-ion Battery	Dual 11.1V 1880mAh Li-ion Battery
Environment	Operating Temperature	0°C ~ 40°C	0°C ~ 40°C	0°C ~ 40°C	-10°C ~ 40°C
	Storage Temperature	-20°C ~ 60°C	-10°C ~ 60°C	-10°C ~ 60°C	-10°C ~ 60°C
	Humidity	5%~95% non-condensing	5%~95% non-condensing	5%~95% non-condensing	5%~95% non-condensing
	Drop Survival	1.0 M	90 cm	90 cm	1.2 M
	Environment Protection	IP 62 compliant front panel	IP 64 compliant front panel	IP 64 compliant front panel	IP 64 compliant front panel
	Certifications	CE/FCC	CE/FCC, Medical-grade Class B	CE/FCC, Medical-grade Class B	CE / FCC
Physical Characteristics	Dimension(LxWxH)(mm)	255 x 180 x 37	270 x 265 x 29	270 x 265 x 29	248 x 153 x 36
	Weight	1.1 kg	1.7 kg	1.7 kg	0.95 kg

1 IEIMobile Solutions

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5 Optional Peripherals

ICEFIRE

10.4" Mobile Clinic Assistant

- 10.4" TFT XGA LCD
- Intel® Atom™ D525 dual core platform
- Powered by Windows ® Embedded Standard 7 P(WES7P)
- Dual-mode input (Digitizer + Multi-Resistive Touch)
- Dual hot swappable batteries
- 1D/2D barcode reader, RFID reader, smart card reader and fingerprint reader
- Bluetooth, Wi-Fi, 3.75G wireless

TAIWAN EXCELLENCE 2012

3.75G/HSUPA	Bluetooth	Wi-Fi	1D Barcode Scanner 123456789	2D Barcode Scanner
Digitizer Screen	Touch Screen	Camera	Fingerprint Reader	SCR

RFID · Windows XP · 7 · intel Intelligent Systems Alliance · One Key Recovery IEi symantec.

Mobile Clinic Assistant Applications

Retrieve patient data at bedside for optimal point-of-care treatment.

Instant access to patient medical history for real-time diagnosis.

Accurately capture and record patient symptoms during an emergency.

Increase productivity and decrease opportunities for error through documentation directly at point-of-care.

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High Performance and Low Power Consumption Mobile Platform

The ICEFIRE is powered by 1.8 GHz Intel® Atom™ D525 dual-core processor (1M cache). It is a compact and highly integrated application processor with excellent performance that allows low idle mode to improve power efficiency.
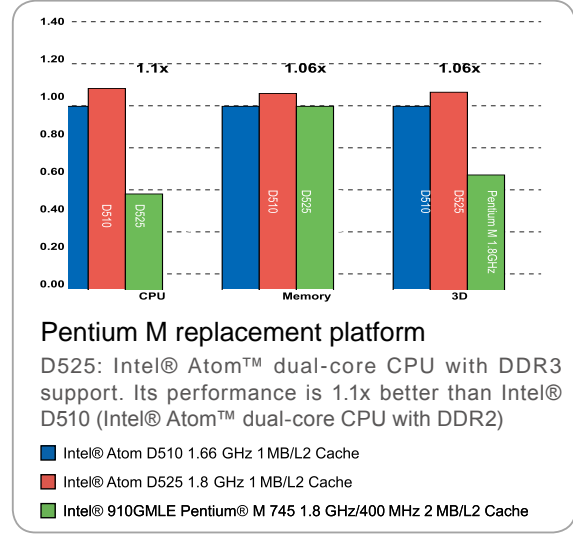
Features

● **DDR3 support up to 4GB by UEFI BIOS**
» Power saving more than 30% compared to DDR2
» Higher bandwidth performance, up to 2133 MT/s standardized

● **UEFI BIOS**
» Under 10 seconds boot time for fast boot
» Supports more than 2.2 TB HDD capacity
» Supports dual ranks x16 DDR3 memory up to 2 GB per DIMM, system up to 4 GB

● **New graphic performance**
» The GPU contains 3rd generation graphics core GMA3150 and supports DX9*, MPEG2 hardware acceleration
» VGA resolution up to 2046 x 1536 pixels
» Single 18-bit LVDS resolution up to 1366 x 768 pixels

The ICEFIRE is preinstalled with Windows® 7 Professional for Embedded Systems. With Windows Touch, gestures, handwriting, voice recognition, and advanced 3D display control, users' experiences are limited only by their imagination.

The ICEFIRE is designed based on Windows and Intel® open architecture to extend mobility for point-of-care and healthcare software applications. This mobility allows many tasks to be performed on the run, minimizing time wasted between the nursing station and the patient's room. The ICEFIRE enables nurses to deliver higher quality patient care while significantly improving productivity.

Pentium M replacement platform

D525: Intel® Atom™ dual-core CPU with DDR3 support. Its performance is 1.1x better than Intel® D510 (Intel® Atom™ dual-core CPU with DDR2)

■ Intel® Atom D510 1.66 GHz 1 MB/L2 Cache
■ Intel® Atom D525 1.8 GHz 1 MB/L2 Cache
■ Intel® 910GMLE Pentium® M 745 1.8 GHz/400 MHz 2 MB/L2 Cache

Windows XP   **7**   **Intelligent Systems Alliance**

1
IEIMobile Solutions

Dual-Mode Input

Along with Windows® 7 digitizer support and dual-mode input support, the ICEFIRE features both WACOM digitizer and traditional resistive touch input with auto-sensing and auto-switching. When a digitizer pen moves close to the screen of the ICEFIRE, the digitizer automatically takes effect and switches off resistive touch input mode.

2
Automation Panel Solutions

The digitizer is a more accurate and sensitive input method that can detect stylus pressure, speed, and angle. This feature is suitable for a clinician to note patient's vital signs. Another key benefit of the digitizer is to prevent mis-touch. A clinician can use the digitizer pen to write accurate prescriptions without the worry of input errors. The working principles of the EMR® digitizer are as follows:

2048 Level Pressure Senor

3
RISC-based Solutions

■ The tablet surface incorporates a sensor board that detects the pen's movement.
■ Weak energy is induced in the pen's resonant circuit by a magnetic field generated by the sensor board surface.
■ The pen's resonant circuit then makes use of this energy to return a magnetic signal to the sensor board surface.
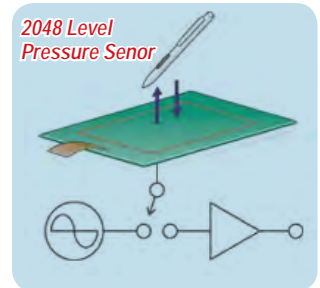
4
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Dual input modes combined with acceleration keys make computing flexible and convenient for healthcare staff working in many different applications.

The ICEFIRE also provides Windows® 7 featured multi-touch, gesture, and hand-writing recognition.

5
Optional Peripherals
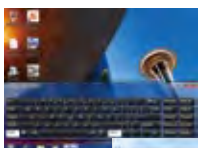
Enhanced on-screen keyboard

Hand-writing recognition

Digitizer Mode

Resistive Touch Mode

Multi-Touch Support

Seamless Wireless Communication

In a local area where wireless LAN is available, the ICEFIRE connects to a wireless local area network (WLAN) via built-in 802.11 a/b/g/n wireless LAN communication module.

When wireless LAN is not available, the ICEFIRE connects to a wide area network (WAN) via telecommunication and the built-in 3.75G modem.

With mobile communication technology, you can improve ongoing and critical dialogue between medical staffs. Records are accurate, research is readily available, and the diagnosis and treatment process are streamlined. By combining seamless wireless communication technology, voice over IP (VoIP), central database connectivity, web-enabled medical IT and other applications, the ICEFIRE helps caregivers get back to their top priority — spending time with their patients and providing point-of-care service.
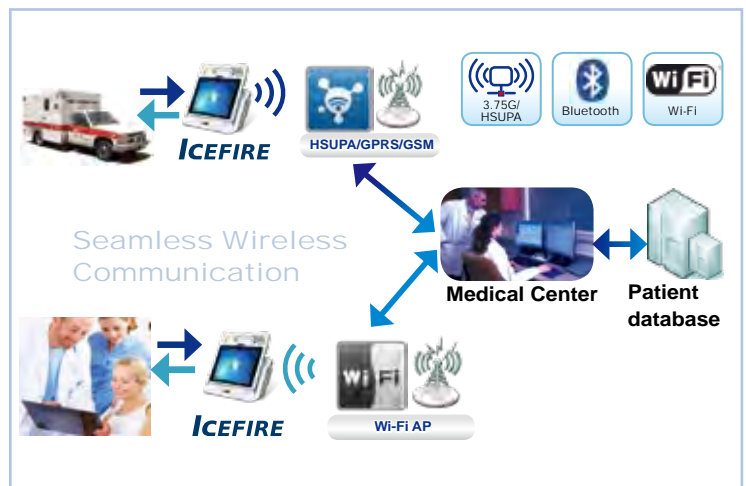
Technology/Bands

- HSPA/UMTS – 800/850/900/1900/2100 MHz
- Quad-band EDGE/GPRS/GSM – 850/900/1800/1900 MHz
- Dual-band EV-DO/CDMA – 800/1900 MHz

Advanced RF Technologies

Receive Diversity on all HSPA/UMTS/EV-DO/CDMA bands
Receive equalization

RADIO	SUPPORT
EV-DO/EV-DO Rev. A 800MHz*	✓
EV-DO/EV-DO Rev. A 1900 MHz*	✓
HSDPA/HSUPA 800MHz*	✓
HSDPA/HSUPA 850MHz*	✓
HSDPA/HSUPA 900MHz*	✓
HSDPA/HSUPA 1900MHz*	✓
HSDPA/HSUPA 2100MHz*	✓
GSM/GPRS/EDGE 850MHz	✓
GSM/GPRS/EDGE 900MHz	✓
GSM/GPRS/EDGE 1800MHz	✓
GSM/GPRS/EDGE 1900MHz	✓
Standalone GPS, AGPS, gpsOneXTRA™	✓

Gobi supports major RF bands
around the world and GPS— all with one chipset Technology/Bands

Efficient Power Management

Illuminated Power Button Supports Laptop-style Power Management

- One click to boot up the system. The green LED turns on.
- One click to suspend the system or to resume from suspend mode. The green LED blinks when the system is in suspend mode.
- Push for four seconds to shut down the system. The green LED turns off.
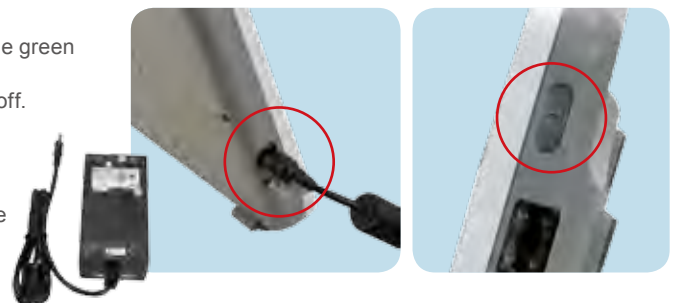
DC Power Input

The bundled AC to DC power adapter provides 12 V DC to power the ICEFIRE in full-speed and charge the batteries simultaneously.

Dual Battery Pack

Each battery pack, with medical-grade certifications, provides 11.1 V 1880 mAh capacity and supports a hot swappable function. When one battery is removed, the system automatically switches power consumption to the other battery. With an additional battery pack and the hot swappable feature, the ICEFIRE ensures non-stop point-of-care, 24 hours a day, every day.

Each battery pack has capacity indicators. Besides these visual indicators, operating systems like Windows® 7 will also display information of available batteries and capacity on the desktop.

The ICEFIRE consumes the battery with lower power capacity first. When charging, the ICEFIRE charges the battery with higher power capacity first then the other.
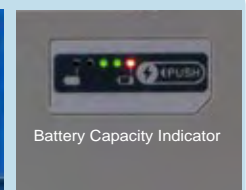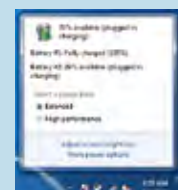
Battery Capacity Indicator

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PACSmate Medical Solutions

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Optional Peripherals

Advanced Data Acquisition Technology

1D/2D Barcode Scanner

	1D	2D
Speed	200 scans/s auto adaptive	60 images/s auto adaptive
Symbology	EAN/UPC, RSS, Code 39, Code 128, UCC/EAN 128, ISBN, ISBT, Interleaved, Matrix, Industrial and Standard 2 of 5, Codabar, Code 93/93i, Code 11, MSI, Plessey, Telepen, postal codes	Data Matrix, PDF417, Micro PDF 417, Maxicode, QR, Aztec, EAN.UCC composite

LED Torch for Night Time Use

RFID on/off button. The ICEFIRE supports a reading distance of up to 5cm.

Press this button to turn on the 1D/2D barcode scanner. Press again to turn off.

Press this button to turn on the flashlight. Press again to turn off.

High performance LED flashlight --- Never leaves you in the dark

13.56 MHz RFID Reader Supports ISO14443A (Mifare) ISO15693

The built-in RFID reader for data collection enables hospitals to automate data capture, improve data accuracy, increase productivity and streamline everyday processes in patient rooms, admittance, laboratories and the pharmacy.

3 Megapixels Camera with LED Flash

■ Integrate a 3 megapixels camera to capture images or data and immediately save it in the ICEFIRE or send it back to the server via Wi-Fi or HSUPA.

■ Press the camera hot key to turn on the camera.

■ Choose "Options" to preview and display the pictures.

Security and Access Control

Combined with Windows® 7 Embedded security management feature, the built-in fingerprint reader allows hospitals to control access priorities.

The optional USB interface smart card reader supports identity verification and makes the ICEFIRE an ideal access control device for transaction-based medical cloud-computing systems.

Optional Smart Card Reader (SCR)   **Fingerprint Reader**

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IEIMobile Solutions

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Optional Peripherals

Indicators and Hot Keys

Indicators

- Green light shows Wi-Fi is enabled
- Blue light shows Bluetooth is enabled
- Orange light shows that Battery-1 is being charged
- Orange light shows that Battery-2 is being charged

Hot Keys

- 4-direction keys (UP, DOWN, LEFT, and RIGHT), and ENTER key
- Wi-Fi on/off button
- Bluetooth on/off button
- Secure Attention Sequence (SAS): identical to "CTRL-ALT-DEL" keystroke combination

Function Key Combinations

Rotate Screen 90° clockwise

User-defined Task A, default setting is to launch Windows File Manager

User-defined Task B, default setting is to rename a file

Function Key + Up/Down Key LCD Brightness Control

Multi-functional Docking Station

Power/Battery charging LED

DC power input

1 x RS-232

1 x VGA output

USB

Battery Charging Packs

The ICEFIRE Docking Station (ICEFIRE-DS) provides power to one docked ICEFIRE and two plug-in battery packs simultaneously.

Docking Dimensions
(Unit: mm)
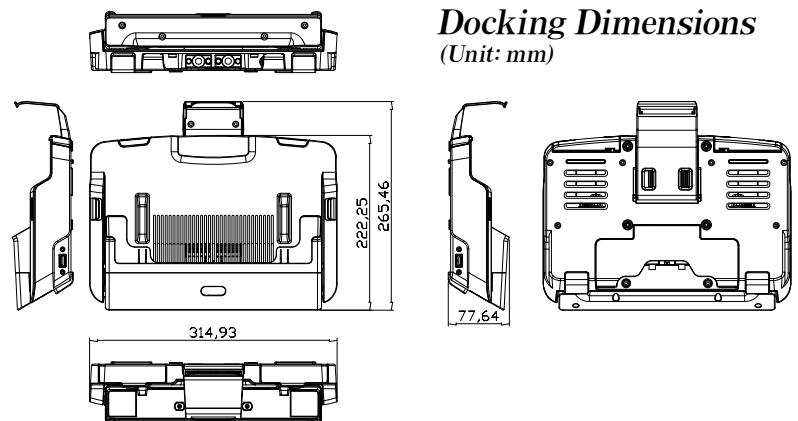
265,46

222,25

314,93

77,64

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Optional Peripherals

ICEFIRE-2013-V10

1-14

PC-Style Peripherals

10/100 Mbps Ethernet LAN

Whenever Ethernet LAN is available, the LAN port of the ICEFIRE provides another faster and more efficient networking option.

Bluetooth v2.1 with EDR

Bluetooth provides a secure way to connect and exchange information with devices such as a mobile phone, handsfree headset, HID, printer, speaker, or Bluetooth medical device.

Control Center Utility

With ICEFIRE control center, user can define the hot keys and direction keys, which can provide them much flexible choice and meet their behavior.

Advantages
● Easy to setup
● Flexible selection table
● Pre-install tips

ICEFIRE Dimensions *(Unit: mm)*

LED torch on/off · RFID on/off · Barcode scanner on/off

Function keys · Fingerprint scanner · Status LED · Navigation keys

USB · Mic · Camera button · Power on/off button with power LED · Barcode scanner · LED torch · Power in · RFID antenna

LED Flashlight · Digitizer pen holder · Camera · Battery 1 · Battery 2

Docking connector

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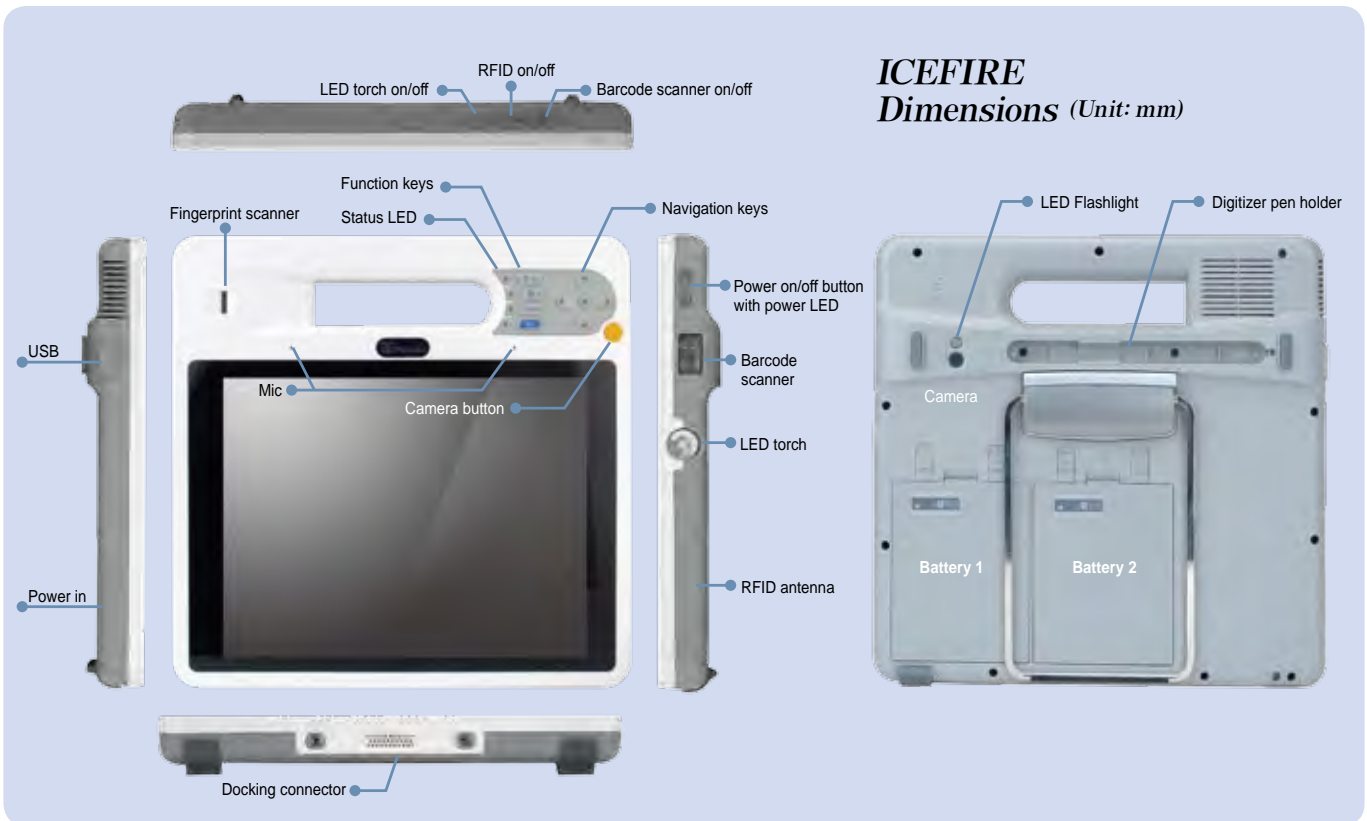
Compact, Slim, and Ergonomic Design

IP64 Compliant and Easy-to-Clean Plastic Housing

Ergonomic Handlebar and Hinge Stand

Handle design for easy carry

Ergonomic Grip Handle

Desk-mount stand for ease of use

Medical-grade Certification Approved

EN 60601-1
EN 60950

IEC.

Antibacterial Housing

Slim and Lightweight Design

1.8 kg with Battery

2.54cm

WOW (Workstation on Wheels) Installation

The combination of ICEFIRE and ICEFIRE Docking Station is an ideal solution for a healthcare cart:

- Desktop, swing arm, or VESA mounting options
- Expanded I/O connects to peripherals such as keyboard/mouse, printer, barcode scanner, or medical equipments
- Easy to draw out and draw back
- Convenient bedside healthcare
- Power and battery options support uninterrupted point-of-care

Dimensions (Unit: mm)

270
250.4
72.9
182.2
41.3
28.5
266.5
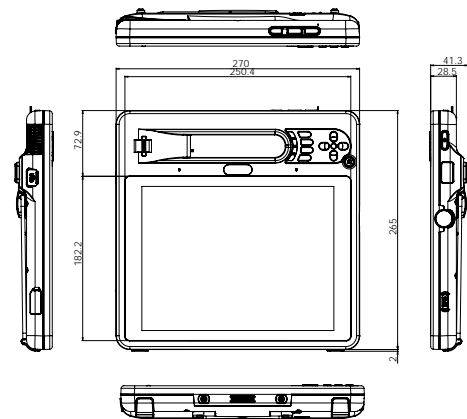
Easy and Flexible Installation

Desktop Installation

Wall-mount Installation

Ergonomic Sliding and Hooking Design

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Optional Peripherals

ICEFIRE-ET

Enterprise Tablet PC

- **10.4" TFT 350 cd/m² XGA LCD with multi resistive touch**
- **Intel® Atom™ D525 dual core 1.8 Ghz platform**
- **Powered by Windows® Embedded Standard 7 P**
- **3 Megapixels camera with LED flash**
- **Bluetooth, Wi-Fi a/b/g/n, Ethernet LAN**
- **Dual hot swappable batteries**
- **Optional docking station / smart card reader**

| Bluetooth | Wi-Fi | Touch Screen | Camera | Fingerprint Reader | SCR | | Intelligent Systems Alliance |
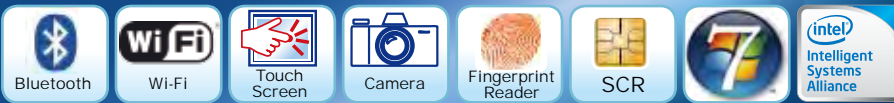
Applications

Enterprise Mobility

Using technology to quickly move products helps save your time and increases productivity. The right technology enables the flow of information between handheld devices used by your workers and your core business systems. The ICEFIRE-ET utilizes wireless local area networks (WLANs) and management software to increase the data transfer speed and optimize your working mobility in logistics and warehousing environments.

Inspection

The ICEFIRE-ET is most suitable for inspection applications. It features an ergonomic and light weight design that is easy to carry around on-the-job. It also offers exceptional functions that allow information to be stored in real-time and help businesses to provide transparent inspection and accurate information.
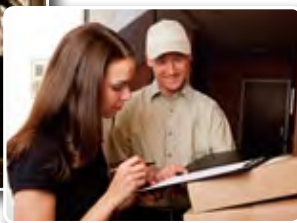
Logistics and Warehouse

Enhancing on-duty staff work force and mobility, the tablet PC brings more efficiency to the workplace. All data and information are saved in the ICEFIRE-ET and can be transferred via wireless communication providing real-time responses without any loss.

ICEFIRE 2 New

10.4" Mobile Clinic Assistant

- 10.4" TFT XGA LCD
- Intel® Atom™ N2800 1.86GHz processor
- Powered by Windows® Embedded Standard 7 P
- Built-in 8GB mSATA storage
- Bluetooth, Wi-Fi, 3.75G wireless with GPS
- 1D/2D barcode reader, 13.56MHz RFID reader
- Dual-mode input (Digitizer + Multi-Resistive Touch)
- Dual hot swappable battery
- Dual Camera:
  1.3 Megapixels front camera
  3.0 Megapixels rear camera

| 3.75G/HSUPA | Bluetooth | Wi-Fi | 1D Barcode Scanner | 2D Barcode Scanner | Digitizer Screen | Touch Screen | Camera | RFID | 7 |
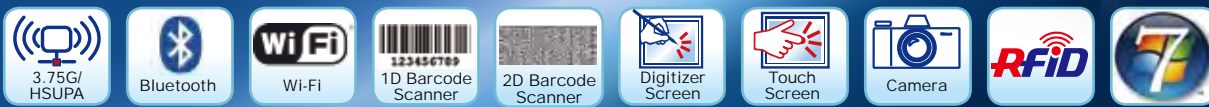
High Performance, Low Power Consumption CPU for Fanless Design

The new generation Intel® Atom™ N2800 processor provides reduced power consumption with high performance suitable for mobile devices in industrial computing. Benefits include:

- Display options include two digital ports supporting extra LVDS/HDMI/VGA interface
- Two times improved graphics with two HD video support
- 2 times improved graphics with 2 HD video support
- Faster memory up to DDR3 1066MHz
- Support fan-less design

Processor Performance
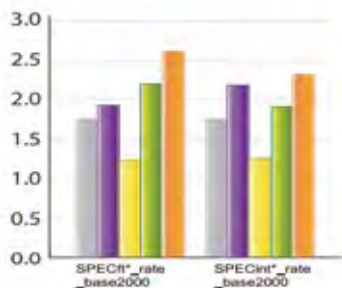
Graphics Performance
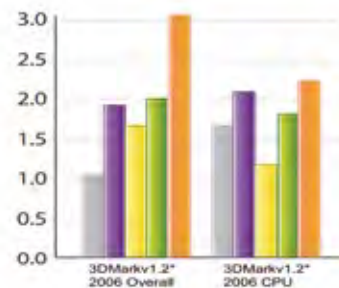
- Intel® Atom™ processor D525
- Intel® Atom™ processor D2700
- Intel® Atom™ processor N455
- Intel® Atom™ processor N2600
- Intel® Atom™ processor N2800

CPU Specification Comparison

	ICEFIRE	ICEFIRE2	
Core Functionality	1.67 GHz (N455) 1.8 GHz (D525)	1.6 GHz (N2600) 1.85 GHz (N2800)	
Process Technology / Packing Size	45-nm / 22x22	32-nm / 22x22	
Graphics Base Frequency	200 MHz (N455) 400 MHz (D525)	400 MHz (N2600) 640 MHz (N2800)	
Memory Technology	DDR3 667 (N455) DDR3 800 (D525)	DDR3 800 (N2600) DDR3 1066 (N2800)	
Max Memory Capacity	2GB (N455) 4GB (D525)	2GB (N2600) 4GB (N2800)	
CPU / TDP	D525 / 13W	N2600 / 3.5W	N2800 / 6.5W
Chipset / TDP	ICH8M / 2.4W	NM10 / 1.5W	NM10 / 1.5W
Power kit / TDP	Power / 7W	Power / 3W	Power / 3W
Total	22.4W	8W	11W

GPS Application : Position & Location

Together with wireless network technology (such as 3G), the built-in GPS tracks the exact location of the ICEFIRE users:

■ Users can be located on a map to reference his/her own location in relation to other landmarks. With location based services, mobile workers can locate important destinations such as gas stations and customers in an unknown territory.

■ Location information obtained from the GPS can be transmitted to the backend office through wireless broadband connectivity, allowing employees to be tracked while they are on the move.

Back-office Tracking
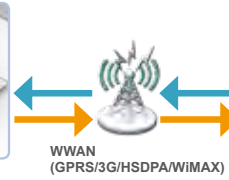
WWAN
(GPRS/3G/HSDPA/WiMAX)

Out-field Location

mSATA Storage

mSATA SSD leverages the speed and reliability of the SATA interface, providing high-performance and cost-effective storage for smaller devices and enabling more compact integration into a wide variety of applications. Compared to the traditional HDD and CF card storage, mSATA has the following advantages:

■ Fast re-write capabilities
■ Able to withstand vigorous vibrations
■ Small in size

Flexible Module Expansion Slot

Open Cover

Located at the back of the ICEFIRE 2, the module expansion slot is designed for easy and fast exchange of a variety of modules including RFID readers. This design brings functional versatility to the ICEFIRE 2 to serve a diverse range of applications.

Integrated Dual Camera

3-megapixel Rear-facing Camera

1.3-megapixel Rear-facing Camera

The ICEFIRE 2 is integrated with two camera, one on the front and one on the rear. The 3-megapixel rear-facing camera can be utilized for photographic and video documentation purposes. The 1.3-megapixel front-facing camera enables unified video communications wirelessly.

1
IEIMobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

LED torch on/off
RFID on/off
Barcode scanner on/off

Function keys
Fingerprint scanner
Status LED
Navigation keys
3 megapixels camera
Digitizer pen holder

Power on/off button with power LED

USB

Barcode scanner

1.3 megapixels camera
Camera button

LED torch

Power in

Battery 1
Battery 2
Removable cover

RFID antenna

Docking connector

Selection Guide

		ICEFIRE			ICEFIRE 2		
Model		ICEFIRE-T10A HU/2G-32S-R11	ICEFIRE-T10A-TR/2G-32S-R10	ICEFIRE-T10A-ET/2G-32S-R10	ICEFIRE2-T10-HU-R10	ICEFIRE2-T10-TR-R10	ICEFIRE2-T10-ET-R10
Display	LCD Size	10.4'' TFT LCD					
	Brightness (cd/m²)	350 cd/m²					
	Max Resolution	1024 x 768 pixels XGA					
	Viewing Angle	88/88/88/88 Deg.					
	Touch Screen	Resistive Support Multi-touch and Gesture					
	Digitizer	256 levels @ full scale pressure resolution	N/A	N/A	2048 levels@ full scale pressure resolution	N/A	N/A
System	CPU	1.8GHz Intel® Atom™ D525			1.86GHz Intel® Atom™ N2800		
	Chipset	Intel® ICH8M			Intel® NM10		
	Operating System	Microsoft® Windows® Embedded Standard 7 P (WES7P)			Microsoft® Windows® Embedded Standard 7 P (WES7P)		
	Memory	1333MHz 2GB DDR3 SDRAM			1333MHz 4GB DDR3 SDRAM		
	Storage	32GB SSD			mSATA 8G SLC		
Communication	Wireless LAN	Wi-Fi 802.11a/b/g/n			Wi-Fi 802.11b/g/n		
	Bluetooth	Bluetooth V2.1+ EDR (Class 2)			Bluetooth V3.0 + EDR (Class 2)		
	Modem	WCDMA/HSUPA	N/A	N/A	GPRS/CDMA/HSDPA	N/A	N/A
	GPS	N/A	N/A	N/A	Yes	N/A	N/A
Data Collection	Camera	3 megapixels and LED Light			1.3 megapixels CMOS camera (Front) / 3 megapixels CMOS camera (Rear)		
	Barcode	1D/2D Imager Scan Engine	N/A	N/A	1D/2D Imager Scan Engine	N/A	N/A
	RFID	13.56 MHz RFID supports ISO15693 and ISO14443A/B (by customization) compliant	N/A	N/A	13.56 MHz RFID support ISO 15693 and 14443A /14443B (by customization) compliant	N/A	N/A
Fingerprint Reader		Yes	Yes	N/A	Yes	Yes	N/A
Indicators & Buttons	LED Indicators	Power/ Wi-Fi/Bluetooth/ RFID/ Battery Status LED		Power/ Wi-Fi/Bluetooth/ Battery Status/	Power/ Wi-Fi/Bluetooth/ RFID/ Battery Status		Power/ Wi-Fi/ Bluetooth/ Battery Status
	Keys	5-way Navigation key/Barcode Scanner/RFID/LED Torch/Camera/Wi-Fi/Bluetooth/SAS/Function Key		5-way Navigation key/ Camera/Wi-Fi/Bluetooth/ SAS/Function Key	5-way navigation key/ Barcode Scanner/RFID/LED Torch/Camera/Wi-Fi/ Bluetooth/SAS/Function Key		5-way navigation key/ LED Torch/Camera/ Wi-Fi/Bluetooth/ SAS/ Function Key
I/O Interface	USB	1 x USB 2.0			1 x USB 3.0		
	LAN	1 x 10/100 Mbps			1 x 10/100/1000 Mbps		
	Audio	1 x 2W Speaker, 1 x Mic in					
	LED Torch	1 x LED Torch	1 x LED Torch	N/A	1 x LED Torch	1 x LED Torch	N/A
Power	Power Adapter	12V @ 5A @ 60W					
	Docking Power Adapter	19V @ 4.74A @ 90W					
	Battery	Dual 11.1V 1880mAh Li-ion Battery					
Environment	Operating Temperature	0ºC to +40ºC					
	Storage Temperature	-10ºC to +60ºC					
	Humidity	5%~95% non-condensing					
	Drop Survival	90 cm					
	Environmental Protection	IP 64 compliant front panel					
	Certifications	CE/FCC, Medical-grade Class B EN 60601-1/ EN60950	CE/FCC, Medical-grade Class B EN 60601-1/ EN60950	CE/FCC	CE/FCC, (Medical-grade Class B)	CE/FCC, (Medical-grade Class B)	CE/FCC
Physical Characteristics	Dimensions (LxWxH) (mm)	270 x 265 x 29			270 x 265 x 29		
	Weight	1.7 kg	1.7 kg	1.6 kg	1.7 kg	1.7 kg	1.6 kg

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

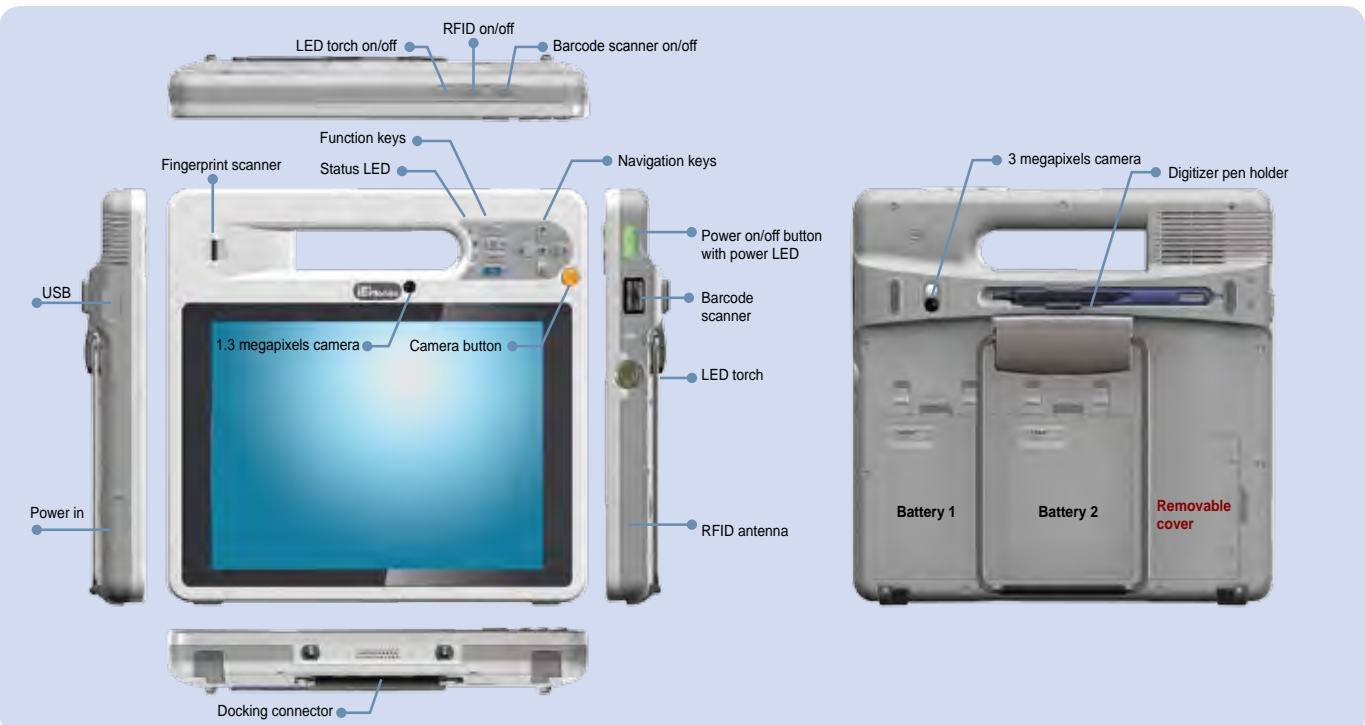**4** PACSmate Medical Solutions

5 Optional Peripherals

Ordering Information

Part No.	Description
ICEFIRE: Intel® Atom™ D525 CPU with Windows® Embedded Standard 7	
ICEFIRE-T10A-HU/2G-32S-R11	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ D525 1.8GHz CPU, Multi-Touch and Digitizer Dual Mode, 2GB DDR3 RAM, HSUPA, 802.11 a/b/g/n Wireless, Bluetooth, GPS, 1D/2D Barcode Scanner, RFID, 3M Pixel Camera, LED Torch, 32G SSD, WES7P RoHS
ICEFIRE-T10A-TR/2G-32S-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ D525 1.8GHz CPU, Resistive Multi-Touch, 2GB DDR3 RAM, 802.11 a/b/g/n Wireless, Bluetooth, 1D/2D Barcode Scanner, RFID, 3M Pixel Rear Camera, LED Torch, 32G SSD, WES7P, RoHS
ICEFIRE-T10A-ET/2G-32S-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ D525 1.8GHz CPU, Resistive Multi-Touch, 2GB DDR3 RAM, 802.11 a/b/g/n Wireless, Bluetooth, 32G SSD, WES7P RoHS
ICEFIRE 2: Intel® Atom™ N2800 CPU with Windows® Embedded Standard 7	
ICEFIRE2-T10-HU-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ N2800 1.86GHz CPU, Multi-Touch and Digitizer Dual Mode, 4GB DDR3 RAM, HSUPA, 802.11 b/g/n Wireless, Bluetooth, GB, 1D/2D Barcode Scanner, RFID, 3M Pixel Rear Camera, 1.3M Pixel Front Camera, LED Torch, 8G, WES7P RoHS
ICEFIRE2-T10-TR-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ N2800 1.86GHz CPU, Resistive Multi-Touch, 4GB DDR3 RAM, 802.11 b/g/n Wireless, Bluetooth, 1D/2D Barcode Scanner, RFID, 3M Pixel Rear Camera, 1.3M Pixel Front Camera, LED Torch, WES7P, RoHS
ICEFIRE2-T10-ET-R10	10.4" TFT-LCD 350 cd/m² XGA Industrial Mobile Clinical Assistant with Dual-core Intel® Atom™ N2800 1.86GHz CPU, Resistive Multi-Touch, 4GB DDR3 RAM, 802.11 b/g/n Wireless, Bluetooth, WES7P RoHS

Model Variations

Part No.	Digitizer	Touch	Wireless	Bluetooth	3.75G	GPS	Barcode	RFID	Fingerprint Reader	Memory
ICEFIRE: Intel® Atom™ D525 CPU with Windows® Embedded Standard 7										
ICEFIRE-T10A-HU/2G-32S-R11	Digitizer	Resistive Multi-touch	802.11 a/b/g/n	Ver. 2.1+EDR, Class 2	Qualcomm	N/A	1D/2D	RFID	Yes	32G SSD
ICEFIRE-T10A-TR/2G-32S-R10	N/A	Resistive Multi-touch	802.11 a/b/g/n	Ver. 2.1+EDR, Class 2	N/A	N/A	1D/2D	RFID	Yes	32G SSD
ICEFIRE-T10A-ET/2G-32S-R10	N/A	Resistive Multi-touch	802.11 a/b/g/n	Ver. 2.1+EDR, Class 2	N/A	N/A	N/A	N/A	N/A	32G SSD
ICEFIRE 2: Intel® Atom™ N2800 CPU with Windows® Embedded Standard 7										
ICEFIRE2-T10-HU-R10	Digitizer	Resistive Multi-touch	802.11 b/g/n	Ver. 3.0+EDR Class 2	Qualcomm	GPS	1D/2D	RFID	Yes	8G mSATA
ICEFIRE2-T10-TR-R10	N/A	Resistive Multi-touch	802.11 b/g/n	Ver. 3.0+EDR Class 2	N/A	N/A	1D/2D	RFID	Yes	8G mSATA
ICEFIRE2-T10-ET-R10	N/A	Resistive Multi-touch	802.11 b/g/n	Ver. 3.0+EDR Class 2	N/A	N/A	N/A	N/A	N/A	8G mSATA

Packing List

Item	Part No.	HU	TR	ET
Digitizer Pen	7Z000-SU5E10S06AU00X-RS	●		
Stylus	43125-0002C0-00-RS		●	●
Battery Pack	31603-000016-RS	●	●	
Battery Pack-B	31603-000020-RS			●
Medical-grade Power Adapter (12V/60W)	63040-010060-020-RS	●	●	
Non-Medical-grade Power Adapter (12V/60W)	63040-010060-030-RS			●
User's Manual CD	7B000-000552-RS	●	●	●

Carrying Case   Docking Station   Smart Card Reader   Battery Pack   12V Power Adapter   19V Power Adapter   Digitizer Pen   Stylus

Optional Accessory List

Item	Part No.	Description
Docking Station	ICEFIRE-T10A-DS01-R10	ICEFIRE-T10A Docking Station
	63040-010090-000-RS	Medical Certification Docking Power Adapter, 19V/4.74A/90W
	ICEFIRE-T10A-DS02-R10	ICEFIRE-T10A Docking Station
	63040-010090-020-RS	Non-Medical Certification Docking Power Adapter, 19V/4.74A/90W
Smart Card Reader	ICEFIRE-T10A-SCR01-R10	USB 2.0 (Full Speed) Smart Card Reader Complies with ISO7816-1,2,3 for ICEFIRE-T10A
Battery Pack	31603-000016-RS	11.1V 1880 mAh Battery
Battery Pack-B	31603-000020-RS	11.1V 1880 mAh Battery, Black
Digitizer Pen	7Z000-SU5E10S06AU00X-RS	Digitizer Sensor Pen
Stylus	43125-0002C0-00-RS	Touch Pen
Carrying Case	7Z000-ICEFIRET10APOUCH-RS	Black, leather protective bag with shoulder strap

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4 PACSmate Medical Solutions

5 Optional Peripherals

ICEROCK

Infotainment Tablet PC

- **8" 350 cd/m² TFT XGA LCD**
- **Intel® Atom™ Z530 platform**
- **Powered by Windows® XP Embedded**
- **Bluetooth, Wi-Fi, 3.75G wireless**
- **Optional 1D/2D barcode scanner and 13.56 MHz RFID reader compliant with ISO 15693 and ISO 14443A**

Wi-Fi	Bluetooth	1D Barcode Scanner	2D Barcode Scanner	RFID
3.75G/ HSUPA	Camera	IP62	Touchscreen	Fanless	Windows XP	Intelligent Systems Alliance
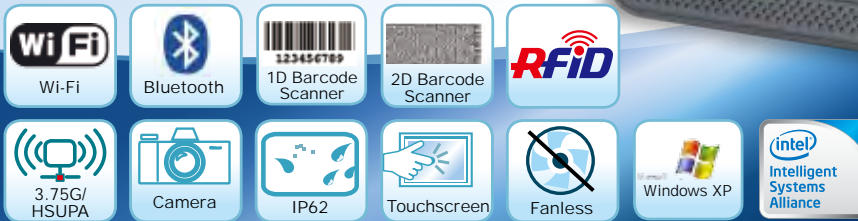
█ Application

The ICEROCK is a semi-rugged and powerful tablet PC for indoor, outdoor and home automation applications. It can be applied across vertical markets that need a robust device for harsh work environments.

The ICEROCK utilizes the power of Intel® Z530 processors and integrates Wi-Fi 802.11 b/g/n, Bluetooth and enhanced Gobi™3000 mobile broadband for out-field users.

WWAN
(GPRS/3G/HSUPA/WiMAX)

In-field
Warehouse/
Stock Checking

Out-field
On-site Support

Headquarter
Back-end Management Team

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Optional Peripherals

Easy to Use

■ Ambient Light Sensor

Automatically adjusts the screen brightness for optimum visibility and energy efficiency.

■ Rotate with G-Sensor

Automatically toggles between portrait and landscape display mode providing the most comfortable viewing experience.

■ 1.3 Megapixels Camera and Microphone

Built-in 1.3 megapixels video intercom device allows for real-time communication. The webcam performs well in low light situations.

Camera with Low Light Function!

■ Eight Function Keys

F1~F8 function keys help to simplify frequently used applications by pressing a single shortcut key. The Function Keys can be programmed for customization.

Key	Functions
Fn+F1	Sleep
Fn+F2	Volume ON/OFF
Fn+F3	Volume Up
Fn+F4	Volume Down
Fn+F5	Auto Dimming
Fn+F6	Brightness Up
Fn+F7	Brightness Down
Fn+F8	LCD ON/OFF

Key	Description
SAS(Fn)	Secure Attention Sequence (Alt+Ctrl+Del)

Key	Functions
Arrow Up	Up
Arrow Down	Down
Arrow Right	Right
Arrow Left	Left
Enter Key	Enter
Fn+Arrow Up	Page Up
Fn+Arrow Down	Page Down
Fn+Arrow Right	End
Fn+Arrow Left	Home

■ G-sensor Setting

Disabled by default, the G-sensor can be set-up in BIOS.Use the function key to select BIOS SET UP. Press F4 to go back to the previous menu.

The automatic screen rotation sensitivity can be enhanced by enabling G-sensor with an ODM.

■ After Enabling the G-sensor Function

1. Please make sure to install the Graphics Driver before adjustment
2. Enable G-sensor in BIOS
3. Calibration window will appear after enabling the G-sensor
4. ICEROCK has to be laid down on a flat surface
5. Press Enter to complete G-Sensor calibration
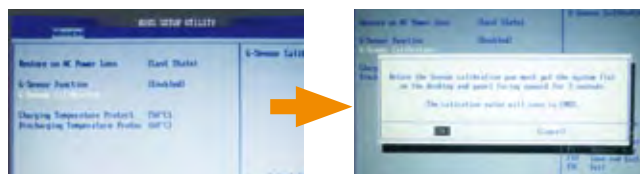
■ LED Indicators

Indicator 1	AC power in/Battery on (Only Battery with AC Power) Battery mode: Red LED On Battery mode and low power: Red LED Flash	(Battery and AC Power in) Battery charge mode: Green LED blinks Battery charge mode and full battery: Green LED on
Indicator 2	Wireless/Bluetooth Enable: LED on; Disable: LED off	
Indicator 3	HD Enable: LED on; Disable: LED off	
Indicator 4	3.75G Enable: LED on; Disable: LED off	

Reliable

IP62 Compliant Front Panel Protection

Provides protection against damage caused by accidental spills and dust.

One Key Recovery

IEI's useful One Key Recovery solution includes exclusive technology to backup and recover your operating system with just one simple click when your computer faces the following situations:

● Severe virus attack

● Operating system crash

● Natural or man-made disasters

One Key Recovery

IEI Recovery Kit

Powerful

High Graphics Performance Supports H.264, MPEG1/2/4, VC-1/ WMV9 High Definition Decoding

The ICEROCK is powered by an Intel® Atom™ Z530P with full hardware acceleration which eliminates the need for software decoding and the risk of overloading the processor. With low CPU resource utilization, the ICEROCK is optimized for multitasking.

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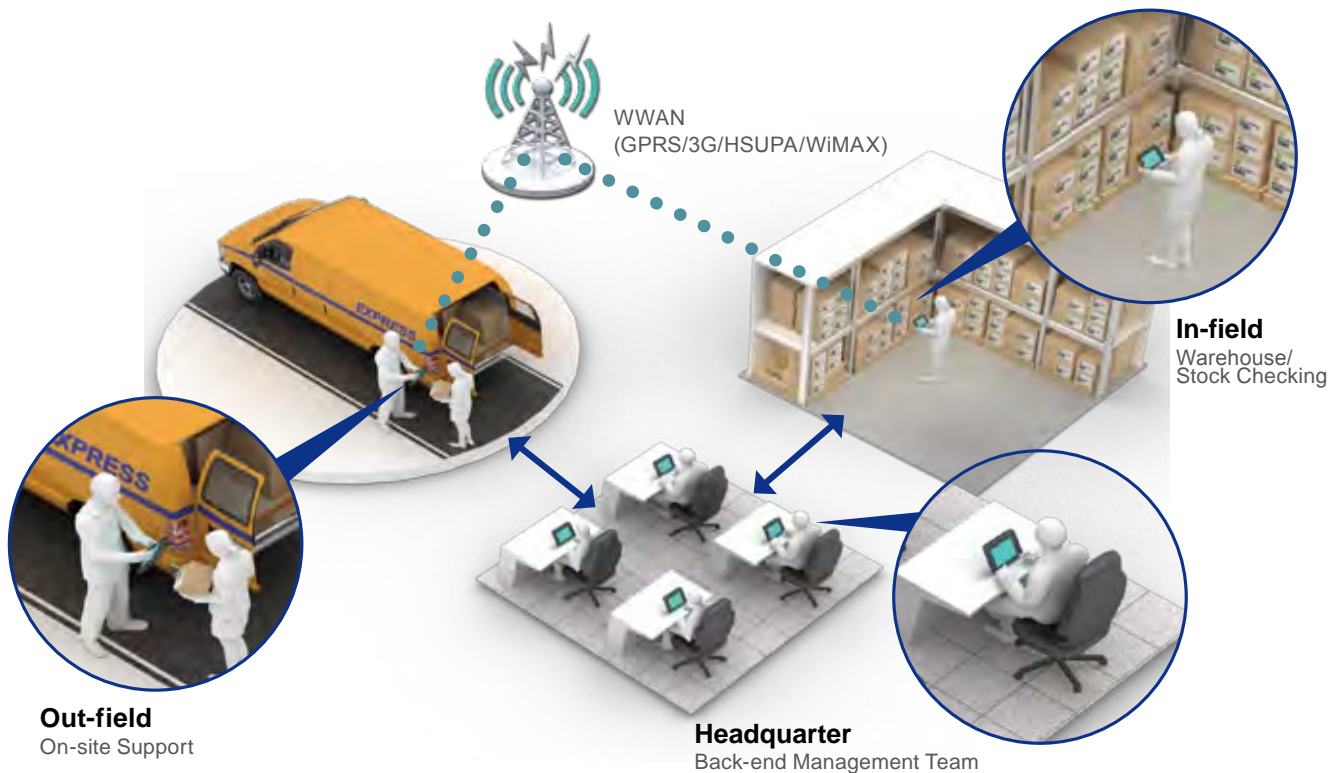PACSmate Medical Solutions

5

Optional Peripherals

Mobile

802.11b/g/n Wireless LAN

Integrated PIFA antenna on the ICEROCK ensures an uninterupted wireless connection and provides up to IEEE 802.11n wide bandwith operation. Frees cables and clutter from your workspace.

Wi Fi

Bluetooth V3.0+HS CLASS II

A preinstalled Bluetooth module communicates with a wide range of electronic devices from PDAs and cellphones to barcode readers. Transmission performance is greater than 20m in free space.

3.75G HSUPA

Mobile 3.75G Connection

Free Wi-Fi hotspots will only get you so far. Stay connected with a mobile broadband Internet connection over 3G mobile phone network while you're on the move.

Bluetooth®

Supported Bands

*HSUPA/UMTS –800/850/900/1900/2100 MHz
*Quad-band EDGE/GPRS/GSM –850/900/1800/1900 MHz
*Dual-band EV-DO/CDMA

Warehouse Management   **Multimedia Control Center**   **Construction Site**

Communication Applications

1.Surveillance Management

The ICEROCK can monitor factories, offices and other places such as VNC software through LAN, 3.75G or Wi-Fi connection.

2. Remote Login

Users can remotely login via LAN, 3.75G and Wi-Fi such as VPN

Example: use 3.75G connection to login a NAS server.
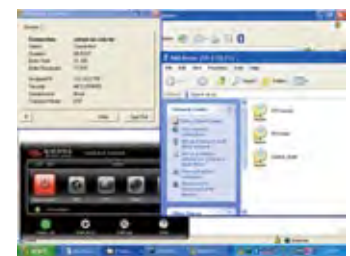
3.Wireless Communication

Use communication software such as SameTime or Skype via LAN & 3.75G & Wi-Fi and Bluetooth earphone.

skype

3.75G
Wi-Fi
LAN

Bluetooth

4.Ordering System

The ICEROCK can be set up as a POS station when used together with a handheld order terminal such as the MODAT-200.
It can also be displayed in the kitchen or connected to a Bluetooth printer to print out receipts.

Diverse Installation Methods

Desktop with Docking Station

Docking Station (Optional)
ICEROCKDS-08A-R10

12 V DC Jack VGA RJ-45
4 x USB 2.0 RS-232

Stand Switch

USB 2.0 Port Battery LED
AMP 1 W Speaker Power LED AMP 1.5 W Speaker
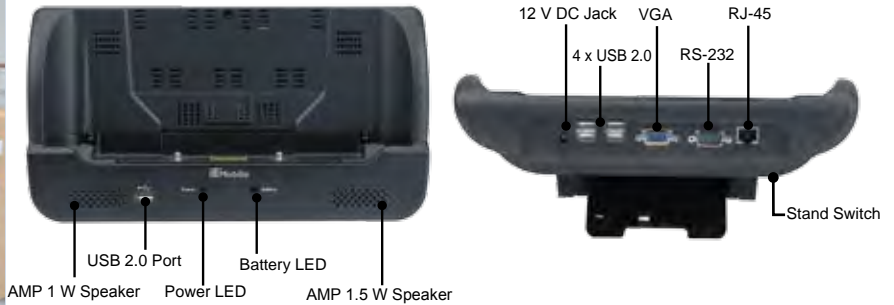
Wall Mount with Docking Station

Wall Mouting Options
VESA Stand

Adjustable Hinge VESA 75 mm x 75 mm

Built-in Stand

VESA
50 mm x 20 mm

Docking Station Provides Second Display Connection

The docking station provides a VGA out connector that connect the ICEROCK to a larger second display such as a projector, TV or monitor.

VGA

Monitor

Projector

TV

Optional Battery Pack

Larger Battery Pack

Longer Power Support – Optional Larger Battery Capacity

5000 mAh capacity is powerful enough to support the ICEROCK's rich wireless communication and various data collection functions.

Part No. 31603-000022-RS

Specifications

	Item	Rating Performance	Remark
1	Nominal capacity	5000 mAh	In standard charging
2	7.4VNominal Voltage	7.4V	Within 1 hour after quick charging
3	Maximum charge voltage	8.4V	
4	Operating condition	Charge: 0˚C~40˚C Discharge: -10˚C~60˚C	
5	Storage temperature	-20~60˚C	

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Optional Peripherals

1-25 **ICEROCK-2013-V10**

ICEROCK-BAR

ICEROCK-08A-BAR-2G-R12
ICEROCK-08A-BAR-HU/2G-R12

Barcode Scanner   RFID Reader

AC Power/Battery, Wi-Fi/Bluetooth, HDD, HSUPA LED Indicators

AMP 1.5 W + 1.5 W Speaker   1.3 Megapixels CMOS Camera   Ambient Light Sensor

Power Button

Headphone Mic-in

Bluetooth/ Wireless LAN Switch

USB 2.0

Stylus

Lockable SD Card

RJ-45

USB 2.0

8" LED Backlight TFT LCD with Touch-screen

F1 F2 F3 F4

F5 F6 F7 F8

Mini USB

12 V DC Jack

Secure Attention Sequence Function

Digital Microphone

Navigation Button Function Keypads

F1~F8 Programmable Function Keys

Advanced Data Acquisition Technology

RFID Reader

Certified with ISO15693, ISO14443A, and ISO14443B, the built-in RFID reader for data collection automates data capture, improving data accuracy, productivity, and performance for business applications.

1D/2D Barcode Scanner

Powered by Honeywell Adaptus® Imaging Technology, the built-in barcode reader features high quality reading functionality and advanced image capture capabilities. Designed with industry-leading motion tolerance, low light sensitivity, broad depth of reading distances, and tough environmental considerations, it is a quick and easy adoption for point-and-shoot scanning.

Performance			
Focal Point	SR: 7" (17.8cm) from lens plate; SF: 4.5" (11.4cm) from lens plate	Viewing Angle	± 40°C
Ambient Light	Total darkness to 100,000 lux (full sunlight)	Image Sensor	752 x 480 CMOS sensor
Supported Symbologies			
1D	Code 39, Code 128, Codabar, UPC, EAN, Interleaved 2 of 5, Reduced Space Symbology, Code 93, Codablock		
2D	PDF417, MicroPDF417, MaxiCode, Data Matrix, QR Code, Aztec, Aztec Mesa, Code 49, UCC Composite		
Others	Postal Codes, OCR Fonts		

Integrated with both an 1D/2D barcode scanner and a RFID reader, the upgraded ICEROCK (bar) is the most competitive choice for retailers of all types. From department stores that offer almost everything, to specialty stores that provide particular products, inventory management and control is ultimately the most important issue that retail managers have to face. With the ICEROCK (bar), inventory can be recorded and tracked automatically. It can not only reduce costs associated with human handling (such as error and time) but also allow retailers to improve accuracy, efficiency and profitability.

Inventory Management   Inventory Registry   Inventory Tracking

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5 Optional Peripherals

System Overview

AC Power/Battery, Wi-Fi/Bluetooth, HDD, HSUPA LED Indicators

AMP 1.5 W + 1.5 W Speaker

1.3 Megapixels CMOS Camera

Ambient Light Sensor

Power Button

Headphone Mic-in

Bluetooth/ Wireless LAN Switch

USB 2.0

12 V DC Jack

Stylus

Lockable SD Card

RJ-45

USB 2.0

Mini USB

8" LED Backlight TFT LCD with Touchscreen

Secure Attention Sequence Function

Digital Microphone

Navigation Button Function Keypads

F1~F8 Programmable Function Keys

Specifications

Model		ICEROCK
Display	LCD Size	8.0" TFT LCD
	Brightness (cd/m²)	350 cd/m²
	Max Resolution	800 x 600 pixels SVGA
	Viewing Angle	70/70/60/70 Deg.
System	CPU	Intel® Atom™ Z530 1.6GHz
	Chipset	Intel® SCH US15WP
	Operating System	Microsoft® Windows® XP Embedded
	Memory	2G DDR2 on board
	Storage	CompactFlash® Slot, SD Card Slot
Communication	Wireless LAN	Wi-Fi 802.11b/g/n
	Bluetooth	Bluetooth® V3.0 + HS (Class II)
	Modem	WCDMA/HSUPA (optional)
	GPS	by customization
Data Collection	Camera	1.3 megapixels
	Barcode	1D Laser / 2D Imager Scan Engine (Optional)
	RFID	13.56 MHz RFID supports ISO 14443A/B (by customization)
Indicators & Buttons	LED Indicators	Power/ Wi-Fi/Bluetooth/HDD/3.75G Status LED
	Keys	5-way navigation key 8 x Programmable function keys
I/O Interface	USB	2 x USB 2.0 1 x Mini USB Client
	LAN	1 x 10/100/1000 Mbps GbE RJ-45
	Audio	2 x 1.5W Speaker
		1 x Mic-in
Power	Power Adapter	12V @ 5A @ 60W
	Battery	7.4 V 2400 mAh Li-ion Battery (Optional 5000mAH)
Enviroment	Operating Temperature	0˚C to +40˚C
	Storage Temperature	-20˚C to +60˚C
	Humidity	5%~95% non-condensing
	Drop Survival	1.0 M
	Environmental Protection	IP 62 compliant front panel
	Certifications	CE/FCC
Physical Characteristics	Dimensions (LxWxH) (mm)	255 x 180 x 37
	Weight	1.1 kg

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IEIMobile Solutions

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Automation Panel Solutions
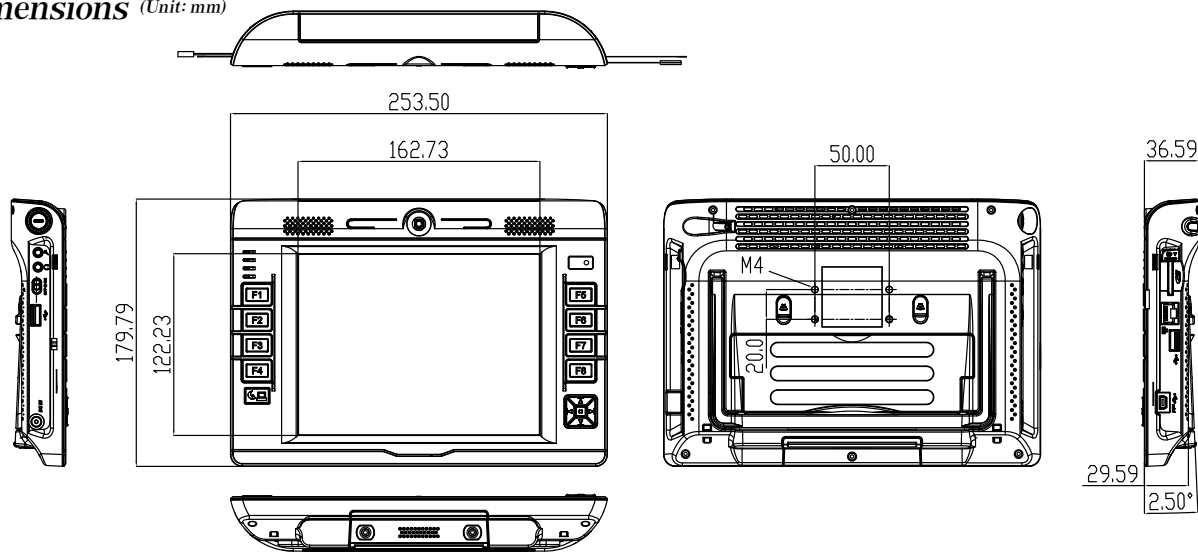
3

RISC-based Solutions

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PACSmate Medical Solutions

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Optional Peripherals

ICEROCK

Dimensions (Unit: mm)

253.50
162.73
50.00
36.59
179.79
122.23
M4
20.0
29.59
2.50°

Ordering Information

Part No.	Description
ICEROCK-08A-Z530/WT-R/2G-R12	8.0" 350cd/m² SVGA Mobile Panel PC with Intel® Atom™ Z530P 1.6GHz, 802.11 b/g/n Wireless Module, Bluetooth Module, Touch screen, 1.3 Megapixels Camera, 2GB SDRAM,R10, RoHS
ICEROCK-08A-WT-R-HU/2G-R12	8.0" 350cd/m² SVGA Mobile Panel PC with Intel® Atom™ Z530P 1.6GHz, 802.11b/g/n Wireless Module, Bluetooth Module, Touch screen, 1.3 MegapixelsCamera, 2GB SDRAM, 3.75G Module, RoHS
ICEROCK-08A-BAR-2G-R12	8.0" 350cd/m² SVGA Mobile Panel PC with Intel® Atom™ Z530P 1.6GHz, 802.11b/g/n Wireless, Bluetooth, RFID, 1D/2D Barcode Scanner, 1.3 Megapixels Camera, 2GB SDRAM, RoHS
ICEROCK-08A-BAR-HU/2G-R12	8.0" 350cd/m² SVGA Mobile Panel PC with Intel® Atom™ Z530P 1.6GHz, 802.11b/g/n Wireless, Bluetooth, RFID, 1D/2D Barcode Scanner, 1.3 Megapixels Camera, 2GB SDRAM, 3.75G Module, RoHS

Packing List

Item	Part No.	Q'ty
Battery Pack	31603-000011-RS	1
Power Adapter	63040-010060-030-RS	1
Power Cord	32702-000200-100-RS	1
Stylus	7Z000-6051D0320101-RS	1
Plastic Protective Shell	47003-007600-00-RS	1
User Manual CD	7B000-000774-RS	1
IEI One Key Recovery CD	7B000-000724-RS	1

Optional Accessory List

Item	ICEROCK	Description
Docking Station	ICEROCKDS-08A-R10	Docking station with VGA, 5 x USB 2.0, RJ-45, and RS-232 ports for ICEROCK series
Battery Pack	31603-000011-RS	7.4V 2400 mAh Battery
Battery Pack - Large	31603-000022-RS	7.4V 5000 mAh Battery
Leather Carrying Case	ICEROCKCB-00-R10	Black, Leather carrying case in black color for ICEROCK-08A series
OS Windows® XP Embedded	ICEROCKCF-08-XPE-2GB-R10	2 GB CompactFlash® with Windows® XPE OS image and license
	ICEROCKCF-08-XPE-4GB-R10	4 GB CompactFlash® with Windows® XPE OS image and license

Stylus   Battery Pack   Docking Station   Battery Pack-Large   Power Adapter   Plastic Protective Shell   Leather Carrying Case

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5 Optional Peripherals

ICECARE

Mobile Field Assistant

- 7" 500 cd/m² TFT LCD with projective capacitive touchscreen

- **Texas Instruments Sitara ARM Cortex A8 CPU**
- **Powered by Android 2.3.4 OS**
- **1D laser / 2D imager scan engine, HF RFID reader**
- **Dual Camera :**
  2 Megapixels CMOS front camera
  5 Megapixels CMOS rear camera
- **Bluetooth, Wi-Fi, 3.5G wireless**
- **Built-in Ublox GPS with internal antenna**
- **Dual hot swappable batteries**

Cortex Intelligent Processors by ARM

TEXAS INSTRUMENTS

| android | Bluetooth | Wi-Fi | USB 2.0 | GPS | 3.75G/ HSUPA | Camera | Touch Screen | IP64 | 1D Barcode Scanner | 2D Barcode Scanner |

Field Service Application

Increase field service productivity and efficiency with the ICECARE 7" Mobile Field Assistant. This RISC-based tablet PC features TI OMAP3 AM3715 CPU and runs on the Android 2.3.4 OS. Targeted for field service applications, it can be used for:

- Capturing and recording information in real-time
- Determining customers' locations
- Tracking and locating mobile field workers
- Accessing and updating information in real-time

Track and Locate

Capture and Record

Out-field
WWAN
(GPRS/3G/ HSDPA/WiMAX)

Access and Update

Power Saving and Trendy Platform

TI Cortex A8 CPU

- TI's Sitara family of highly-integrated ARM9™ and ARM Cortex™-A8 microprocessor portfolio offers various combinations of high-performance and low power levels, providing the ability to create an array of products using a common hardware and software platform.
- Reduce system risks and accelerate time to market using standard and comprehensive ARM-based software development tools.
- TI is the largest ARM core licensee supporting all major high-level operating systems such as Android and Windows CE.

Sitara™ offers

Performance
- Up to 450MHz ARM9 to 1.5GHz Cortex A8 devices
- Industry's first widely available Cortex-A8 devices - 2DMIPS per MHz
- Graphics acceleration up to 27M polygons/s performance for advanced user interface
- High speed DDR2 and DDR3 memory performance

Connectivity
- 10/100/1000 Ethernet
- CAN 2.0 and high speed USB interface
- Multiple serial port options per device
- **Cost effective** processor with SATA interface
- Flexible LCD controller for up to 720p displays and moving to 1080p in future devices
- Industrial peripheral support

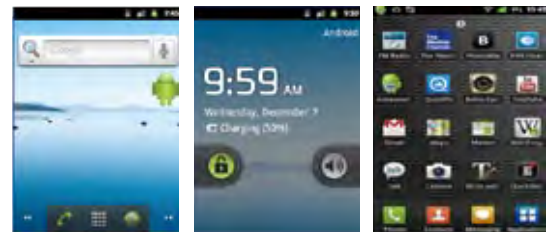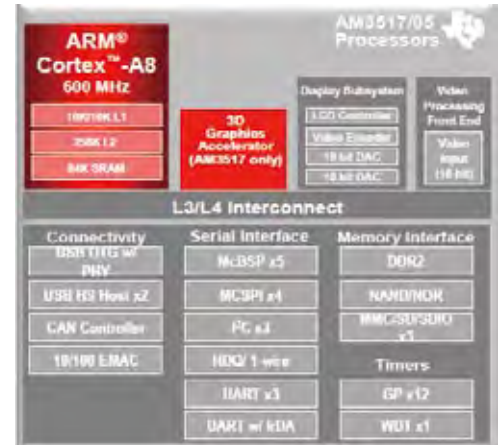### AM3517/05 Cortex™-A8 based processors

Benefit
- Support OS such as Linux, Win CE, RTOS
- 10M polygons/second for robust GUIs
- Multi windows overlay for hardware accelerated user

Power
- Total Power: L700mW
- Standby Power: 12mW

Suggested Application
- Industrial/Home automation
- Point of service

Android 2.3.4 Operating System

- Android is an operating system for mobile devices such as smartphones and tablet computers. It is developed by the Open Handset Alliance led by Google.
- Android was listed as the best-selling smartphone platform worldwide in Q4 2010 by Canalys with over 200 million Android devices in use by November 2011.
- 2.3 Gingerbread refined the user interface, improved the soft keyboard and copy/paste features, improved gaming performance, added SIP support (VoIP calls), and added support for Near Field Communication.

Android Security Issue:
Android applications run in a sandbox, an isolated area of the operating system that does not have access to the rest of the system's resources, unless access permissions are granted by the user when the application is installed. Before installing an application, Android Market displays all required permissions.

Seamless Wireless Communication

The ICECARE keeps mobile workers connected with the back-office and peripherals through built-in 3.5G, Wi-Fi, and Bluetooth wireless technologies.

Local-Area Communication

Wi-Fi

Compliant with the 802.11 b/g/n. This feature allows fast data transfer for near field or ad-hoc data communication.

Wide-Area Mobile Communication

3.5G/HSUPA

With up to 3.5G wireless technology, outfield workers can maintain and share constant contact with the back office.

Peripheral Communication

Bluetooth

Compliant with the Bluetooth 2.1+EDR specification. This feature ensures easy and quick access to nearby peripherals.

Built-in Navigation Grade GPS module

GPS

GPS is a mature technology that allows users to locate their current location and other landmarks. Navigation and Positioning support

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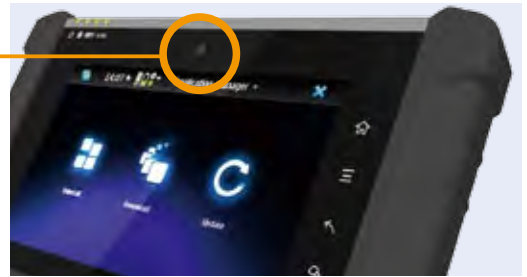
4 PACSmate Medical Solutions

5 Optional Peripherals

Advanced Data Collection Technology

2 Megapixels CMOS Camera

The optional 2 megapixels CMOS front camera functions as a web camera allowing field technicians to communicate face-to-face with the staffs in the office and other parties while on the move.

13.56 MHz RFID Reader

Support Read/Write, ISO 14443A (Mifare), ISO 14443B (Felica), ISO 15693. Support NFC Read/Write and peer-to-peer communication.

5 Megapixels CMOS Camera

The 5 megapixels CMOS rear camera can be used to capture environmental information while field technicians are performing services.

1D Laser / 2D Imager Scan Engine

The variety of barcode symbologies supported by the 1D laser / 2D imager scan engine allows easy and fast data capture, and thereby optimize work efficiency.

Efficient Power Management

The ICECARE comes along with two battery packs that provides 11.1V 1880mAh capacity and support hot swappable function. When one battery is removed, the system automatically switches power consumption to the other battery. This design is beneficial for mobile field workers because:

Each battery pack has capacity indicators showing remaining power.
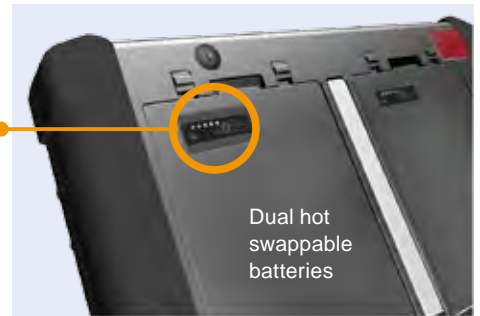
Dual hot swappable batteries

- When power is running low, the batteries can be replaced with fully charged ones without shutting down the system and applications.
- With an additional battery pack, the device can operate for hours to ensure non-stop customer service.

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Optional Peripherals

5 Megapixels CMOS Camera

Barcode Scanner

Power Button RFID Reader

2 Megapixels CMOS Camera

Stylus

USB Host

Battery 1   Battery 2

ICECARE Lite
Mobile Smart Assistant

SD Slot

Headset

USB Host

Stand

Function Keys

DC Jack

Speaker   Docking Connector

Rugged Design

Designed specifically for out-field applications, the ICECARE has been tested and approved for its semi-ruggedness.

IP64

IP 64 Rating
Dust tight and protected against water splashed against the component from any direction

Operating Temperature -10°C~40°C

Operating Temperature -10°C ~ 40°C
It can be operated under a wide range of temperatures

Drop Protection

1.2M Drop Test
Passed the 1.2M drop test on all sides 26 times

Operating Temperature -10°C~60°C

Storage Temperature -10°C ~ 60°C
It can be stored under extreme temperatures

A black protective rubber surrounds three sides of the ICECARE, giving it the protection it needs in harsh work environments.

The metal stand is designed to support and stabilize the device on the work surface.

How Tough is Rugged?

Mobile computing devices, namely tablet PCs and industrial PDAs, are becoming increasingly popular for out-field use. Their versatility makes them useful in public safety and field service applications. However, popular consumer tablets or handhelds are not designed to meet outdoor use, especially where the environment is tough. They are not designed to work in the rain, or extreme hot or cold temperatures, or in areas where dust and dirt could interfere with the device. For these environments, tougher devices are required – those that meet the "rugged" standard.

So, what defines "rugged"? From the user's perspective, rugged refers to the device's ability to operate in the work environment that it is exposed to. However, different users work in different environments. Hence, rugged means something slightly different from one user to the other. For example, a tablet PC used in a warehouse will be more likely exposed to dust and drops, but will less likely be used in extreme temperatures. To meet the needs of all possible users, the industry has agreed upon a general a set of standards to test for a device's ruggedness. These standards include tests for: extreme operating and storage temperatures, Ingress Protection (IP Grade) as well as drop survival.

The ICECARE Mobile Field Assistant is compliant with IP 64 grade protection and has been tested with 1.2M drop tests on all sides of the device. It also features wide operating and storage temperature ranges. Taken these together, the ICECARE complies with the "rugged" standard and ensures stable operation under tough environments.

Drop Survival
Protection against accidental drops.

IP Grade
Protection against dust and water splash.

Operating Temperature
Protection against extreme temperatures.

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Specifications

Model	ICECARE				
Display	LCD Size	7" TFT LCD	**Indicators & Buttons**	LED Indicators	Charging Status LED (Orange / Green)
	Brightness (cd/m²)	500 cd/m²			Wi-Fi enable / disable LED (Green)
	Max Resolution	800 (H) x 480 (V)			BT enable / disable LED (Blue)
	Viewing Angle	60/70/70/70 Deg.			3.5G enable / disable LED (Green)
	Touch Screen	Projective capacitive type		Keys	Power on/off switch
System	CPU	TI Sitara AM3715			Reset Key
	OS	Android 2.3.4			4 x Function key (Home / Menu / Back / Search)
	Memory	4GB eMMC Flash + 512MB SDRAM	**I/O Interface**	Audio	1 x Headset
	Storage	SD Slot			1 x 1.5W speaker
Communication	Wireless LAN	Wi-Fi 802.11 b/g/n			1 x Digital Mic
	Bluetooth	Bluetooth 2.1+EDR		Expansion	2 x USB 2.0
	Modem	HSUPA/GPRS/GSM			1 x DC Jack
	GPS	GPS with internal antenna		Docking (Support Wall Mount)	1 x Ethernet 10/100M
	RFID	HF RFID ISO 14443A(Mifare) ISO 14443B(Felica) ISO 15693 NFC			1 x Full Function RS-232
					1 x 1.5W speaker
					2 x USB 2.0
					1 x DC Jack
			Power	Power Adapter	19V @ 2.1A @ 40W
				Battery	Dual 11.1V 1880mAh Li-ion battery
			Environment	Operating Temperature	-10°C ~ 40°C
				Storage Temperature	-10°C ~ 60°C
				Humidity	5%~95% non-condensing
				Drop Survival	1.2 M
				Environment Protection	IP64
				Certification	CE / FCC
Data Collection	Barcode	1D laser/2D imager scan engine	**Physical Characteristics**	Dimensions (LxWxH) (mm)	248 x 153 x 36
	Camera (Back)	5 megapixels CMOS camera		Weight	0.95 kg
	Camera (Front)	2 megapixels CMOS camera			

Ordering Information

Part No.	Description
ICECARE-07-R10	7" TFT-LCD industrial tablet with TI Sitara AM3715 CPU, HSUPA/GPRS/GSM, WiFi/Bluetooth, GPS, RFID, 2D/1D barcode, 2M/5M Camera, Android 2.3 OS, RoHS
ICECARE-07-1D-R10	7" TFT-LCD industrial tablet with TI Sitara AM3715 CPU, WiFi/Bluetooth, 1D barcode, 2M/5M Camera, Android 2.3 OS, RoHS

Packing List

Item	Part No.	Q'ty
Battery Pack	31603-000016-RS	1
Power Adapter	63040-290040-000-RS	1

Model Variations

Part No.	WiFi	Bluetooth	Modem	GPS	Barcode	RFID
ICECARE-07-R10	802.11 b/g/n	Ver 2.1 +EDR	HSUPA/GPRS/GSM	GPS	1D/2D	HF RFID
ICECARE-07-1D-R10	802.11 b/g/n	Ver 2.1 +EDR	N/A	N/A	1D	N/A

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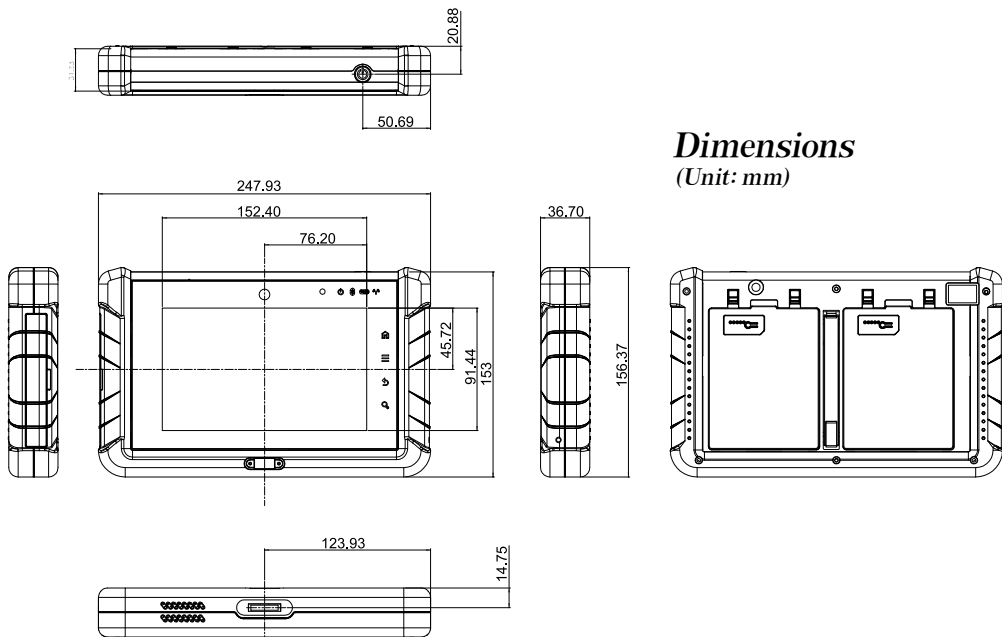Solutions

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Automation
Panel
Solutions

3
RISC-
based
Solutions

4
PACSmate
Medical
Solutions

5
Optional
Peripherals

Dimensions
(Unit: mm)

iEiMobile®

Your Mobile Solution

Windows Mobile   ANDROID

Industrial PDA (EDA)

Industrial PDA (EDA)

Mobile Revolution in the Workplace

The world is in the midst of a mobile revolution with the rapid consumer uptake and adoption of smartphones. Its year-on-year growth rate in the third quarter of 2010 nearly doubled at 96 percent; while sales of mobile phones only rose by 35 percent according to Gartner research group. As smartphones are rapidly becoming an integral part of a consumer's digital life, a demanding tech-savvy public is beginning to seek a more interactive and engaging mobile device experience in the workplace. Mobile integration in the workplace means devices with features such as operating systems that support sophisticated applications, text messaging, Internet and email access, document viewing, touch screen interface, built-in cameras, GPS navigation software, barcode readers, and wireless connectivity.

PDAs and smartphones often develop in tandem, with data-centric PDAs taking on more voice-centric aspects, and smartphones including features previously limited to PDAs. As the line between PDAs and smartphones keeps blurring, there is concern that smartphones will eventually replace PDAs, just as they have begun to make traditional mobile phones seem obsolete. This may be true in the consumer sector where convenience trumps all and a dialed-down system requirement would suffice for everyday use.

In the business sector, however, industrial PDAs are riding the wave of the smartphone-led mobile revolution and enjoying what the growing smartphone ecosystem has to offer. They benefit greatly from the advances and mass popularization of consumer handheld technologies, such as RFID, high quality scanners and integrated high resolution cameras. Rather than being peripherals, these technologies have become powerful, small, and reliable enough to be integrated into industrial PDAs, offering a cost-effective all-in-one solution for business travelers and professionals who are constantly on the move.

Moreover, the more ubiquitous, affordable and versatile wireless technology becomes, the easier it is for PDAs to synchronize and update information anytime anywhere. In essence the PDA has become miniature mobile business portal.With this increased mobility, employees can feel empowered to initiate changes and go after new projects. In this way, Industrial PDAs serve as a catalyst for reform in the workplace, promoting innovation and flexibility.

For field force workers that require the ability to access and forward data where it is needed most, a data-centric PDA packaged in tough, rugged shell is perfect for the job at hand. Many businesses and government organizations often rely on rugged PDAs, or enterprise digital assistants (EDAs), for mobile data applications. EDAs often have extra features such as data capture, barcode readers, radio-frequency identification (RFID) readers, magnetic stripe card readers, or smart card readers. The ability of industrial PDAs to enable work in different environments and for different purposes allows businesses to go beyond traditional computing and information seeking infrastructures, enhancing workflow and productivity.

Businesses in the hospitality industry face a highly competitive environment in which differentiation and innovative customer experiences are critical in improving sales and revenue. Wireless access to a centralized hospitality management system facilitates efficient handling of client requests for information and services as well as better execution of loyalty programs. Offering High-impact individualized service is made easier with on-demand retrieval of client information and purchase records.

Time and energy saved by utilizing an industrial PDA can then be used to provide more personalized service with the customers, effectively increase revenues through improved customer satisfaction.

We here at IEIMobile are excited about the future of industrial PDAs. A major initiative has launched with our upcoming product line to harness the mobile revolution in the workplace as a key component of our industry wide development agenda.

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Seamless Wireless Network Roaming

We all appreciate the freedom and mobility afforded by the cell phone, as well as the economy and security of using the company's WLAN to download data or talk via a VoIP-based telephone system at the office. Since the advent of mobile devices that support multiple connectivity options, "seamless wireless network roaming" is now poised to become a reality with a single mobile device that can provide wide area connections via GPRS or CDMA, WLAN connections via 802.11b, plus connectivity to Bluetooth and wired Ethernet. In addition, a user's mobile device can switch from a cellular carrier's wireless network to a company's WLAN automatically at the right time, every time without dropped calls.

Just consider these working scenarios:

Data roaming makes it possible for a delivery and logistics company to move from the warehouse (WLAN) to the delivery route (WWAN) without any intervention or interruption. It is common practice for router drivers to check out their loads before leaving the facility since they are liable for losses and damages to the products on their vehicles.

Making the latest updates for a specific product or procedure available for repair workers has never been easier with data roaming. Using a single device that functions as both a phone and a data storage center, service personnel can obtain updates through WWAN and/or WLAN connections (depending upon the urgency) regarding product sales information and repair manuals. As updates are accessed on an "as-needed" basis, unnecessary documentation will no longer take up valuable storage space.

Data roaming enables delivery drivers to log real-time job progress via WWAN connections back to headquarters. They also have the choice to upload more detailed information (in larger files) near public hot spot locations such as hotels, fast food restaurants or coffee shops. The device can detect the availability of a faster connection and automatically switch to WLAN, without any operator intervention.

Most of IEIMobile products are equipped with both Wireless LAN and GPRS/WCDMA modules. This combined with powerful embedded operating system support, provides a seamless wireless communication experience.

Off-Road

WWAN

3.5G

Data Center

AP

WLAN

Near-Field
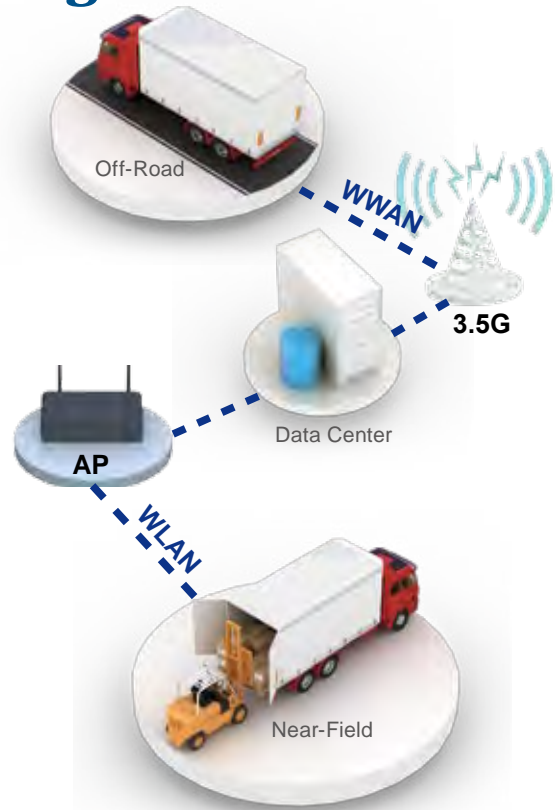
Industrial Wi-Fi

Wi-Fi has become a popular choice for connecting industrial devices. It is a well-established, mature technology that offers close integration with existing Ethernet networks. However, the issues that face an industrial mobile application are quite different from the issues encountered in a typical office or commercial application.

Power saving
By adopting a mobile Wi-Fi solution and modifying the Wi-Fi driver, IEIMobile products support power saving mode. This saves battery power while the mobile device is in suspend mode and Wi-Fi communication is in idle mode.

Auto-connecting to existing wireless LAN
Whenever an IEIMobile device boots up, it automatically connects to the best signaling access point which has been pre-configured and registered in a list of Wi-Fi connection points.

Roaming
When moving from one access point zone to another in a wireless LAN consisting of typical commercial access points, the IEIMobile optimized Wi-Fi solution ensures re-connection to new access point in 20 seconds the once original access point has disconnected. This 20-second re-connection time is compliant with Microsoft® and Wi-Fi roaming certifications. IEIMobile's optimized Wi-Fi driver ensures that data transmission will be resumed after re-connection.

Seamless roaming and auto-switching
While roaming in an enterprise wireless LAN or a wireless LAN server like Cisco, IEIMobile devices are compliant with wireless network servers. This allows our devices to automatically switch to the AP with the strongest signal without data loss or interruption--a completely seamless transition.

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Windows® Embedded Handheld 6.5

Windows® Embedded Handheld is an operating system designed for use in mobile and handheld devices such as smartphones. Part of the Windows CE family, it can be seen as a scaled down version of the desktop Windows Operating System. It offers a similar Windows experience on small mobile devices.

Emphasis on Touch Control

Windows® Embedded Handheld 6.5 was introduced in February 2009. Carrying popular applications such as Microsoft® Office, Windows Media Player, Internet Explorer and Outlook mail client, it featured a revamped, touch-optimized user interface.

Cloud-Based Service Integration

It also offered a free on-line backup and cloud-syncing service called "My Phone." Using "My Phone" service to link with Windows Live ID, Windows® Embedded Handheld users can sync contacts, calendar entries, text messages, videos, photos, music, e-mails, documents and more with the Cloud, so that data is backed up and available online. In essence, this functionality allows information to be synchronized across multiple connected devices, ideal for business users on the move.

Direct access to "Windows Marketplace" --- Microsoft®'s mobile app store --- is another key feature of Windows® Embedded Handheld 6.5. The vast array of third-party software available for Windows® Embedded Handheld devices has long been one of Windows® Embedded Handheld's greatest strengths, Now getting the right software is easier than ever With the launch of "Windows Marketplace," Microsoft® provides a single location for software developers to offer their applications. Users can browse, purchase, download and install Windows® Embedded Handheld software from the convenience of their handset.

Focus On Enterprise Market

Windows® Embedded Handheld has a long history dating back over 10 years, fostering a well-supported ecosystem. There are two major advantages it has over other Mobile OSs on the market today:

*Quick and easy adoption : With a traditional PC look-and-feel, user doesn't have to readjust their work habits or take lessons to familiarize themselves with new applications.

*Hassle-free integration : For businesses with legacy infrastructure and systems, failure to address issues of application compatibility will result in more than just a loss of productivity and overhead. The inability to leverage existing system know-how, device management expertise and security solutions spells even more trouble for businesses. Whether on the desktop, or in the server room, Microsoft®'s line-up of embedded operating systems is everywhere. Windows® Embedded Handheld, therefore, becomes the apparent mission critical, industrial-strength integration solution.

Microsoft® unveiled plans for Windows Phone 7 in February 2010, targeting the smartphone OS market. Windows Embedded Handheld was announced later in June with a focus on enterprise applications. IEIMobile is closely following the guidelines laid out by Microsoft®'s Mobile OS Roadmap and fully prepared to offer on-demand software hardware upgrade support.

IEIMobile to Support Android

- Android is an open-source software stack for mobile devices, and a corresponding open-source project led by Google.
- Android's purpose is to establish an open platform for developers to build innovative mobile apps. Three key components work together to realize this platform.
  - The Android Compatibility Program defines the technical details of the Android platform and provides tools used by OEMs to ensure that developer apps run on a variety of devices.
  - The Android SDK provides built-in tools for developers to specify which device features their apps require.
  - With a pre-installed app called "Market," users can browse and download available third-party apps directly from the Android Market.
- Different Android devices run different versions of the Android platform, meaning each version has different hardware requirements. It is IEIMobile's mission to adopt a "best-fit" approach, and ensure compatibility between hardware capabilities and Android platform version. We are also committed to providing complete SDKs for industries to develop their OEM field application softwares. In addition to providing Android device ODM services, IEIMobile is developing a series of own-brand products which combine a potent version of Android with powerful hardware to be available soon.

Worldwide Mobile OS Market Share

Source: IDC Worldwide Quarterly Mobile Phone Tracker, September 7, 2010

Symbian	-18.0%
BlackBerry OS	-3.5%
Android	51.2%
IOS	-25.8%
Windows Mobile	43.3%
Others	8.3%

Market Share(%)

0.00% 5.00% 10.00% 15.00% 20.00% 25.00% 30.00% 35.00% 40.00% 45.00%
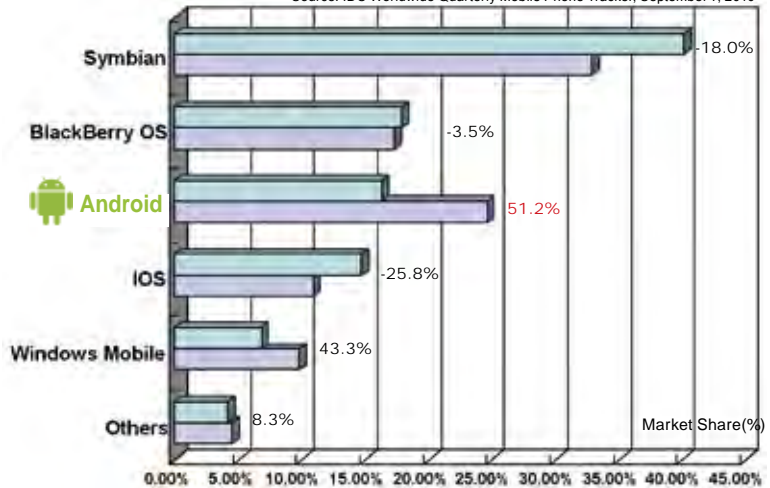
	Others	Windows Mobile	IOS	Android	BlackBerry OS	Symbian
	4.20%	6.80%	14.70%	16.30%	17.90%	40.10%
	4.50%	9.80%	10.90%	24.60%	17.30%	32.90%

2010 Market Share

2014 Predicted Market Share

Industrial PDA (EDA)

iEiMobile®

Model		MODAT-100	MODAT-200	MODAT-328	MODAT-335
Display	LCD Size	3.5" TFT LCD (Sunlight Readable)	3.5" TFT LCD (Sunlight Readable)	2.8" TFT LCD	3.5" TFT LCD (Sunlight Readable)
	Brightness (cd/m²)	190 cd/m²	250 cd/m²	240 cd/m²	190 cd/m²
	Max Resolution	240(H) x 320(V) QVGA	240(H) x 320(V) QVGA	240(H) x 320(V) QVGA	240(H) x 320(V) QVGA
	Viewing Angle	80/80/80/80 Deg.	80/80/80/80 Deg.	70/50/70/70 Deg.	80/80/80/80 Deg.
	Touch Screen	4-wire resistive type touch	4-wire resistive type touch	4-wire resistive type touch	4-wire resistive type touch
System	CPU	Marvell® PXA 310 624MHz	Samsung® 6410 ARM11 667MHz	Marvell® PXA 310 624MHz	Marvell® PXA 310 624MHz (Windows Embedded Handheld 6.5) or TI Sitara AM3715 (Android 2.3.4)
	Operating System	Microsof® Windows® Embedded Handheld 6.5	Microsof® Windows® Mobile 6.5	Windows® Embedded Handheld 6.5	Windows® Embedded Handheld 6.5 or Android 2.3.4
	Memory	128MB Flash + 256MB SDRAM	128MB Flash + 128MB SDRAM	256MB Flash + 128 MB SDRAM	256MB Flash + 256MB SDRAM
	Storage	microSD Slot	microSD Slot	microSD Slot	microSD Slot
Communication	Wi-Fi	Wi-Fi 802.11 b/g	Wi-Fi 802.11b/g	Wi-Fi 802.11 b/g	Wi-Fi 802.11 b/g/n
	Bluetooth	Bluetooth 2.1 + EDR	Bluetooth 2.1 + EDR	Bluetooth 2.1 + EDR	Bluetooth 2.1+ EDR
	Modem	WCDMA/HSDPA	N/A	N/A	WCDMA/HSDPA or GPRS
	GPS	GPS w/internal antenna	N/A	N/A	GPS w/internal antenna
Data Collection	RFID	13.56 MHz RFID support ISO 14443A (Mifare) ISO 14443B (Felica) ISO 15693 ISO 18092 NFC	N/A	13.56 MHz RFID support ISO 14443A (Mifare) ISO 14443B (Felica) ISO 15693 ISO 18092 NFC	13.56 MHz RFID support ISO 15693 and ISO 14443A/B compliant UHF (optional): EPC Global Class1 Gen2 support ISO/IEC 18000-6 Type C and at least 1m reading distance
	Barcode	1D Laser Scan Engine	N/A	1D/2D imager scan engine	1D/2D imager scan engine
	Camera	3 megapixels CMOS camera with LED flash light	N/A	3 megapixels CMOS camera with LED flash light	3 megapixels CMOS camera with LED flash light
Indicators & Buttons	LED Indicators	Charging status LED HSDPA status LED	System/Battery charging status LED Wi-Fi/Bluetooth enable/disable LED	Charging status LED Wi-Fi / Bluetooth enable/disable LED	Charging status LED Wi-Fi enable/disable LED 3.5G/2.5G enable/disable LED
	Hot Keys	2 x Barcode key	1 x Rolling Key	2 x Barcode key 1 x Camera key	2 x Barcode key 1 x Camera key
I/O Interface	Audio	1 x Speaker	1 x Speaker	1 x Speaker	1 x Speaker
		1 x Headset / Built-in Mic-in	1 x Headset / Built-in Mic-in	1 x Headset / Built-in Mic-in	1 x Headset / Built-in Mic-in
	Expansion	16-pin connector (RS232 / battery charging / USB Host / USB Client)	1 x Mini USB Host 1.1/Client	1 x Mini USB Client 2.0	1 x Mini USB Client 2.0
		2" thermal printer	N/A	16-pin connector (RS-232 / battery charging / USB Host / USB Client)	16-pin connector (RS-232 / battery charging / USB Host / USB Client)
		smart card reader support	N/A	N/A	N/A
		Magnetic Stripe Reader Support	N/A	N/A	N/A
Power	Power Adapter	Input: VAC:100V ~ 240V Output: 12V/3A	Input: 100 V AC to 240 V AC ~ 50-60Hz 0.2A Output: 5V / 1A	Input: 100V AC to 240V AC ~ 50-60Hz 0.2A Output: 5V / 2.1A	Input: 100V AC to 240V AC ~ 50-60Hz 0.2A Output : 5V / 2.1A
	Battery	7.4V 1880 mAh battery	3.7V 1800 mAh battery (built-in non swappable)	3.7V 1880 mAh battery	3.7V 3000 mAh battery
Enviroment	Operating Temperature	0˚C ~ 50˚C	-10˚C ~ 50˚C	-10˚C ~ 50˚C	-10˚C ~ 50˚C
	Storage Temperature	-20˚C ~ 70˚C	-20˚C ~ 70˚C	-20˚C ~ 60˚C	-20˚C ~ 60˚C
	Humidity	5%~95% non-condensing	5%~95% non-condensing	5%~95% non-condensing	5%~90% non-condensing
	Drop Survival	1.2M	1.2M	1.5M	1.5M
	Environmental Protection	IP 54 (Front Panel Only)	IP 54	IP 54 (Front Panel Only)	IP 54
	Certification	CE / FCC	CE / FCC / BSMI	CE / FCC	CE / FCC
Physical Characteristics	Dimensions (LxWxH) (mm)	230 x 84 x 54	125 x 74 x 18.7	172 x 55 x 31	218 x 81 x 46
	Weight	546 g	200 g	245 g	405 g

MODAT-100

Mobile POS Terminal

- 3.5" TFT sunlight readable LCD touch screen
- Marvell® PXA 310 624 MHz CPU
- Windows® Embedded Handheld 6.5 pre-installed
- Built-in 32-channel GPS Receiver
- Built-in Smart Card Reader, Magnetic Stripe Card Reader and 2" thermal printer
- 1D laser barcode/Optional 2D Imager barcode reader for data collection
- Bluetooth, Wi-Fi and 3.5G/HSDPA wireless communication

| 3.5G/HSDPA | Bluetooth | Wi-Fi | Camera | Printer | RS-232 | USB 2.0 | Barcode Scanner | SCR | MSR | Windows Embedded Handheld |

Point-of-Service Application

Standard Point-of-Service(POS) features, such as smart card readers, magnetic stripe card readers and thermal printers come integrated for an all-in-one mobile solution. Equipped with 1D laser barcode and 3 megapixels camera, the MODAT-100 can capture data and images via a built-in high performance wireless communication module. The MODAT-100 offers mobility and flexibility that promises to streamline workflow and enhance productivity.

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Handheld Computer — HSDPA — USB/RS-232 — Handheld Computer — Vehicle Computer

USB/RS-232 — WLAN — Handheld Computer

Out-field
WWAN (GPRS/3G/ HSDPA/WiMAX)

LAN

In-field

Headquarters

Internet

AP Client — Web Server — FTP Server — AP Server — DB Server — Middleware
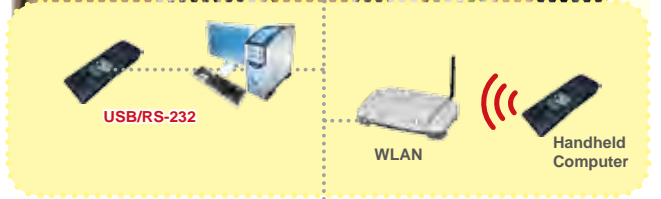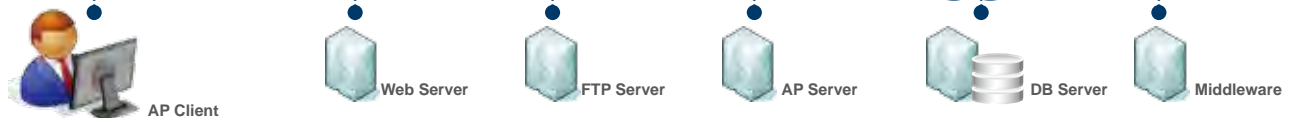
High Performance Low Power Consumption Platform

▌ Marvell PXA 310

- ■ Wireless Intel® SpeedStep® technology for MIPS/ mW power efficiency, long battery life
- ■ Hardware security/DRM processing
- ■ Enhanced peripheral speeds and features such as support for camera sensors up to 5 megapixels and Bluetooth v2.0 EDR
- ■ Supports DDR SDRAM for cost-effective memory solutions
- ■ Secure devices from boot-up to corporate network access

	Multimedia and General-Purpose Processing			
USB 2.0 High-Speed Client	Enhanced Quick Capture Interface	Memory Controller	Wireless Trusted Platform	
USB 1.1 Full-Speed Host		Marvell PXA310 Core Scalable to 624 MHz	Hardware Video, JPEG Accelerator	LCD Controller w/Low-power Refresh
USB 1.1 Full-Speed Host		32K D-cache / 32K I-cache		
SSP Interface X4	Intel® Wireless MMX™ 2 Co-processor	256K Internal SRAM	2D Graphics/ Scaling/ Rotation	AC97 Interface
UART Interface X3	Wireless Intel SpeedStep® Technology Power Management			
SD/SDIO/MMC Interface X3	I2C Interface	Keypad Controller	I2S Interface / Other Peripherals JTAG	Power I2C Interface

▌ Built-in Windows® Embedded Handheld 6.5

- ■ Windows® Embedded Handheld (WM) is a compact mobile operating system developed by Microsoft® and designed for use in smart phones and mobile devices.
- ■ IEIMobile Enterprise PDA Series adopts Windows® Embedded Handheld 6.5 to meet the needs of your mobile workforce.
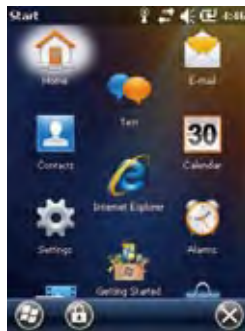
Windows® Embedded Handheld Application Development

- **● Only One Official IDE**
  Microsoft® Visual Studio 2005/2008/2010

- **● Managed Code**
  Intermediate Language
  Just-In-Time (JIT) compilation: Run time translated to machine code (Native Code) by CLR (Common Language Runtime) which comes pre-installed and optimized in each Windows® Embedded Handheld device
  .NET Compact Framework
  -Visual Basic .NET, Visual C# .NET
  -BCL (Base Class Libraries)

- **● Native Code**
  Machine code
  C++
  MFC, ATL, WTL, STL

Internet Download

- **● Windows Marketplace for Mobile (http://www.windowsmarketplace.com)**

Built-in Application

- ■ Internet Explorer Mobile
- ■ Microsoft® Office Outlook Mobile
- ■ Windows Media Player Mobile
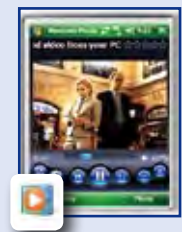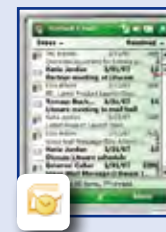
- ■ Optional Microsoft® Office for Mobile is programmable and fully compatible with desktop Windows Office.
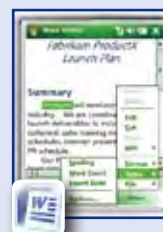
Optional Microsoft® SQL Server Mobile Edition is the leading industry standard DBMS and compatible with desktop PCs or back-end ERP systems, which saves you the effort and time of building a new ERP system.

1 IEIMobile Solutions

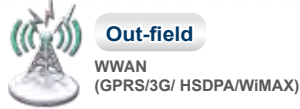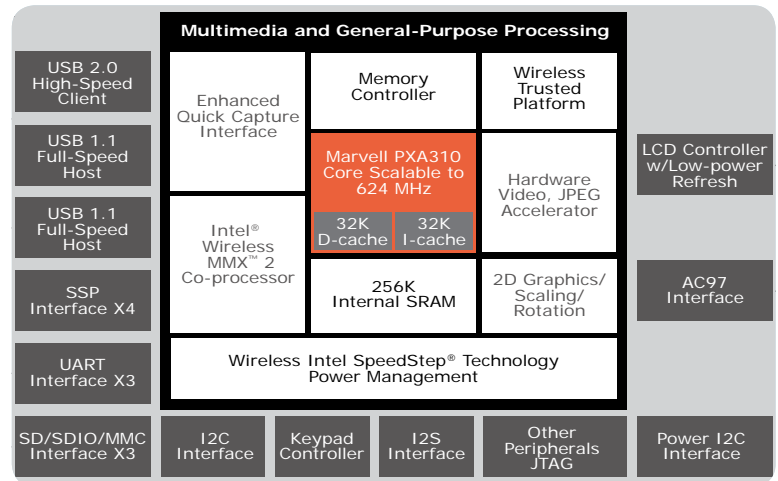**2** Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Rugged Compact Design Suitable for Outdoor Use

The MODAT-100 features a sunlight readable panel for daytime use and an LED backlight for nighttime use. Its rugged design is drop-tested at 1.2 M and IP rated at 54. It can also function in a wide range of temperatures.

Sunlight Readable

▍Sunlight Readable- 3.5" TFT LCD with LED backlight

- ■ 3.5'' diagonal with resolution of 240x320
- ■ 6-bit 262,144 color display capability
- ■ Long life & high brightness LED back-light improved outdoor readability
- ■ Blanview TFT-LCD Resistive touch input

Drop Protection

▍1.2 M Drop Test

- ■ The average height at which people drop handheld products is 1.2 M
- ■ Drop test passed 26 times. Guaranteed sturdy design

Operating Temperature -0°C~50°C

▍Operating Temperature 0°C ~ 50°C

Operate under extreme temperatures, in the warehouse or out in desert .

Storage Temperature -20°C~70°C

▍Storage Temperature -20°C ~ 70°C

Can be stored under extreme temperature conditions

Seamless / Wireless Communication

Out on the field, the MODAT-100 keeps you connected via a built-in 3.5 G modem and a 802.11 b/g wireless LAN module. Empowered by advanced wireless technology, field workers can easily connect with back-offices to verify work orders, transmit field reports and retrieve necessary data and updated information.

MODAT-100

▍Local-Area Communication

Wi-Fi

It gives you up to broadband-speed browsing and connectivity, compared to traditional wired LAN. Best for near field or ad-hoc data communications.
- ■ Compliant with IEEE 802.11b/g
- ■ Auto fallback optimal data rate
- ■ Security : WPA/WPA2, 802.11i AES /CCMP, WEP with TKIP
- ■ Hardware signaling BT/Wi-Fi co-existence supported

▍Peripheral Communication

Bluetooth

- ■ Compliant with Bluetooth specification V1.2.
- ■ Profile : SPP, HFP, HSP
- ■ Up to 1 Mbps data transfer rate and 10 M distance

HSDPA

▍Wide-Area Mobile Communication

3.5G/ HSUPA

- ■ UMTS/HSDPA: Triple band, 850//1900/2100 MHz
- ■ GSM/GPRS/EDGE: Quad band, 850/900/1800/1900 MHz

Built-in GPS

GPS technology for handsets has matured, offering much better performance in terms of sensitivity, power consumption, size and price. Sales of GPS-enabled GSM/WCDMA handsets grew to an estimated 150 million units in 2009, up from 78 million devices in 2008. And the forecast for shipments of GPS-enabled GSM/WCDMA/LTE handsets will grow to 770 million units in 2014. Equipped with GPS and GSM/WCDMA features, the MODAT-100 is an ideal industrial mobile electronics devices for Location-Based Services (LBS).
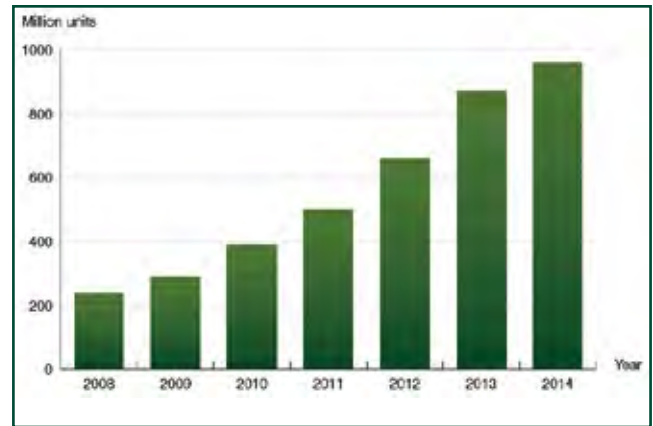
Features

- A 32-channel acquisition engine with over 1 million effective correlates is capable of massive parallel searches
- A-GPS: Supports AssistNow Online and Offline, OMA SUPL compliantTime To First Fix (TTFF): < 1 sec
- Best-in-class acquisition and tracking sensitivity
- GPS Sensitivity Diagnostic Utility

Satellites

HSDPA Network

Internet

Remote Center

HSDPA

GPS Sensitivity Diagnostic

MODAT-100

Real-time Tracking
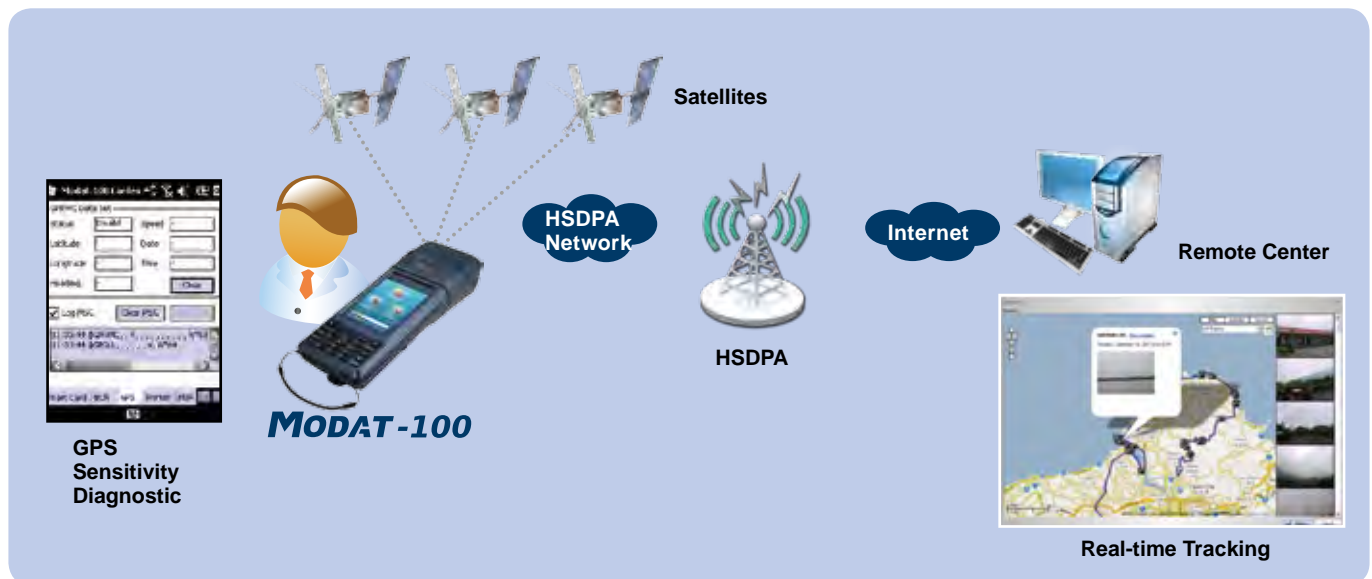
Highly Integrated Mobile Point-Of-Service Design

Most Enterprise PDAs only come with Bluetooth, Wi-Fi or 3G. The MODAT-100 not only has a built-in wireless communication function, it also has integrated peripherals serving as your all-in-one Point-of-Service mobile assistant. The MODAT-100 increases the mobility of your field force.

Magnetic Stripe Reader

Thermal Printer

Smart Card Reader

Highly integrated

Barcode

Camera

1
IEIMobile
Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

Hybrid Card Reader

● **Smart Card Reader**

EMV V4.1 Level 1 Compliant
Supports ISO 7816 T=0, T=1 Smart Card. (Supports commonly used memory card.)
Card Interface ISO 7816 part 1,2 and 3 Compliant
Card Interface Communication Speed up to 115200 bps

● **Magnetic Stripe Reader**

EIA/TIA-232 Compliant
Card Speed 3 to 60 in/s (7.6 to 152.4 cm/s) Reads single, dual or triple track
ISO 7811 Conformance (AGC (Automatic Gain Control) – Reads cards from 30% - 200% of ISO 7811 amplitude standard)
9600 bps, 8 Data Bits, No Parity, 1 Stop Bit

IEIMobile MODAT-100 Utility-SCR and MSR Diagnostic Software

Payment System -**SCR**

SCR diagnostic software allows the user to initiate insert/remove sequences and perform read/write function tests all in one UI screen. During testing, current card reader and processing commands/responses are displayed.

Membership Control -**MSR**

Track 1 and Track 2 data such as credit card holder name, account number of the bank, expiration date or service code can be displayed on the UI screen simultaneously.
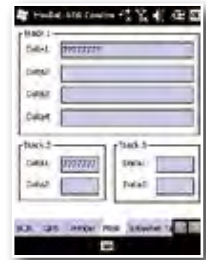
Built-in 2'' Thermal Printer

● **Easy to load**
Our original plate removal mechanism improves paper loading and maintenance.

● **Ultra compact**
The 2-inch model measures 15.5 mm high, 70.3 mm wide, and 33.0 mm deep.

● **High speed printing**
Prints up to 60 mm/s (480 dot lines/s) using Fujitsu's unique hard-drive control.

● **High resolution printing**
8 dots/mm printing resolution.
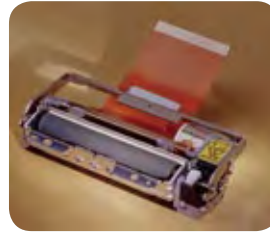
IEIMobile MODAT-100 utility

Print and test software included.

SCR Application

Internet

Data center   Web browser

WiFi

MODAT-100

Transaction

MSR Application

Membership Card

Membership check

Salesclerk

MODAT-100

Customers

1
IEIMobile Solutions

2
Automation Panel Solutions

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RISC-based Solutions

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PACSmate Medical Solutions

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Optional Peripherals
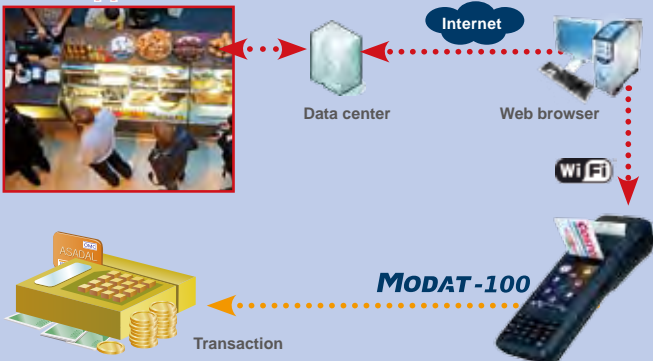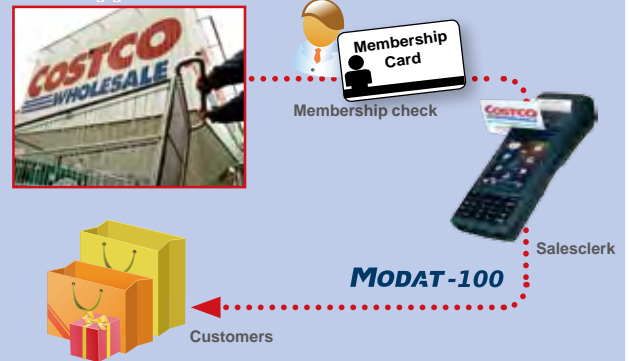
Advanced Data Acquisition Technology

The MODAT-100 built-in camera and 1D laser barcode offers the user multiple data collection methods.

3 Megapixels CMOS Camera
Capture images instantly and send data back to the office via HSDPA

Features
- Superior low-light performance
- Ultra low-power, cost effective sensor
- Integrated real-time JPEG encoder
- Flexible support for external auto focus, optical zoom, and mechanical shutter
- Automatic image correction and enhancement

High Power LED Flash Light
Image is enhanced even under weak light conditions. Great for night patrol and field survey applications.

Features
- Input power: 3 W
- Emitted color: White
- Low power consumption

Motorola 1D Laser or Intermec 2D image Barcode Scanner Pre-installed

● Wide working range
- Meets the needs of a wide range of applications for increased productivity
- Easily optimized product designs

● 100 scans per second
Optimized scanning speed delivers aggressive performance and accurate capture of all barcodes — even damaged and poor quality barcodes

● Low power consumption
Increasesd battery life in portable terminals

● Bright scan line and aim mode
Intuitive and easy to use across the entire working range

● Aggressive decoding algorithms

| Damaged | Non linear distortion | Over burn | Low contrast |

- Decoding is key to maximize productivity and reduce exception processes
- Extensive symbologies library including linear and 2D codes

IEIMobile MODAT-100 Barcode Demo Software
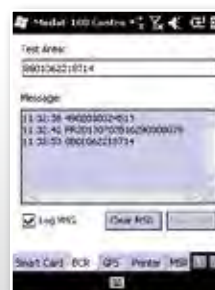
- Press the hot key or […] key to scan the barcode. Test area displays the number.
- During testing, the barcode reader detects and displays the commands/responses on the message box.

1
IEIMobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

I/O Interface

● **microSD**

You can install applications on your MODAT-100 by using:
• Microsoft® ActiveSync. ActiveSync lets you transfer files, synchronize files, remotely debug, and perform other device management activities. ActiveSync is a free application available from the Microsoft® web site

● **SIM Card**

Insert SIM Card for 3.5G data transmssion

● **SAM Card**

SAM (Security Authentication Module) card protects financial data transmission

● **16-pin Connector**

16-pin connect cable

USB2.0 Host

USB Client

RS-232

USB Host Application for intelligent electric testing

Connect the MODAT-100 to electric testing equipment and transmit the data via USB-Host.

USB Client Application

Connect to desk top and sync the MODAT-100 data.

RS-232 Application for mobile temperature test

Testing equipment connected via RS-232 allows field workers to test temperatures. The MODAT-100 detects errors and displays them on screen, allowing workers to address issues on-site.

LED Indicators & HOT Keys

Green: 3.5G on

Direction Key

Fn

Alpha/Numeric Switch

Green: Fully Charged
Amber: Battery Charging

Camera On/Off

Power On/Off

Enter Key

Barcode Scanner Button

Same as PC Fn Key

■ Press Alpha to use the orange characters

■ Press Fn to use the blue characters

MODAT-100-RFID-WB65-En

● **Target on out-field services. For example, public sector applications can utilize the HF RFID (13.56 MHz) to read tags and print out information with the thermal printer.**

● **Specification**
■ Marvell® PXA 310 624 MHz CPU
■ Windows® Embedded Handheld 6.5 pre-installed
■ Built-in 32-channel GPS Receiver

■ Built-in Smart Card Reader (SCR), 2'' thermal printer
■ 1D laser barcode, **RFID supports ISO 14443 A/B & ISO 15693**
■ Bluetooth, Wi-Fi and HSDPA

Bundled IEIMobile MODAT-100 Software Support

● **Besides Windows® Embedded Handheld SDK, the MODAT-100 provides an SDK (Software Development Kit)**
■ SDK (for embedded Visual C++)

● **Utility**
■ IEI Utility (Registry management, start up program and function test)
■ Remote Management Tool
■ Locate versions of Boot Loader and OS image on the "General" page
■ When a new version of OS and/or Boot Loader is detected it can be updated by pressing the "Yes" button
■ To open IEI Utility, click Start and select "Settings and System"
■ To launch applications automatically, click the "Auto Execution" tab and add applications. Click the "Save to registry" button to save the settings
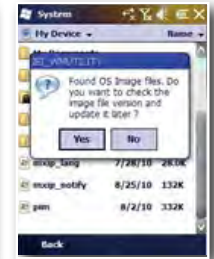
● **Diagnostic and Demo AP**
■ **Internet Demo**
■ **Barcode Demo**
■ **MSR/SCR Demo**
■ **HSDPA Demo/Utility**
■ **Printer Demo**
■ **Camera Demo**
■ **GPS Demo**

● **COM Port Debugging Tool**
Diagnose the COM6 (RS-232 port) using the COM Port Debugging tool to receive/send messages from the specified COM port.

Barcode Scanner Trigger
microSD
Reset Button
16-pin Connector

Smart Card Reader
2" Thermal Printer
Magnetic Stripe Reader
LED Flash Light
Key Pad
Headset

1D Laser Barcode Scanner
3 Megapixels Camera
Speaker
7.4V 188mAh Battery

Barcode Scanner Trigger
Stylus
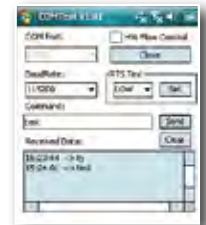
MODAT-100 Dimensions
(Unit: mm)
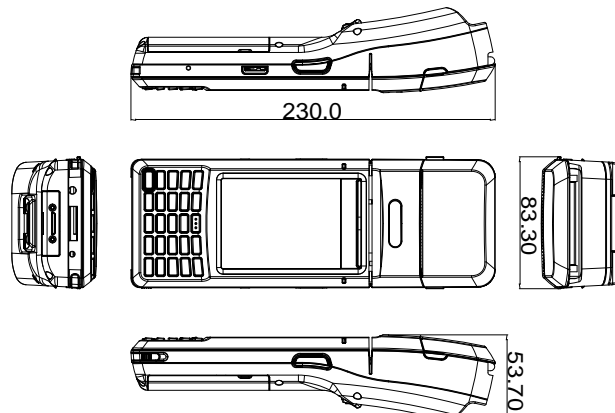
230.0

83.30

53.70

1 IEIMobile Solutions
2 Automation Panel Solutions
3 RISC-based Solutions
4 PACSmate Medical Solutions
5 Optional Peripherals

Specifications

Model		MODAT-100
Display	LCD Size	3.5" TFT LCD (Sunlight Readable)
	Brightness (cd/m²)	190 cd/m²
	Max Resolution	240 x 320 pixels QVGA
	Viewing Angle	80/80/80/80 Deg.
	Touch Screen	4-Wire Resistive Type Touch
System	CPU	Marvell® PXA 310 624 MHz
	Operation System	Windows® Embedded Handheld 6.5
	Memory	128 MB Flash + 256 MB SDRAM
	Storage	microSD Slot
Communication	Wireless LAN	Wi-Fi 802.11 b/g
	Bluetooth	Bluetooth 2.1 + EDR
	3.5G	WCDMA/HSDPA
	GPS	GPS w/internal antenna
Data Collection	Barcode	Built-in 1D Laser Engine and optional 2D imager Engine
	Camera	3 megapixels CMOS Camera with LED Flash Light
Indicators & Buttons	LED Indicators	Charging/Barcode status LED HSDPA status LED
	Hot Keys	2 x Barcode Trigger
I/O Interface	Audio	1 x Headset and 1 x Speaker
	Expansion	16-pin connector (RS-232 / battery charging/ OTG-Host/ OTG-Client)
		2" Thermal Printer
		Smart Card Reader Support
		Magnetic Stripe Reader Support
Power	Power Adapter	Input: VAC:90 V~264 V Output: 12 V/3 A
	Battery	7.4V 1880 mAh battery
Environment	Operating Temperature	0ºC ~ 50ºC
	Storage Temperature	-20ºC ~ 70ºC
	Humidity	5%~95% non-condensing
	Drop Survival	1.2 M
	Environmental Protection	IP 54 (Front Panel only)
	Certification	CE, FCC
Physical Characteristics	Dimensions (LxWxH) (mm)	230 x 84 x 54
	Weight	546 g

Optional Accessory List

Item	Part No.	Description
Cradle	MODAT-100-CR01-R10	Charging cradle integrated one charging bay along with USB Host, USB Client and RS-232 I/0 ports
16Pin Cable	32024-001500-100-RS	16-pin cable Connect to USB Host, USB Client and RS232
Battery Pack	31603-000014-RS	7.4V 1880 mAh Battery
Carrying Case	7Z000-MODAT100POUCH-RS	Black, professional protector case with shutter strape for MODAT-100
Car Holder	19B00-000229-00-RS	MODAT-100 car holder with stand
Thermal Printer Paper	5Z000-000165-RS	One thermal paper; 57MM*3.1CM*0.079TMM;
	19N43-128001-00-00-RS	Five thermal paper per roll
microSD Card	79D00-G001-006-RS	1G microSD Card
	79D00-G002-005-RS	2G microSD Card

Support Function

Part Number	Barcode	RFID	MSR	SCR
MODAT-100-RFID-WB65-En	1DBarcode Scanner	13.56MHz supports ISO 14443 A/B & ISO 15693	N/A	Yes
MODAT-100-WB65-En5-En	1D Barcode Scanner	N/A	Yes	Yes
MODAT-100-2D-WB65-En-En	1D/2D Barcode Scanner	N/A	Yes	Yes

Packing List

Item	Part No.	Q'ty	Description
Battery Pack	31603-000014-RS	1	7.4V 1880 mAh Battery
Carrying Case	7Z000-MODAT100POUCH-RS	1	Black, professional protector case with shutter strap for MODAT-100
Power Adapter	63000-FSP036RAB613-RS	1	FSP036-RAB613; VAC:90V~264V; 12V/3A; 36W;PLUG Ψ1.35/Ψ3.5/ NONE LOCK/LENGTH:9.5MM; 1500MM; FSP
Stylus	7Z000-MODAT100STYLUS-RS	1	
Headset	30900-000001-RS	1	

Battery Pack

Stylus

Power Adapter

Carrying Case

Cradle

Headset

16-pin Cable

Car Holder

Thermal Printer Paper

Ordering Information

Part No.	Description
MODAT-100-RFID-WB65-En	3.5" TFT-LCD 190 cd/m² QVGA Enterprise PDA with Marvell® PXA 310 624MHz CPU, HSDPA, 802.11 b/g Wireless, Bluetooth,1D barcode scanner, RFID,Smart Card Reader,Windows® Embedded Handheld 6.5 OS, RoHS
MODAT-100-WB65-En	3.5" TFT-LCD 190 cd/m² QVGA Enterprise PDA with Marvell® PXA 310 624MHz CPU, HSDPA, 802.11 b/g Wireless, Bluetooth, 1D barcode scanner, Smart Card Reader, Magnetic Stripe Card, Windows® Embedded Handheld 6.5 OS, RoHS
MODAT-100-2D-WB65-En	3.5" TFT-LCD 190 cd/m² QVGA Enterprise PDA with Marvell® PXA 310 624MHz CPU, HSDPA, 802.11 b/g Wireless, Bluetooth, 1D/2D Imager barcode scanner, Smart Card Reader, Magnetic Stripe Card, Windows® Embedded Handheld 6.5 OS, RoHS

1

IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

MODAT-200

Order Entry PDA

- ■ 667 MHz ARM11 CPU
- ■ Built-in Windows® Mobile 6.5 OS/
  Windows® CE 6.0 Optional
- ■ USB 1.1 Host/Client 2.0
- ■ Built-in Wi-Fi and Bluetooth wireless communication
- ■ 3.5" TFT resistive touch screen
- ■ microSD slot

ARM   **SAMSUNG**

Windows Mobile | Bluetooth | Wi-Fi | USB 2.0

▌Application

- ● Quick Registration
- ● Inspection
- ● Table Service
- ● On-Line Sales

MODAT-200
Order entry PDA

Bluetooth Mobile Printer

ICEROCK
Kitchen computer

Wi-Fi

MODAT-100
POS computer

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

High Performance, Low Power Consumption CPU

System Peripheral	ARM Core	Multimedia Acceleration
RTC	ARM1176JZF-S	Camera I/F
PLL x 3	I/D-Cache 16KB I/D-TCM 16KB 533/667MHz	Multi Format CODEC (H.264/MPEG4/VC1)
Timer w/ PWM		NTSC, PAL TV out (with Image Enhancement)
Watch-Dog Timer		JPEG
DMA(32 ch)		2D Graphics
Keypad (8 x 8)		3D Graphics

X64 / 32 Multi − Layer AHB / AXI Bus

Connectivity		Memory Subsystem
I2S / I2S 5-ch		SRAM/ROM/NOR/ OneNAND
I2C x 2		Mobile SDRAM
UART x 4		Mobile DDR SDRAM
GPIO		NAND Flash
IrDA v1.1		
SPI (Full Duplex)		
HIS (Modem I/F)	Power Management	TFT LCD Controller
USB OTG 2.0		
USB Host 1.1	Normal, Idle Stop, Sleep	Resolution typically 800x480 Color-TFT LCD
HS-MMC/SD		
AC97 / PCM Audio I/F		

The S3C6410X is a 16/32-bit RISC microprocessor that delivers high performance with a cost-effective, energy-efficient design. Not only does it provide general application for mobile phones, its ARM1176JZF-S based CPU subsystem and Java acceleration engine make it a perfect match for handheld computers.

■ Multiformat codec provides MPEG-4/H.263/H.264 encoding and decoding.

■ 2D graphics and 3D graphics acceleration with Bit Blit and rotation.

■ USB 2.0 OTG supports high-speed (480Mbps, on-chip transceiver).

■ USB 1.1 Host suppors full-speed (12Mbps, on-chip transceiver).

Built-in Windows Mobile 6.5 OS

■ Windows® Mobile (WM) is a compact mobile operating system developed by Microsoft®, and designed for use in smart phones and mobile devices.

■ The IEIMobile Enterprise PDA series runs on Windows® Embedded Handheld 6.5.

Built-in Applications

■ Internet Explorer Mobile

■ Microsoft® Office Outlook Mobile

■ Windows® Media Player Mobile

■ Microsoft® Office for Mobile is programmable and compatible with desktop Windows® (optional)

■ Microsoft® SQL Server Mobile edition for desktop PC or back-end ERP system (optional)

Windows® Embedded Handheld Application Development

■ **Windows® Embedded Handheld Device**
  ● NET Compact framework
    - Visual basic .NET, Visual C# .NET
    - BCL (Base Class Libraries)

■ **Native Code**
  ● Machine code
  ● C++ ; MFC / ATL / WTL / STL

Optional Windows CE 6.0 OS

■ Run one of Microsoft's compact operating systems, either Windows CE or Windows® Embedded Handheld.

■ Vertical market handhelds still run Windows CE & Windows® Embedded Handheld.

MODAT-200

Take orders while customers are waiting in a busy shop or cafe

MODAT-200

Drive-through quick order services

MODAT-200

Check reservations and table status at reception

MODAT-200

Allow customers to pay at the table, receive receipt and give feedback all at once

ICEROCK
POS computer

Wi-Fi AP

MODAT-100
POS computer

Bluetooth headset

MODAT-200
Ordering entry

Bluetooth mobile printer

Power

Scrolling Key

Speaker   Wi-Fi / Bluetooth LED

System / Battery LED

microSD

Reset Button

Touch Keys
(Calendar/Start/OK/Message)

iEiMobile

Headset

Mini USB

Power Charging Cradle Connector

Hanger   The hanger is designed for optimal flexibility. Wherever there is a hook and hanger, the MODAT-200 can easily be used in various situations.

Stylus

Neck Strap Clip

The Neck Strap Clip is located at the bottom panel to allow the MODAT-200 to be taken up for service at the right side.

1

IEIMobile Solutions

2

Automation Panel Solutions

3

RISC-based Solutions

4

PACSmate Medical Solutions

5

Optional Peripherals

Specifications

Model		MODAT-200
Display	LCD Size	3.5" TFT LCD
	Brightness (cd/m²)	250 cd/m²
	Max. Resolution	240 (H) x 320 (V) QVGA
	Viewing Angle	80/80/80/80 Deg.
	Touch Screen	4-Wire Resistive Type Touch
System	CPU	Samsung® 6410 ARM11 667MHz
	Operating System	Windows® Mobile 6.5 OS
	Memory	128MB Flash + 128MB SDRAM
	Storage	microSD Slot
Communication	Wi-Fi	Wi-Fi 802.11b/g
	Bluetooth	Bluetooth 2.1 + EDR
Indicators & Buttons	LED Indicators	Message/battery/charging status LED Wi-Fi / Bluetooth enable/disable LED
	Hot Keys	1 x Rollng Key
I/O Interface	Audio	1 x Headset and 1 x Speaker
		Built-in Mic-in
	Expansion	1 x Mini USB Host 1.1/Client 2.0
Power	Power Adapter	Input: 100 V AC to 240 V AC ~ 50-60Hz 0.2A Output: 5V/1A
	Battery	3.7V 1800mAh battery (built-in non-swappable)
Environment	Operating Temperature	-10˚C ~ 50˚C
	Storage Temperature	-20˚C ~ 70˚C
	Humidity	5%~95% non-condensing
	Drop Survival	1.5M
	Environmental Protection	IP 54
	Certification	CE, FCC, BSMI
Physical Characteristics	Dimensions (LxWxH) (mm)	125 x 74 x 18
	Weight	200 g

MODAT-200 Dimensions *(Unit : mm)*

73

124.998

AA Area

19.7

21.6
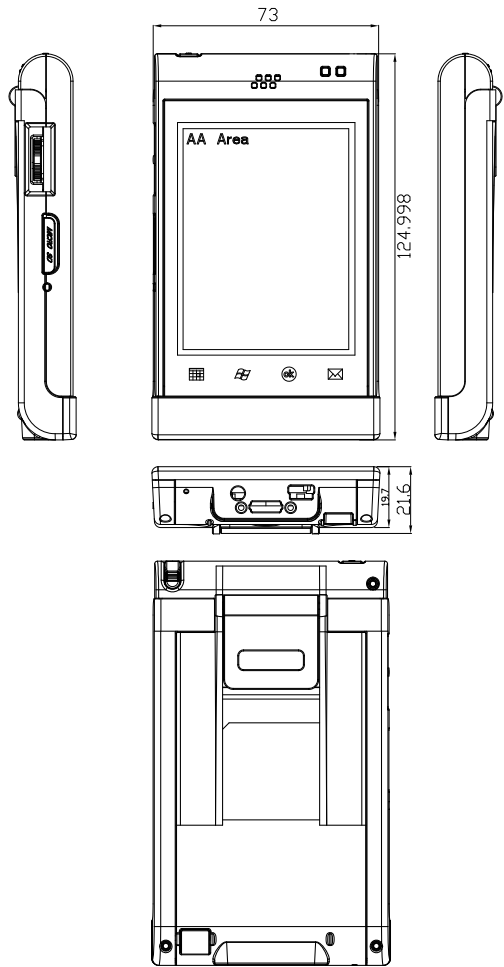
Ordering Information

Part No.	Description
MODAT-200-CE60-En	3.5" TFT-LCD 250 cd/m² QVGA Enterprise PDA with Samsung® 6410 ARM11 667MHz CPU,802.11 b/g Wireless, Bluetooth, Windows CE 6.0 OS, RoHS
MODAT-200-WB65-En	3.5" TFT-LCD 250 cd/m² QVGA Enterprise PDA with Samsung® 6410 ARM11 667MHz CPU,802.11 b/g Wireless, Bluetooth, Windows Mobile 6.5 OS, RoHS

Packing List

Item	Part No.	Q'ty
Cradle	MODAT-200-CR01-R10	1
Leather Protective Case	7Z000-MODAT200POUCH-RS	1
USB Cable	32001-000301-100-RS	1
AC-DC Adapter	63040-180005-000-RS	1
Headset	30900-000001-RS	1
Stylus	7Z000-MODAT200STYLUS-RS	1
Hand Strap	7Z000-MODAT200STRAP-RS	1
User's Manual CD ROM	7B000-000548-RS	1

USB Cable   AC-DC Adapter   Headset   Hand Strap

Leather Protective Case   Stylus   Cradle

Optional Accessory List

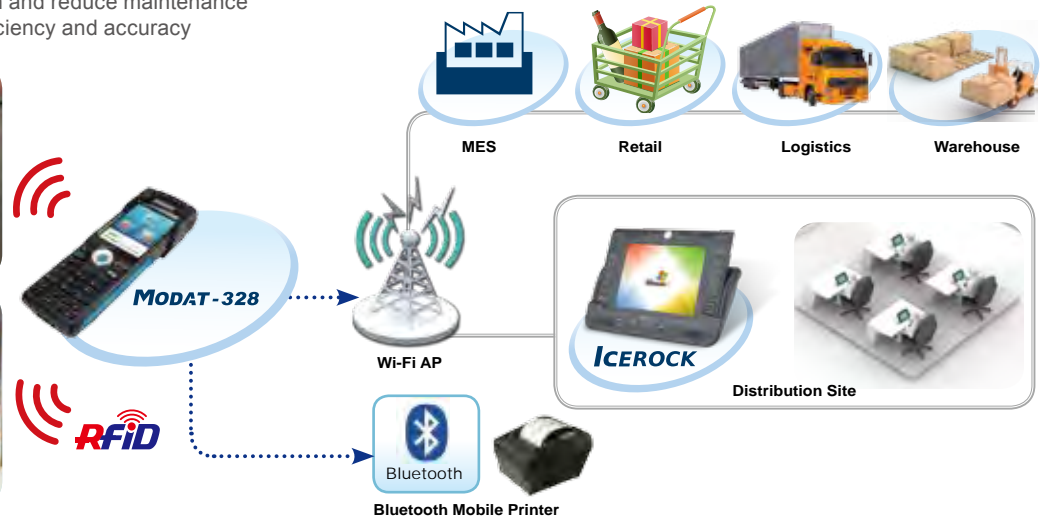| Item	Part No.	Description
Leather Protective Case	7Z000-MODAT200POUCH-RS	Black, professional leather protective case for MODAT-200
AC-DC Adapter	63040-180005-000-RS	Input: 100 V AC to 240 V AC ~ 50-60Hz0.2A Output: 5 V DC, 1 A (Max)
Cradle	MODAT-200-CR01-R10	One to one charging cradle with MODAT-200

MODAT-328

Stocktaking PDA

- **2.8" TFT LCD with resistive touch screen**
- **Marvell PXA 310 624 MHz CPU**
- **Built-in Windows® Embedded Handheld 6.5 OS**
- **Wi-Fi and Bluetooth wireless technology**
- **3 Megapixels camera with LED flash**
- **Supports Mifare (ISO 14443A) Felica (ISO 14443B) and ISO 15693**
- **1D/2D barcode reader**
- **Optional cradle with RS-232 and USB client port**

| Bluetooth | Wi-Fi | Camera | RFID | RS-232 | USB 2.0 | 1D Barcode Scanner | 2D Barcode Scanner | Windows Embedded Handheld |

Benefits

Designed to be an integral part of the warehousing management solution, the MODAT-328 is an all-functional stocktaking PDA with the Marvell PXA310 CPU and Windows® Embedded Handheld 6.5 operating system. It is a light-weight, ergonomic mobile terminal equipped with advanced data acquisition technologies: RFID, 1D/2D barcode reader, and 3 megapixels CMOS camera. Via built-in 802.11b/g Wi-Fi and Bluetooth wireless modules, the MODAT-328 allows quick and easy connection to other peripherals. Your mobile workforce is empowered with the ability to track and report real-time inventory levels and movements, reducing chances for delays, shortages and uncertainties. With the MODAT-328, it's never been easier for businesses to remote-control warehouse and distribution center operations. On the manufacturing floor, up on the loading dock or out in the yard, the MODAT-328's ultra-rigged design offers reliable performance under harsh environment.

- Accurate and real-time inventory data
- Inventory visibility and better forecasting and accuracy enabling a reduction in safety stocking levels
- Reduction in misplaced goods and elimination of sales lost due to out of stocks
- Increase accuracy and reduced labor costs in receiving, put-away and shipping operations
- Reduce labor requirements for backroom functions such as physical inventory counting, receiving, and locating specific items
- Reduce losses and shrinkage of assets, also theft prevention
- Correct item name identification and reduce maintenance
- Increase distribution center efficiency and accuracy

MES   **Retail**   **Logistics**   **Warehouse**

MODAT-328

Wi-Fi AP

ICEROCK

Distribution Site

RFID

Bluetooth

Bluetooth Mobile Printer

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

High Performance Low Power Consumption Platform

Marvell® PXA 310

Built on a low-power 90nm process technology, the Marvell PXA 310 is a cost-effective, power-efficient solution with up to 624 MHz computing performance. In addition to hardware video acceleration, DRM security and video/audio playback, it combines low-power modes with on-demand adjustment of voltage and frequency to support exceptional battery life in standby modes.

Built-in Windows® Embedded Handheld 6.5

Windows® Embedded Handheld (WM) is a compact mobile operating system developed by Microsoft®, and designed for use in smart phones and mobile devices. IEIMobile Enterprise PDA series adopts Windows® Embedded Handheld 6.5 to meet the demands of your mobile workforce.

Multimedia and General-Purpose Processing

USB 2.0 High-Speed Client	Enhanced Quick Capture Interface	Memory Controller / Wireless Trusted Platform
USB 1.1 Full-Speed Host		Marvell PXA310 Core Scalable to 624 MHz / Hardware Video, JPEG Accelerator
USB 1.1 Full-Speed Host		32K D-cache / 32K I-cache
SSP Interface X4	Intel® Wireless MMX™ 2 Co-processor	256K Internal SRAM / 2D Graphics/Scaling/Rotation
UART Interface X3	Wireless Intel SpeedStep® Technology Power Management	
LCD Controller w/Low-power Refresh		
AC97 Interface		

SD/SDIO/MMC Interface X3 | I2C Interface | Keypad Controller | I2S Interface | Other Peripherals JTAG | Power I2C Interface

Built-in Applications
- Optional Windows® Embedded Handheld 6.5 Office
- Optional Microsoft® SQL Server Mobile Edition is compliant with the industrial leading standard DBMS and is compatible with desktop PC or back-end ERP system. It saves time and effort of building a new ERP system.

### Windows® Embedded Handheld Application Development
- Official IDE
- Managed Code
- Native Code

Microsoft **SQL Server**
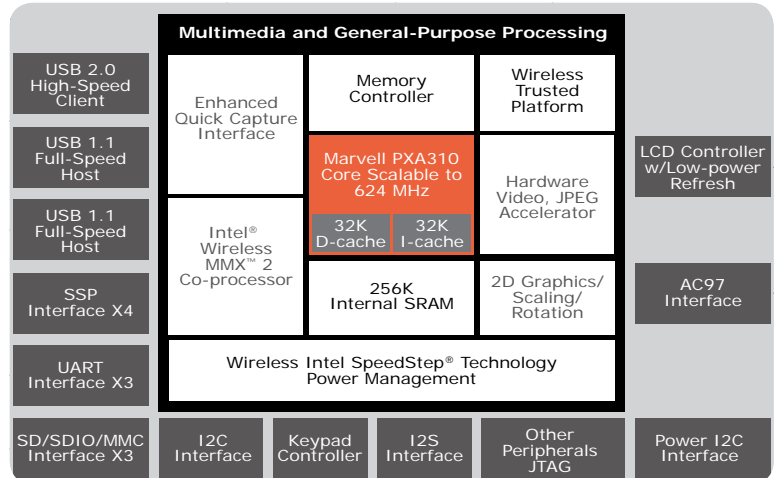
Seamless Wireless Communication

Real-time data can be delivered and accessed using MODAT-328's built-in 802.11 b/g wireless LAN module to connect to wireless local area network (WLAN). Nowadays, efficient and streamlined work-flow is where most businesses look to reduce cost and improve competitiveness. With the seamless wireless connection, you can greatly enhance stock management system. The MODAT-328 also comes with Bluetooth 2.1 +EDR, offering a fast and easy way to connect and synchronize all the peripherals, such as printers and headsets.

Eg. Warehouse workers use wireless LANs to exchange information with central database server and increase their productivity.

Cargo Receiving

Barcode Scanning

Inventory Checking

Wi-Fi
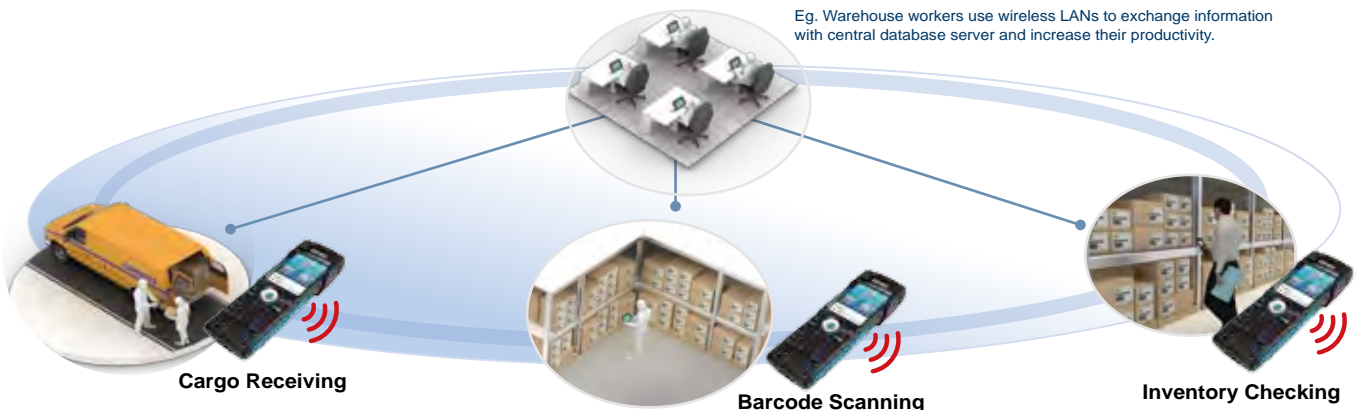
MODAT-328 gives you up to broadband-speed browsing and connectivity, compared to traditional wired LAN. It is best-suited for near field or ad-hoc data communications.

Local-Area Communication
- Compliant with IEEE 802.11b/g
- Auto fallback optimal data rate
- Security : WPA/WPA2, 802.11i AES /CCMP, WEP with TKIP
- Hardware signaling BT/Wi-Fi co-existence supported

Bluetooth

- Compliant with Bluetooth specification V1.2.
- Profile : SPP, HFP, HSP
- Up to 1Mbps data transfer rate and 10M distance

Peripheral Communication

Advanced Data Acquisition Technology

The MODAT-328 is a multi-modal device that supports 1D and 2D barcode scanning, RFID and imaging. RFID technology is capable of "simultaneous identification," capturing data from multiple tags within specific range all at the same time. In addition to RFID, the MODAT-328 has a built-in barcode scanning capability and a 3 megapixels camera with high power LED flashlight. The MODAT-328 is an ideal transaction-based stocktaking PDA.

▌ Built-in 13.56 MHz RFID Reader

Supports Mifare(ISO 14443A) Felica(ISO 14443B) and ISO 15693

Combined with mobile computing and Web technology, RFID technology provides a way for organizations to identify and manage their assets in real-time.

The MODAT-328 integrated with RFID readers delivers a complete set of tools that eliminates paperwork, and gives proof of identification and attendance. Manual data entry becomes a thing of the past. Its RFID reader module supports standard ISO 14443A ISO 14443B and ISO 15693(smart label).

▌ 1D/2D Image Barcode Reader or 1D Laser Barcode Reader

MODAT-328's built-in barcode scanner can integrate with warehouse management software, providing rapid gains in storage efficiency. The MODAT-328 can quickly collect the data and build an inventory database. Through the warehouse management system, managers or administrators can calculate how much space is needed and where to put these items. Based on storage rules the customer needs and formulas designed to store inventory with maximum efficiency, the MODAT-328 can provide very detailed up-to-date information on key aspects of the business, enabling decisions to be made much more quickly and with more confidence. For example: fast-selling items can be identified quickly and automatically reordered to meet consumer demand, preventing a build-up of unwanted stock.

1D and 2D application

1D barcode is common in most household products and 2D barcode is common in industrial products where more information is needed to be stored in the label.

2D barcode   1D barcode

▌ 3 Megapixels CMOS Camera

Features

The module features CMOS sensor and 2064V x 1552H resolution.
- Superior low-light performance, ultra low-power, low-cost sensor
- Integrated real-time JPEG encoder
- Flexible support for external auto focus, optical zoom, and mechanical shutter

Stylish and Ergonomic Design

Brings a stylish and lightweight ergonomic look to the handheld mobile device, the MODAT-328 offers a comfortable grip and ultra portability with a petite size at 190 x 136 x 115mm while ensuring single-handed scanning service.

▌ LED Indicators & HOT Keys

- Provides 2.8" QVGA touch screen and simple user interface. It allows user to have easy access to all the relevant information and applications.
- Shockproof, dustproof, and waterproof in compliance with IP54.
- The ergonomic and professional keypad is made of wear-resistant PET+SUS and is easy to operate.

▌ I/O Interface

- **microSD:** Users can install applications in the MODAT-328 by using:
- Microsoft® ActiveSync lets you transfer files, synchronize files, remotely debug, and perform other device management activities. ActiveSync is a free application available from the Microsoft® web site
- microSD card
- **Mini USB (OTG) :** Expand the storage capacity and peripheral devices
- **16-pin Connector:** 16-pin connect cable

■ RS-232   ■ 2.0 USB Client   ■ 2.0 USB HOST

Sidebar

1 — IEIMobile Solutions

2 — Automation Panel Solutions

3 — RISC-based Solutions

4 — PACSmate Medical Solutions

5 — Optional Peripherals

Headset

Green: Wi-Fi On

Speaker

Amber: Battery Charging
Green: Fully Charged

1D/2D Barcode Scanner

Barcode Trigger

2.8" TFT LCD (Touch Screen)

Flash LED

3M Pixel Camera

Power and Reset Button (Rubber)

microSD

5-way Navigation Keys

RFID

Barcode Trigger

Mini USB

Keypad

1880 mAh Battery

Camera Key

Function Keys

Lock

Microphone

Specifications

Model		MODAT-328
Display	LCD Size	2.8" TFT LCD
	Brightness (cd/m²)	240 cd/m²
	Max Resolution	240(H) x 320(V) QVGA
	Viewing Angle	70/50/70/70 Deg.
	Touch Screen	4-wire resistive type touch
System	CPU	Marvell® PXA 310 624MHz
	Operating System	Windows® Embedded Handheld 6.5
	Memory	256 MB Flash + 128 MB SDRAM
	Storage	microSD Slot
Communication	Wi-Fi	Wi-Fi 802.11 b/g
	Bluetooth	Bluetooth 2.1 + EDR
Data Collection	RFID	13.56 MHz RFID reader support ISO15693 and 14443A/B compliant or ISO 14443A and Felica compliant
	Barcode	1D/2D Imager Scan Engine
	Camera	3 megapixels CMOS camera with LED flashlight
Indicators & Buttons	LED Indicators	Charging status LED Wi-Fi / enable/disable LED
	Hot Keys	3 x Barcode key 1 x Camera key
I/O Interface	Audio	1 x Headset and 1 x Speaker
		Built-in Mic-in
	Expansion	1 x Mini USB Client 2.0
Power	Power Adapter	Input: 100 V AC to 240 V AC ~ 50-60Hz 0.2A Output: 5 V/2.1A
	Battery	3.7V 1880 mAh battery
Environment	Operating Temperature	-10°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C
	Humidity	5%~95% non-condensing
	Drop Survival	1.5M
	Environmental Protection	IP 54 (Front panel)
	Certification	CE, FCC
Physical Characteristics	Dimensions (LxWxH) (mm)	172 x 55 x 31
	Weight	245 g

MODAT-328 Dimensions (Unit: mm)

58.90   34.50

172.00
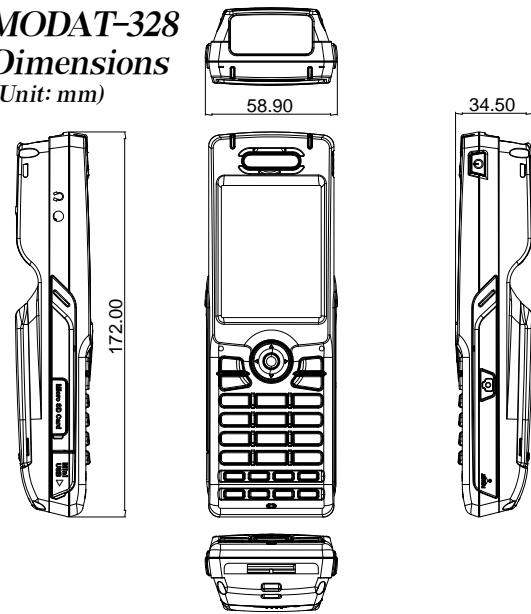
Support Function

Part Number	Wireless	Barcode	RFID
MODAT-328-WB65-En-R11	802.11 b/g	1D/2D Barcode Scanner	Mifare (ISO 14443A) Felica (ISO 14443B) and ISO 15693
MODAT-328-1D-WB65-En	802.11 b/g	1D Barcode Scanner	N/A

Ordering Information

Part No.	Describtion
MODAT-328-WB65-En-R11	2.8" TFT-LCD 240 cd/m² QVGA Enterprise PDA with Marvell® PXA 310 624MHz CPU, 802.11 b/g Wireless, Bluetooth, 1D/2D Barcode Scanner, RFID, 3M Pixels Camera, Windows® Embedded Handheld 6.5 OS, RoHS
MODAT-328-1D-WB65-En	2.8" TFT-LCD 240 cd/m² QVGA Enterprise PDA with Marvell® PXA 310 624MHz CPU, 802.11 b/g Wireless, Bluetooth, 1D Barcode Scanner,Windows® Embedded Handheld 6.5 OS, RoHS

Packing List

Item	Part No.	Q'ty	Description
Battery Pack	31603-000015-RS	1	3.7V 1880 mAh Battery
Belt Clip Case	7Z000-MODAT-328POUCH-RS	1	Black, MODAT-328 Professional Belt Clip Case
USB Cable	32001-000301-100-RS	1	
AC-DC Adapter	63040-330010-000-RS	1	Vin:90~264VAC;10.5W, (NO LOAD 0.1W) Vout:5VDC;USB;CCL;RoHS
Headset	30900-000001-RS	1	
Stylus	7Z000-431250003C000RS-RS	1	
Hand Strap	7Z000-MODAT300STRAP-RS	1	
User's Manual CD ROM	7B000-000550-RS	1	

Optional Accessory List

Item	Part No.	Description
Cradle	MODAT-300-CR01-R10	Charging cradle with USB Client
Battery Pack	31603-000015-RS	3.7V 1880 mAh Battery
Battery Pack - L	31603-000017-RS	3.7V 3000 mAh Battery (Note: Please confirm that need to purchase the Batter Pack Cover-L or not)
Belt Clip Case	7Z000-MODAT-328POUCH-RS	Black, MODAT-328 Professional Belt Clip Case
16-pin Cable	32024-001500-100-RS	Connect to USB Host, USB Client and RS-232
Battery Pack - L Cover	9N41-209001-00-00-A-RS	The Cover of Battery Pack - L (Note : Please select this cover when the first time purchase the Battery Pack - L)

Cradle

Belt Clip Case

AC-DC Adapter

USB Cable

Hand Strap

Headset

Battery Pack

Stylus

16-pin Cable

MODAT - 335

Field Service Terminal

- **3.5" TFT sunlight readable LCD touch screen**
- **Marvell® PXA 310 624MHz CPU**
- **Built-in Windows® Embedded Handheld 6.5 OS**
- **Wi-Fi, Bluetooth and WCDMA/HSDPA or GPRS wireless technology**
- **Built-in GPS**
- **1D Laser/2D Imager Scan Engine and Supports Mifare (ISO 14443A) Felica (ISO 14443B) and ISO 15693 RFID reader 3 Megapixels Camera**
- **Optional Handle Grip**
- **Optional UHF read Multi Tags and support 3 meter reading distance**

| 3.5G/HSDPA | Barcode Scanner | 2D Barcode Scanner | RFID | Wi-Fi | Bluetooth | GPS | Windows Embedded Handheld |

Field Service Application

The MODAT-335 is a highly integrated terminal designed for the mobile field service workforce. Benefits include:

- Fleet and inventory tracking
- Access to detailed customer and asset records
- Automated service order dispatch
- Remote update of work status
- Capture customer and asset data easily
- Create notifications and service orders on the spot
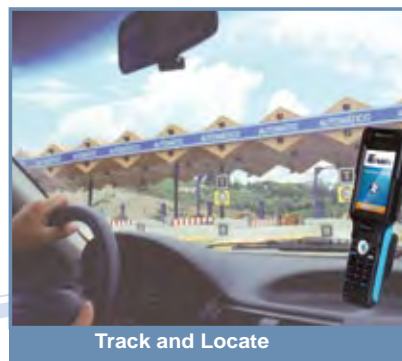
Capture and Record

Track and Locate

Out-field
WWAN
(GPRS/3G/ HSDPA/WiMAX)

Access and Update

1
IEIMobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

Advanced Data Acquisition Technology

1D/2D Image Barcode Scan Engine

2D Barcode Scanner

The built-in 1D/2D barcode scanner features a high quality reading function and advanced image capture capabilities suitable for technicians to identify and record information in the field.

Built-in 13.56 MHz RFID Reader

RFID

Compliant with ISO15693 and 14443A, the built-in RFID reader automates data capture. The RFID field service application reduces the number of parts required on a service vehicle, eliminate manual data entry, and improve productivity and customer service.

3 Megapixels CMOS Camera

Camera

The 3 megapixels camera features a CMOS sensor and a 2064V x 1552H resolution. The camera is perfect for technicians to capture images while working in the field.

Seamless / Wireless Communication

The MODAT-335 keeps field workers connected through a built-in 3.5G modem and a 802.11 b/g wireless LAN module and Bluetooth. With these technologies, the mobile workforce stays connected to back-offices in order to verify and obtain information, update work status and dispatch jobs in real-time.

Local-Area Communication

Wi-Fi

It gives you up to broadband-speed browsing and connectivity, compared to traditional wired LAN.insert a space Best for near field or ad-hoc data communications.
- Compliant with IEEE 802.11b/g
- Auto fallback optimal data rate
- Security: WPA/WPA2, 802.11i AES /CCMP, WEP with TKIP
- Hardware signaling BT/Wi-Fi co-existence supported

Peripheral Communication

Bluetooth

- Compliant with Bluetooth specification V1.2.
- Profile: SPP, HFP, HSP
- Up to 1 Mbps data transfer rate and 10 M distance

Wide-Area Mobile Communication

3.5G/ HSUPA

- UMTS/HSDPA: Triple band, 850//1900/2100 MHz
- GSM/GPRS/EDGE: Quad band, 850/900/1800/1900 MHz

1
IEIMobile Solutions

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Optional Peripherals

Built-in GPS

Together with wireless technologies such as 3G, the built-in GPS allows for accurate location and tracking of users. This feature has two important implications:

■ Users can be located on a map to reference his/her own location in relation to other landmarks. With location-based and map services, mobile workers can locate important destinations such as gas stations and customers in an unknown territory.

■ Location information obtained from the GPS can be transmitted to the backend office through wireless broadband connectivity, allowing employees to be tracked while they are on the move. This makes dispatch work more efficient as mobile workers can be assigned jobs according to their proximity to customers.

Semi-Rugged Design

The MODAT-335 is a mobile field service terminal specifically designed to meet out-field conditions, with the following taken intoconsideration:
■ The ability to withstand tough outdoor conditions such as high and low operating and storage temperatures.
■ The ability to endure rough handling such as accidental drops and bumps.
■ The ability to function under almost any circumstances such as moist conditions.

IP54

IP 54 Rating
■ Protected against dust that would interfere with normal operation
■ Protected against water splashed against the device from any direction

Sunlight Readable

Sunlight Readable - 3.5" TFT LCD
Display can be read in bright sunlight

Drop Protection

1.5 M Drop Test
Passed 1.5M drop test 26 times

Operating Temperature -10°C~50°C

Operating Temperature -10°C ~ 50°C
Can operate in a wide range of temperatures

Storage Temperature -20°C~60°C

Storage Temperature -20°C ~ 60°C
Can be stored under extreme temperatures

MODAT-335

Speaker
Green: Wi-Fi On
Green: 3G On
Amber: Battery Charging
Green: Fully Charged
1D/2D Barcode Scanner
Headset
RFID Reader
Power and Reset Button (Rubber)
Flash LED
3M Pixels Camera
3.5" TFT LCD (Touch Screen)
Stylus
Barcode Trigger
5-way Navigation Keys
3.7V 3000 mAh battery
Barcode Trigger
microSD
Camera Key
Keypad
Mini USB
Function Keys
Lock
Microphone

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Advanced Optional Accessories

UHF RFID Reader

The communication frequencies used in radio frequency identification (RFID) technology range from 125KHz to 2.45GHz. The MODAT-335 features an optional ultra high frequency (UHF) reader. The MODAT-335:

■ Detects a frequency range from 840MHz to 960MHz
■ Allows a long reading range
■ Is excellent for reading multiple tags
■ Carry one 3000 mAh Battery inside
■ Design 4 screws which can fix the UHF on the device

3000 mAh battery can support UHF power consumption, provide longer working hours!

Vehicle Identification
Verify and identify vehicle transponders.

Object or Personnel Tracking
Verify job or order delivery assignment.

Multiple Item Identification
Read multiple items at once, saving time and effort.

Long Range Reading
Read tags from a long distance.

User friendly design

Easy to Install and Clip

MODAT-335 UART signal connector

+

UART connector

=

Clip design makes it easy to fix the UHF pistol on MODAT-335

Easy to switch and convenient to use

UHF or Barcode Trigger functions

Switch to change between internal and external antennas.

Provide external UHF antenna connector, which is flexible for user preference.

Handle Grip

The MODAT-335 features a removable handle grip which can be secured to the device whenever the user needs it. Its advantages include:

■ Easy to hold and carry while reading tags
■ Increased reading angles

Handle Grip Installation

iEiMobile®

MODAT-335A New

Field Service Terminal

- 3.5" TFT sunlight readable LCD touch screen
- Texas Instruments Sitara ARM Cortex A8 CPU
- Built-in Android 2.3.4 OS
- Wi-Fi, Bluetooth and WCDMA/HSDPA or GPRS wireless technology
- Built-in GPS
- 1D Laser/2D Imager Scan Engine and Supports Mifare (ISO 14443A) Felica (ISO 14443B) and ISO 15693 RFID reader 3 Megapixels Camera
- Optional Handle Grip
- Optional UHF read Multi Tags and support 3 meter reading distance

Cortex Intelligent Processors by ARM

TEXAS INSTRUMENTS

| 3.5G/HSDPA | Barcode Scanner | 2D Barcode Scanner | RFID | Wi-Fi | Bluetooth | GPS | ANDROID |

Power Saving and Trendy Platform

TI Cortex A8 CPU

TI's Sitara™ family of highly-integrated ARM9™ and ARM Cortex™-A8 microprocessor portfolio offers various combinations of high-performance and low power levels, providing the ability to create an array of products using a common hardware and software platform.

Benefit
- Support OS such as Linux, Win CE, RTOS
- 10M polygons/second for robust GUIs
- Multi windows overlay for hardware accelerated user

Power
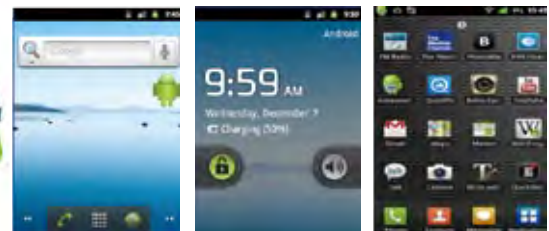- Total Power: L700mW
- Standby Power: 12mW

Suggested Application
- Industrial/Home automation
- Point of service

TEXAS INSTRUMENTS

Android 2.3.4 Operating System

- Android is an operating system for mobile devices such as smartphones and tablet computers. It is developed by the Open Handset Alliance led by Google.

- Android was listed as the best-selling smartphone platform worldwide in Q4 2010 by Canalys with over 200 million Android devices in use by November 2011.

- 2.3 Gingerbread refined the user interface, improved the soft keyboard and copy/paste features, improved gaming performance, added SIP support (VoIP calls), and added support for Near Field Communication.

Android Security Issue:
Android applications run in a sandbox, an isolated area of the operating system that does not have access to the rest of the system's resources, unless access permissions are granted by the user when the application is installed. Before installing an application, Android Market displays all required permissions.

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Specifications

Model	MODAT-335	
Display	LCD Size	3.5" TFT LCD (Sunlight Readable)
	Brightness (cd/m²)	190 cd/m²
	Max Resolution	240(H) x 320(V) QVGA
	Viewing Angle	80/80/80/80 Deg.
	Touch Screen	4-wire resistive type touch
System	CPU	Marvell® PXA 310 624MHz (Windows Embedded Handheld 6.5) or TI Sitara AM3715 (Android 2.3.4)
	Operating System	Windows® Embedded Handheld 6.5 or Android 2.3.4
	Memory	256MB Flash + 256MB SDRAM
	Storage	microSD Slot
Communication	Wireless LAN	Wi-Fi 802.11 b/g/n
	Bluetooth	Bluetooth 2.1+EDR
	Modem	WCDMA/HSDPA or GPRS
	GPS	GPS w/internal antenna
Data Collection	RFID	13.56 MHz RFID Supports Mifare (ISO 14443A) Felica (ISO 14443B) and ISO 15693
	UHF (optional)	EPC Global Class1 Gen2 support ISO/IEC 18000-6 Type C and at least 3m reading distance
	Barcode	1D/2D Image Scan Engine
	Camera	3 megapixels CMOS Camera with LED Flash Light
Indicators & Buttons	LED Indicators	Wi-Fi enable / disable LED (Green) 3.5G or 2.5G enable / disable LED (Green) Charging Status / Full LED (Orange / Green)
	Hot Keys	2 x Barcode Key/ 1 x Camera Key
I/O Interface	Audio	1 x Headset and 1 x Speaker
	Expansion	1 x Mini USB Client 2.0
		16-Pin connector (RS-232/ Battery Charging/ USB Host / USB Client)
Power	Power input	Input: 100V AC to 240V AC ~ 50-60Hz 0.2A Output: 5V / 2.1A
	Battery	3.7V 3000 mAh battery
Enviroment	Operating Temperature	-10°C~50°C
	Storage Temperature	-20°C~60°C
	Humidity	5%~90% non-condensing
	Drop Survival	1.5M
	Environmental Protection	IP 54
	Certification	CE / FCC
Physical Characteristics	Dimensions (LxWxH) (mm)	218.5 x 81 x 46.2
	Weight	405g
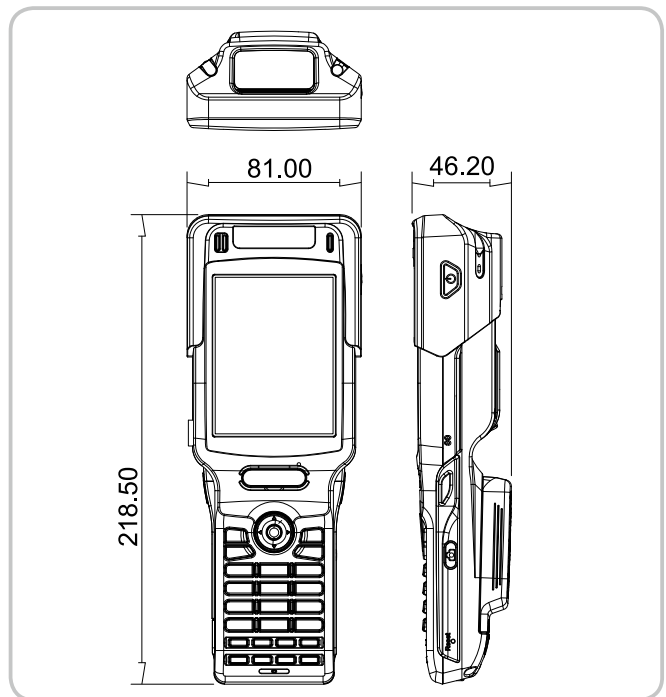
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# Optional Accessory List

Item	Part No.	Description
Cradle	MODAT-300-CR01-R10	Charging cradle with USB Client
Battery Pack	31603-000017-RS	3.7V 3000 mAh Battery
16-pin Cable	32024-001500-100-RS	Connect to USB Host, USB Client and RS-232
Handle Grip	MODAT-335-GRIP-R10	Removable handle grip can trigger 1D/2D barcode
UHF Reader	MODAT-335-UHF-R10	Ultra high frequency (UHF) reader whith 3000 mAh battery.

Ordering Information

Part No.		Description
Windows® Embedded Handheld 6.5 Operating System	MODAT-335-WB65-En	3.5" TFT-LCD, Enterprise PDA with Marvell® PXA 310 624MHz CPU, 802.11 b/g Wireless, Bluetooth, HSDPA,GPS, 1D/2D Barcode Scanner, RFID, 3M Pixels Camera, Windows® Embedded Handheld 6.5 OS, RoHS
	MODAT-335-GPRS-WB65-En	3.5" TFT-LCD, Enterprise PDA with Marvell® PXA 310 624MHz CPU, 802.11 b/g Wireless, Bluetooth, GPRS/GSM, GPS, 1D Barcode Scanner, RFID, 3M Pixels Camera, Windows® Embedded Handheld 6.5 OS, RoHS
	MODAT-335-1D-WB65-En	3.5" TFT-LCD, Enterprise PDA with Marvell® PXA 310 624MHz CPU, 802.11 b/g Wireless, Bluetooth, 1D Barcode Scanner, 3M Pixels Camera, Windows® Embedded Handheld 6.5 OS, RoHS
Android 2.3.4 Operating System	MODAT-335-AD23-En	3.5" TFT-LCD, Enterprise PDA with TI Sitara AM3715 CPU, 802.11 b/g Wireless, Bluetooth, HSDPA,GPS, 1D/2D Barcode Scanner, RFID, 3M Pixels Camera, Android 2.3.4 OS, RoHS
	MODAT-335-1D-AD23-En	3.5" TFT-LCD, Enterprise PDA with TI Sitara AM3715 CPU, 802.11 b/g Wireless, Bluetooth, 1D Barcode Scanner, 3M Pixels Camera, Android 2.3.4 OS, RoHS

Packing List

Item	Part No.	Q'ty
Battery Pack	31603-000017-RS	1
USB Cable	32001-000301-100-RS	1
AC-DC Adapter	63040-330010-000-RS	1
Headset	30900-000001-RS	1
Stylus	7Z000-43150003C000RS-RS	1
Belt Clip Case	7Z000-MODAT-335POUCH-RS	1

Cradle USB Cable Headset

Battery Pack Stylus 16-pin Cable
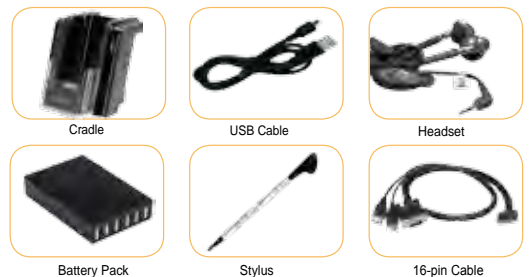
Support Function

Part No.	OS	Wi-Fi	Blutooth	Modem	GPS	Barcode	RFID	Camera
MODAT-335-WB65-En	Windows Embedded Handheld 6.5	802.11 b/g/n	Bluetooth 2.1+EDR	WCDMA/HSDPA	GPS w/internal antenna	1D/2D Image Scan Engine	Supports Mifare (ISO 14443A) Felica (ISO 14443B) and ISO 15693 and 14443A/B compliant	3M Pixels
MODAT-335-GPRS-WB65-En		802.11 b/g/n	Bluetooth 2.1+EDR	GPRS/GSM	GPS w/internal antenna	1D Laser Scan Engine	13.56 MHz RFID support ISO 15693 and 14443A/B compliant	3M Pixels
MODAT-335-1D-WB65-En		802.11 b/g/n	Bluetooth 2.1+EDR	N/A	N/A	1D Laser Scan Engine	N/A	3M Pixels
MODAT-335-AD23-En	Android 2.3.4	802.11 b/g/n	Bluetooth 2.1+EDR	WCDMA/HSDPA	GPS w/internal antenna	1D/2D Image Scan Engine	Supports Mifare (ISO 14443A) Felica (ISO 14443B) and ISO 15693 and 14443A/B compliant	3M Pixels
MODAT-335-1D-AD23-En		802.11 b/g/n	Bluetooth 2.1+EDR	N/A	N/A	1D Laser Scan Engine	N/A	3M Pixels

iEiMobile®

**Data capture
Data transmission
Data storage**

Automotive PC

Automotive PC

Carputer

Combining with more than one decade of in-vehicle computing device ODM experiences and innovative design concepts, IEIMobile provides applicable in-vehicle computing solutions in all aspects.

Carputer is the predominant term used to describe a category of mobile computer designed or modified to specifically be installed and run in automobiles. Originally many do-it-your-selfers have built carputers from laptops and small form factor computers based on industrial personal computer technology and connected with several external peripherals such as GPS receiver, GPRS modem, vehicle power supply, and On-Board Diagnostics (OBD-II) converter.

Now mobile technology and new IT solution causes the creation of more advanced carputers that integrate all these peripherals in one single device to become more compact, rugged, applicable, and survivable in vehicle environment. The popularity of carputer also brings the booming of carputer providers to come out with different product alias like Car-PC, vehicle PC, vehicle computer, in-vehicle computer, auto PC, car computer, or vehicle-mounted computer.

In-Vehicle Infotainment (IVI)

The growing needs to access information in remote, mobile environments have sparked interests in so-called In-Vehicle Telematics Systems (IVTS). These relatively new systems have the potential to deliver computing facilitates to road vehicles, which may include in-vehicle infotainment, route-guidance and navigation and the provision of vital information resources used by fleet haulage companies and emergency services (police, fire and ambulance).

In-Vehicle Infotainment (IVI) systems are devices that deliver navigation, entertainment, and networked computing services in vehicles, such as cars, trucks, planes, and buses. Automotive manufacturers in particular are increasingly viewing IVI systems as a key differentiator in their products. Drivers and passengers are coming to expect the same type of innovations they see in other devices, such as mobile computers and handsets, in their vehicles. As vehicles become connected to the internet, the demand for internet-based entertainment applications and services increases and IEIMobile strives to accelerate the pace of innovation in IVI.

Location-Based Service (LBS)

A location-based service (LBS) is an information and entertainment service, accessible with mobile devices through the mobile network and utilizing the ability to make use of the geographical position of the mobile device. These emerging growing markets of LBS require mobile devices, wireless service and GPS satellite signals to be available and operating for features to function properly.

Mobile messaging plays an essential role in LBS. Messaging, especially SMS, has been used in combination with various LBS applications, such as location-based mobile advertising. SMS is still the main technology carrying mobile advertising / marketing campaigns to mobile devices. A classic example of LBS applications using SMS is the delivery of mobile coupons or discounts to mobile subscribers who are near the advertising restaurants, cafes, movie theatres.

IEIMobile is dedicated to provide industrial mobile electronics devices along with turnkey software solutions to leverage LBS providers and operators to focus on their application and business developments.

▌Emerging LBS

● Fleet Management System
● Remote Real-time Diagnostics
● In-vehicle safety, security and communication service

IEIMobile®
LBS
Applications

Assisted Turn-by-turn Navigation	Emergency Services	Locating Parking Facilities
Locating Nearby Gas Stations	Local Weather Notifications	Traffic Jam Alerts
Local Area Discount Information	Remote Real-time Diagnostics	Local Business Directory Search

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IEIMobile
Solutions

2
Automation
Panel
Solutions

3
RISC-
based
Solutions

4
PACSmate
Medical
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5
Optional
Peripherals

More LBS Examples

- Locating people and vehicle on a map displayed on the mobile device
- Finding someone or something. Person by skill (doctor), business directory, navigation, weather, traffic, room schedules, stolen phone, emergency calls
- Location-based mobile advertising
- Proximity-based notification (push or pull). Targeted advertising, buddy list, common profile matching (dating), automatic airport check-in, and payment based upon proximity (EZ pass, toll watch)
- Turn by turn navigation to any address
- Receiving alerts, such as on sale notification or traffic jam alert
- Requesting the nearest business or service, such as an ATM or a restaurant
- Asset recovery combined with active RF to find, for example, stolen vehicles or assets in containers
- GPS data for operators to dispatch emergency personnel to the correct location
- Resource tracking with dynamic distribution. Taxis, service people, rental equipment, doctors, fleet scheduling

On-Board Diagnostics (OBD-II)

- On-Board Diagnostics, or OBD, in an automotive context, is a generic term referring to a vehicle's self-diagnostic and reporting capability. OBD systems give the vehicle owner or a repair technician access to state-of-health information for various vehicle sub-systems.

- OBD-II is a standard that specifies the type of diagnostic connector and its pin-out, the electrical signaling protocols available, and the messaging format.

- Almost all of the automobiles produced today are required, by law, to provide an interface for connecting a diagnostic test equipment.

Pin	Description
1	Manufacturer discretion. GM: J2411 GMLAN/SWC/Single-Wire CAN.
2	Bus positive Line of SAE-J1850 PWM and SAE-1850 VPW
3	Ford DCL(+) Argentina, Brazil (pre OBD-II) 1997-2000, Usa, Europe, etc. Chrysler CCD Bus(+)
4	Chassis ground
5	Signal ground
6	CAN high (ISO 15765-4 and SAE-J2284)
7	K line of ISO 9141-2 and ISO 14230-4
8	-
9	-
10	Bus negative Line of SAE-J1850 PWM only (not SAE-1850 VPW)
11	Ford DCL(-) Argentina, Brazil (pre OBD-II) 1997-2000, Usa, Europe, etc. Chrysler CCD Bus(-)
12	-
13	-
14	CAN low (ISO 15765-4 and SAE-J2284)
15	L line of ISO 9141-2 and ISO 14230-4
16	Battery voltage

OBD-II Cable

There are five signalling protocols currently in use with the OBD-II interface. Any given vehicle will likely only implement one of the protocols.

- SAE J1850 PWM (pulse-width modulation - 41.6 kB/sec, standard of the Ford Motor Company)
- SAE J1850 VPW (variable pulse width - 10.4/41.6 kB/sec, standard of General Motors)
- ISO 9141-2. K-line and L-line. This protocol has an asynchronous serial data rate of 10.4 kBaud. It is primarily used in Chrysler, European, and Asian vehicles.
- ISO 14230 KWP2000 (Keyword Protocol 2000)
- ISO 15765 CAN (250 kBit/s or 500 kBit/s). The CAN protocol is a popular standard outside of the US automotive industry and is making significant in-roads into the OBD-II market share. By 2008, all vehicles sold in the US will be required to implement CAN, thus eliminating the ambiguity of the existing five signalling protocols.

OBD-II provides access to numerous data from the engine control unit (ECU) and offers a valuable source of information when troubleshooting problems inside a vehicle. The SAE J1979 standard defines a method for requesting various diagnostic data and a list of standard parameters that might be available from the ECU. Following is a list of vehicle diagnostic information you can read from OBD-II. It also shows a sample screen shot from IEIMobile Automotive PC.

- Vehicle speed
- Engine RPM
- Total fuel used (litre since life time)
- High resolution vehicle distance
- Engine coolant temperature
- Vehicle ambient temperature
- Tachograph information
- Total engine hours (h)
- Fuel level (0–100 %)
- Fuel pressure
- Fuel system status

- DTC (Diagnostic Trouble Code)
- Calculated engine load
- Intake air temperature
- Throttle position
- Accelerator pedal position (0–100 %)
- Axle weight (kg)
- Oxygen sensors and status
- Clutch switch (on/off)
- Brake switch (on/off)
- Cruise control (on/off)
- PTO (Status/Mode)

1	IEIMobile Solutions
2	Automation Panel Solutions
3	RISC-based Solutions
4	PACSmate Medical Solutions
5	Optional Peripherals

OBD-II Applications

Hand-held or PC-based scan tools
● Read simple error codes, possibly without translating the meaning, and reset those error codes
● Access more advanced diagnostics
● Set manufacturer- or vehicle-specific ECU parameters
● Access and control other control units, such as air bag or ABS
● Real-time monitoring or graphing of engine parameters to facilitate diagnosis or tuning

In-Vehicle data logger
● Capture vehicle data while the vehicle is in normal operation, for later analysis
● Engine and vehicle monitoring under normal operation, for the purpose of diagnosis or tuning
● Auto insurance risk selection. Auto insurance companies offer reduced premiums if OBD-II vehicle data loggers or cameras are installed, and if the driver's behaviour meets requirements

Fleet management and remote real-time diagnostics
● Monitoring of driver behaviour by fleet vehicle operators
● Real-time vehicle fault alarm and alert
● Enhanced automatic vehicle maintenance

Auto Service   **Car Racing**   **Rental & Insurance**   **Fleet Management**

SAE J1939 Applications (Support by project basis)

SAE J1939 has been adopted widely by diesel engines. Applications of J1939 now include off-highway, truck, bus, and even some passenger car applications, All J1939 packets contain eight bytes of data and a standard header which contains an index called PGN (Parameter Group Number). J1939 defines standard PGNs to encompass a wide range of automotive, agricultural, construction, marine and off-road vehicle purposes. IEIMobile supports J1939 on a by project basis.

Off-Road   **Marine**   **Construction**   **Bus & Truck**   **Diesel Engine**   **Agricultural**

IEIMobile In-Vehicle Computing Devices Provide Full OBD-II Support

Bundled OBD-II Connector or Cable

Complete Software Development Kits (SDK)
● Software Library provides easy-to-use Application Programming Interfaces (API's) for application software programming
● Demo source code for reference
● Support SAE J1979 standard to access OBD-II data and code
●Complete user manual for programming

Pre-installed firmware supports all the most popular in-vehicle bus standards and protocols
● The protocol firmware automatically scans the vehicle bus to check and confirm what protocol its connected vehicle supports
● The protocol firmware acts as a converter between vehicle bus and user application software
● User application software sends requests to the protocol firmware to access vehicle bus data

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IEIMobile Solutions

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1-65   **MODAT-335A-2013-V10**
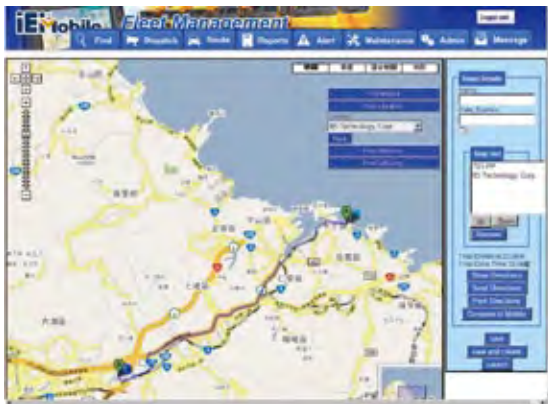
Fleet Management System (FMS)

Fleet management can include a range of functions, such as vehicle financing, vehicle maintenance, vehicle telematics (tracking and diagnostics), driver management, fuel management and health & safety management. It can remove or minimize the risks associated with vehicle investment, improving efficiency, productivity and reducing their overall transportation costs. A main function of the fleet management software is to gather, store, process, monitor, report on and export information. The most basic function in all fleet management systems is the vehicle tracking component which is usually GPS based.
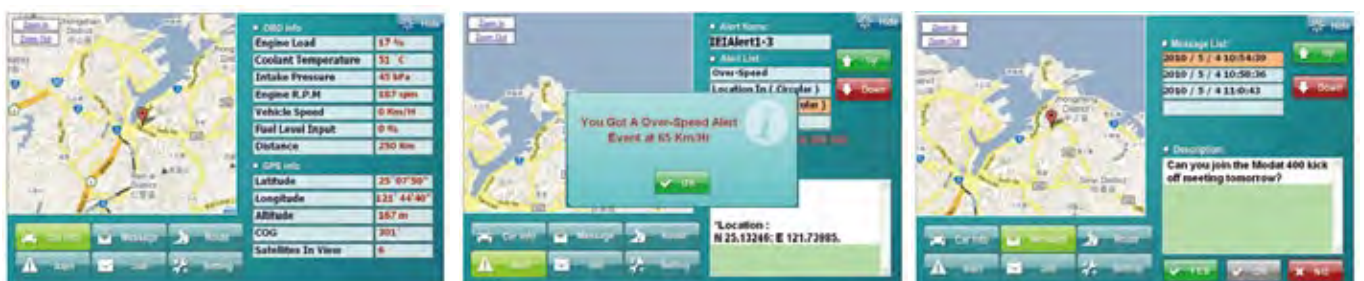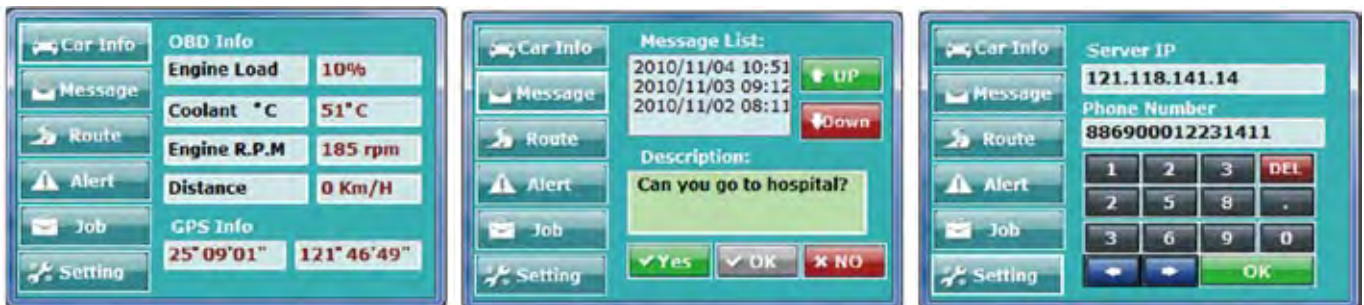
IEI FMS Architecture

IEIMobile in-vehicle computing solutions provides free fleet management software demo, the IEI FMS. This software is based on client/server architecture. The server-side software is contained in the bundled CD to be installed in Windows® desktop PC. The client-side software is pre-installed in each IEIMobile in-vehicle computing device. IEI FMS demonstrates most basic function of fleet management software such as to gather, store, process, monitor, report on and export information.

GPS Coordinates

GPRS Communication

Client-Side Software

Vehicle Data

OBD-II CAN

Store and Import

Server-Side Software

Internet Web Browser

■ **Server-side Screen Shot**

■ **Client-side Screen Shot**

Automotive PC *New*

Model	iKarPC	iKarPC-Lite	VTT-1000	VTT-1000-WiFi	AVL-2000	AVL-3000
Display LCD Size	8" TFT-LCD (Sunlight readable)	7" TFT-LCD	3.5" TFT-LCD	3.5" TFT-LCD	N/A	N/A
Brightness (cd/m²)	600 cd/m² High Brightness	500 cd/m² High Brightness	450 cd/m²	450 cd/m²	N/A	N/A
Max Resolution	800 x 480 pixels WVGA	800 x 480 pixels WVGA	320 x 240 pixels QVGA	320 x 240 pixels QVGA	N/A	N/A
Viewing Angle	60/60/50/50 Deg.	60/70/70/70 Deg.	50/55/60/60 Deg.	50/55/60/60 Deg.	N/A	N/A
Touch Screen	5-wire Resistive Type Touch	5-wire Projective Capacitive Type Touch	4-wire Resistive Type Touch	4-wire Resistive Type Touch	N/A	N/A
System CPU	Intel® Atom™ Z510 1.1GHz	TI ARM Cortex-A8 AM3715 1GHz	Samsung S3C2416 ARM9 400 MHz	Samsung S3C2416 ARM9 400 MHz	Intel® Atom™ Z510 1.1GHz	Intel® Atom™ N2600 1.6Ghz
Chipset	Intel® US15WP	N/A	N/A	N/A	Intel® US15WP	Intel® NM10
Operating System	Microsoft® Windows XP Embedded	Android 2.3.4	Microsoft® Windows CE 6.0	Microsoft® Windows CE 6.0	Microsoft® Windows XP Embedded	Windows Embedded Standard 7 E
Memory	1GB DDR2 533 MHz on board	4GB iNAND Flash and 512MB DDR SDRAM on board	128MB DDR2 133MHz on board	128MB DDR2 133MHz on board	1GB DDR2 533MHz on board	2GB DDR3 on board
Storage	4GB CompactFlash® SD Card Slot	Built-in SD Card Slot (support SD 2.0, max 32GB)	256MB NAND FLASH microSD Card Slot	256MB NAND FLASH microSD Card Slot	4GB CompactFlash® SD Card Slot	1 x Built-in 16GB SATA SSD 1 x SDXC Slot for data storage
Communication Wireless LAN	Wi-Fi 802.11 b/g/n	Wi-Fi 802.11 b/g/n	N/A	Wi-Fi 802.11 b/g	Wi-Fi 802.11 b/g/n	Wi-Fi 802.11 b/g/n
Bluetooth	Bluetooth 2.1+ EDR (Class I)	Bluetooth 2.1+ EDR (Class I)	N/A	N/A	N/A	Bluetooth V2.0+EDR (Class I)
Data Rate	WCDMA/HSUPA	WCDMA/HSDPA or GPRS	GSM/GPRS	N/A	WCDMA/HSUPA	WCDMA/HSUPA
GPS	GPS w/ Internal Antenna	GPS w/ External Antenna	GPS w/ Internal / External Antenna	GPS w/ Internal / External Antenna	GPS w/ Internal Antenna	GPS
Multimedia Audio	1 x Line-in 1 x Line-out 1 x 3W Speaker	1 x Audio out (R+L) (3-pin) 1 x Mic-in (3-pin)	1 x Line-out 1 x 1.5W Speaker	1 x Line-out 1 x 1.5W Speaker	1 x Line-in 1 x Line-out	1 x Mic-in 1 x Line-out
Data Collection RFID	N/A	13.56MHz ISO14443A/B	N/A	N/A	ISO 18000-6C UHF RFID (optional)	ISO 18000-6C UHF RFID (optional)
Video Capturing	N/A	N/A	N/A	N/A	Video Input : 4 channels composite video (NTSC/PAL/SECAM)	Video Input : 4 channels composite video (NTSC/PAL/SECAM)
Camera	0.3 Megapixels CMOS Camera	3 Megapixels CMOS Camera	N/A	N/A	N/A	N/A
LED Indicators & Buttons Indicators	Wi-Fi/Bluetooth/ HDD/3.75G/DVB-T/Power Status LED	3.5G/Wi-Fi/BT/Power Status LED	Power/GPS/2.5G Status LED	Power/GPS/2.5G Status LED	UHF/Wi-Fi/ Bluetooth/422/485/ HDD/3.75G/BAT/Power Status LED	1 x Power LED
Hot Keys & Buttons	F1~F6 Function Key, Navigation Key, Power Button	4 x Function key	7 x Programmeable Keys , Power Button, Reset Button	7 x Programmeable Keys , Power Button, Reset Button	Power Button	Power Button
I/O Interface USB	2 x USB 2.0 Full Speed	2 x USB 2.0 Full Speed	1 x Mini USB 1.1	1 x Mini USB 1.1	2 x USB 2.0 Full Speed	4 x USB 2.0
Serial	1 x DB-9 OBD-II 1 x DB-9 RS-232/422/485 (Software selectable w/ 5V DC) 5V DC	1 x OBD-II (7-pin) 1 x USB (4-pin) 1 x RS-232 (9-pin)	1 x OBD-II 1 x RS-232	1 x OBD-II 1 x RS-232	1 x DB-9 OBD-II 1 x DB-9 RS-232/422/485	1 x OBD-II 6 x COM port: DB-9 (COM1), RS-422/485 (COM4, 4-pin), DB-37 (COM7~COM10)
LAN	1 x 10/100/1000 Mbps GbE RJ-45	1 x 10/100/1000 Mbps GbE (4-pin)	N/A	N/A	1 x 10/100/1000 Mbps GbE RJ-45	1 x 10/100/1000 Mbps GbE RJ-45
VGA	N/A	N/A	N/A	N/A	1 x VGA	1 x VGA supports up to 1920x1200
CAN	N/A	1 x CAN-bus 2.0B (2-pin)	N/A	1 x CAN-bus 2.0B	1 x CAN-bus	N/A
Remote Control	Yes	N/A	N/A	N/A	N/A	N/A
Digital I/O	N/A	2 Input (3-pin) / 2 Output (3-pin)	2 Input / 2 Output	2 Input / 2 Output	4 Input / 4 Output	4 Input / 4 Output
RJ-12	N/A	N/A	N/A	N/A	N/A	1 X RJ11 3.5G Voice
HDMI	N/A	N/A	N/A	N/A	N/A	1 x HDMI
Power Cigarette Lighter Power	Cigarette Lighter Power Cable DC 9~30V	Cigarette Lighter Power Cable DC 9~36V	Cigarette Lighter Power Cable DC 9~30V	Cigarette Lighter Power Cable DC 9~30V	Cigarette Lighter Power Cable DC 9~30V	Cigarette Lighter Power Cable
ACC Power	ACC power on/off mode with software configurable delay time	ACC power on/off mode with software configurable delay time	N/A	N/A	ACC power on/off mode with software configurable delay time	ACC power on/off mode with software configurable delay time
Environment Operating Temperature	-20˚C to +60˚C	-20˚C to +60˚C	-20˚C to +70˚C	-20˚C to +70˚C	-20˚C to +70˚C	-20˚C to +70˚C
Storage Temperature	-30˚C to +70˚C	-30˚C to +70˚C	-30˚C to +80˚C	-30˚C to +80˚C	-30˚C to +80˚C	-30˚C to +80˚C
Humidity	5%~95% non-condensing	5%~95% non-condensing	5%~95% non-condensing	5%~95% non-condensing	5%~95% non-condensing	5%~95% non-condensing
Drop Survival	1M	1M	1M	1M	N/A	N/A
Environmental Protection	IP 54 compliant front panel (Water,dust and splash resistant)	IP 54 compliant front panel (Water, dust and splash resistant)	IP 54 compliant front panel (Water,dust and splash resistant)	IP 54 compliant front panel (Water,dust and splash resistant)	N/A	N/A
Certifications	CE/FCC/e-MARK/ ISO7637	CE/FCC/e-MARK/ ISO7637	CE/FCC/e-MARK/ ISO7637	CE/FCC/e-MARK/ ISO7637	CE/FCC/e-MARK/ ISO7637	CE/FCC/e-MARK/ISO7637
Physical Characteristics Dimensions (LxWxH) (mm)	261 x 162 x 44	210 x 154 x 28	128 x 89 x 32	128 x 89 x 32	200 x 155 x 70	200 x 150 x 76
Net Weight	1.7kg	0.8kg	0.17kg	0.17kg	1.9kg	2.0kg

1
IEIMobile Solutions

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Automation Panel Solutions

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RISC- based Solutions
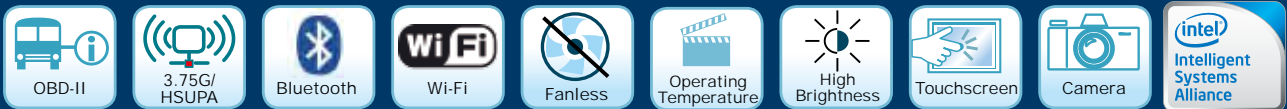
4
PACSmate Medical Solutions

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Optional Peripherals

iKarPC

Vehicle Computer Series

- 8" TFT sunlight readable LCD touch screen
- Intel® Atom™ Z510 1.1 GHz processor
- Pre-installed Windows® XP Embedded
- Built-in HSUPA/GPRS/GSM, Wi-Fi and Bluetooth
- Built-in 32-channel GPS Receiver
- Supports On-Board Diagnostics (OBD)

BC AWARD COMPUTEX TAIPEI 2011 **BEST CHOICE**

OBD-II	3.75G/HSUPA	Bluetooth	Wi-Fi	Fanless	Operating Temperature	High Brightness	Touchscreen	Camera	intel Intelligent Systems Alliance

Diverse Connectivity

WWAN 2.5G/3.5G/3.75G

- Efficient mobile connectivity for GPS map download and high quality video/audio stream.
- Supports WCDMA/CDMA2000/TD-SCDMA

Supported Bands

- HSUPA/HSPA/UMTS-800/850/900/1900/2100 MHz
- Quad-band EDGE/GPRS/GSM-850/900/1800/1900 MHz
- Dual-band EV-DO/CDMA

GPS

Travel navigation, real-time locating and path tracking.

- 32-channel engine
- TTFF (Time to First Fix) < 1 sec for hot and aided starts
- -160dBm SuperSense sensitivity
- A-GPS service by accessing to assistance ephemeris data server via internet or mobile connectivity

Bluetooth V2.0 + EDR Class 1

Efficient mobile connectivity for GPS map download and high quality video/audio stream.

802.11b/g/n Wi-Fi

Best for near field data synchronization or ad-hoc communication when vehicle park in parking space or dock.

SD Card Slot

Power On/Off

MIC

0.3 Megapixels Webcam

MIC

Connectivity LED Indicators

Ambient Light Sensor

Smart Card Reader

VESA 100 Mount

8" WVGA High Brightness, Sunlight Readable, Wide Temperature Touch- screen with Auto Dimming

Line-in/Line-out

LCD On/Off & Brightness

Volume Control

Navigation & Programmable Keys

USB Host

Removable Rear Cover

RS-232/422/485

USB

OBD-II

ACC/DC Switch

9V~30V DC Input

GbE

GPRS/HSUPA Antenna

GPS Antenna

Power On/Off

Tab key

Enter

Function Keys

Auto-Dimming

Navigation Keys

LCD On/Off

Brightness

System Button
LED Brightness
Volume

Infrared Remote Control

Vehicle Power Management

GND

VCC

ACC

Ignition Signal

3.3 V Power

MCU

3.3 V/5V Standby Power

Shutdown flag
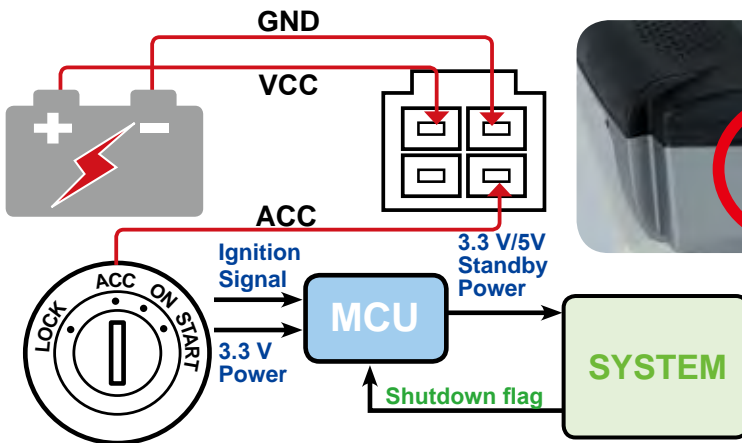
SYSTEM
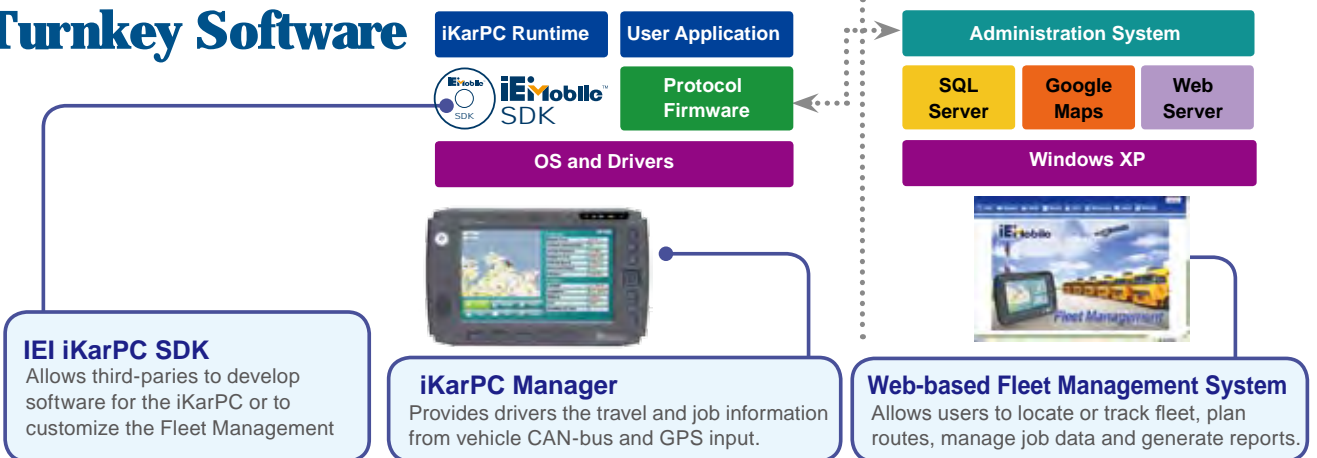
- The special MCU enables system to automatically reboot or shutdown based on the adjustable delay time by detecting ACC status.

- Surge protection and low power consumption hardware design

Turnkey Software

iKarPC Runtime	User Application

IEIMobile SDK **SDK**

Protocol Firmware

OS and Drivers

Administration System

SQL Server	Google Maps	Web Server

Windows XP

IEI iKarPC SDK
Allows third-paries to develop software for the iKarPC or to customize the Fleet Management

iKarPC Manager
Provides drivers the travel and job information from vehicle CAN-bus and GPS input.

Web-based Fleet Management System
Allows users to locate or track fleet, plan routes, manage job data and generate reports.

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Optional Peripherals

1-69

iKarPC-2013-V10

Setting
Use the Setting page to adjust the setting of audio volume, LCD brightness, power on/off delay time, embedded module and function keys.
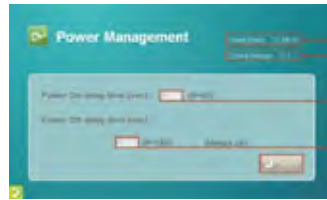
Power Management
When the vehicle ignition switch is turned to ACC or ON state, the iKarPC will automatically turn on off after a certain time delay.

Module On/Off
Use the Module On/Off page to enable or disable the embedded modules, including Bluetooth, Wi-Fi, DVB-T, 3.75G connection and webcam.

Programmable Function Key
The iKarPC provides SDK for customers to define and program their own Function Keys.

Fleet Management Software

The Fleet Management is an advanced, end-to-end, web-based software for data collection and communication. It combines all the information from CAN-bus and GPS input in one easy-to-navigate interface. Pre-installed in the iKarPC, it is integrated with OBD-II diagnose tool to provide a comprehensive remote performance monitoring envelope for vehicles.
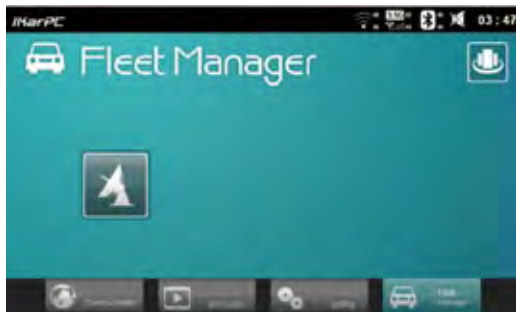
Car Information
Show the vehicle information gathered through the OBD cable to the iKarPC and display the GPS information.
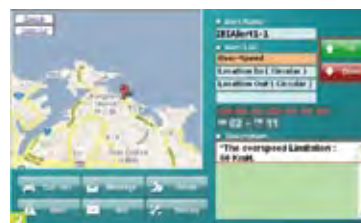
Alert
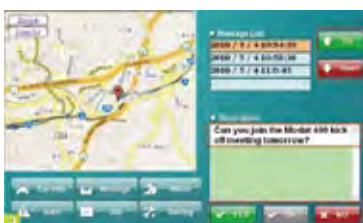Click the Alert button to view the alerts from the management center.

Route
View the route plan from the back-end management center.
Click the Map button to bring up the map of the route plan.
.

Job
Click the Job button to view the Job assignment from the management center.

Message
Show the messages from the back-end management center.
Use up and down buttons or click a message from the message list to view the message.

Setting
Use the Setting page to input the server IP address of the back-end management center to the iKarPC. The unique number of SIM card is used as the identification number of the iKarPC.

One Key Recovery

Without having to go through complicated settings, IEI One Key Recovery uses exclusive technology to recover and backup your system with just one click.

Recover the system from
● Severe virus attack
● Operating system crash
● Man-made disasters

One Key Recovery

IEI Recovery Kit

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Vehicle Bus Protocol (OBD-II)

A vehicle bus protocol is a specialized internal communications network that interconnects components inside a vehicle. It also provides interface for users to acquire vehicle data for diagnostic or cruise information such as vehicle speed, engine loading, engine R.P.M and fuel level. OBD-II supports more than 79 kinds of vehicle information.

J1962 Interface

OBD-II Cable

Vehicle Speed
Engine Loading
Engine R.P.M
Fuel Level :
More than 79 items!

Physical Connection Interface

The vehicle bus connection is mostly based on CAN-bus 2.0b signaling via a specific connection interface. For example, OBD-II defines the J1962 female 16-pin (2x8) connector as its physical interface while J1939 defines the 9-pin round connector.
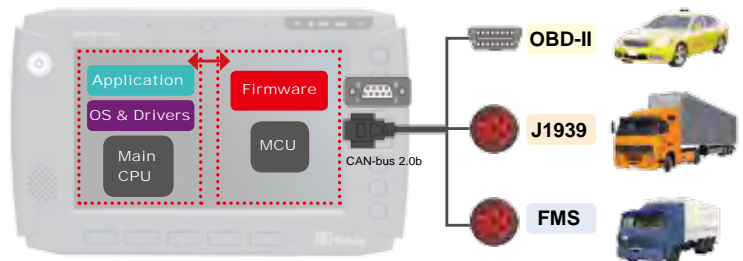
On-Board Diagnostics (OBD-II)

OBD-II is a standard that specifies the type of diagnostic connector and its pin-out, the electrical signaling protocols available, and the messaging format. There are five signalling protocols currently in use with the OBD-II interface. Any given vehicle will likely only implement one of the protocols. The iKarPC supports ISO 15765 CAN (250 kBit/s or 500 kBit/s). The CAN protocol is a popular standard outside of the US automotive industry and is making significant in-roads into the OBD-II market share. By 2008, all vehicles sold in the US are required to implement CAN, thus eliminating the ambiguity of the existing five signaling protocols. The CAN signals are via pin-6 and pin-14 of the OBD-II connector.

Pin	Description
1	-
2	Bus positive Line of SAE-J1850 PWM and SAE-1850 VPW
3	-
4	-
5	-
6	CAN high (ISO 15765-4 and SAE-J2284)
7	K line of ISO 9141-2 and ISO 14230-4
8	-
9	-
10	Bus negative Line of SAE-J1850 PWM only (not SAE-1850 VPW)
11	-
12	-
13	-
14	CAN low (ISO 15765-4 and SAE-J2284)
15	L line of ISO 9141-2 and ISO 14230-4
16	-

OBD-II/J1939/FMS Vehicle Bus Protocol

The vehicle bus protocol deals with special request for data transmission reliability and quality on vehicle bus. The MCU inside the iKarPC acts as a converter among these protocols. The OBD-II is mostly for small car diagnostics while the SAE J1939 is implemented for off-road vehicles with diesel engines and the FMS is for commercial trucks or buses. As a standard offering, IEIMobile supports OBD-II protocol. Other protocols such as FMS and J1939 are supported on a optional by project basis.

SAE J1939 (Spport by project basis)

- SAE J1939 has been adopted widely by diesel engines. Applications of J1939 now include off-highway, truck, bus, and even some passenger car applications.
- SAE J1939 defines five layers in the 7-layer OSI network model, and this includes the CAN 2.0b specification (using only the 29-bit/"extended" identifier) for the physical and data-link layers. The session and presentation layers are not part of the specification.
- All J1939 packets contain eight bytes of data and a standard header which contains an index called PGN (Parameter Group Number). J1939 defines standard PGNs to encompass a wide range of automotive, agricultural, construction, marine and off-road vehicle purposes.

A GND
B Power
C CAN-H
D CAN-L

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Optional Peripherals

Applications

IPCAM Applications

IP camera is a type of digital video camera commonly employed for surveillance. Unlike analog closed-circuit television (CCTV) cameras, it can send and receive data via a computer network and the Internet.

Internet

iKarPC can monitor and record vehicle status through IPCAM.

OBD-II Applications

Auto Service

Car Racing

Rental & Insurance

Fleet Management

SAE J1939 Applications (Support by Project)

Off-Road

Marine

Construction

Bus & Truck

**Diesel Engine**

Agricultural

Certification

Vibration Test
Follow MIL-STD-810F 514.5C-1

	Operating Random Vibration Mode	Non-Operating Sine Mode
Rules	(MIL-STD-810F 514.5C-1)	IEC-60068-2-06
	Axis: 3 axes / Vertical / Transverse / Longitudinal. 10-500 Hz, 60min/axis	Axis: 3 axes / Vertical / Transverse / Longitudinal .2. 0.4in. p-p, 10-55Hz

Shock Test
Reference IEC68-2-27 Testing Procedures

	Operating	Non-Operating
Rules	Operating Shock Half-Sine Wave Shock	Non-Operating Shock Half-Sine Wave Shock
	Acceleration 5 G	Acceleration 15 G
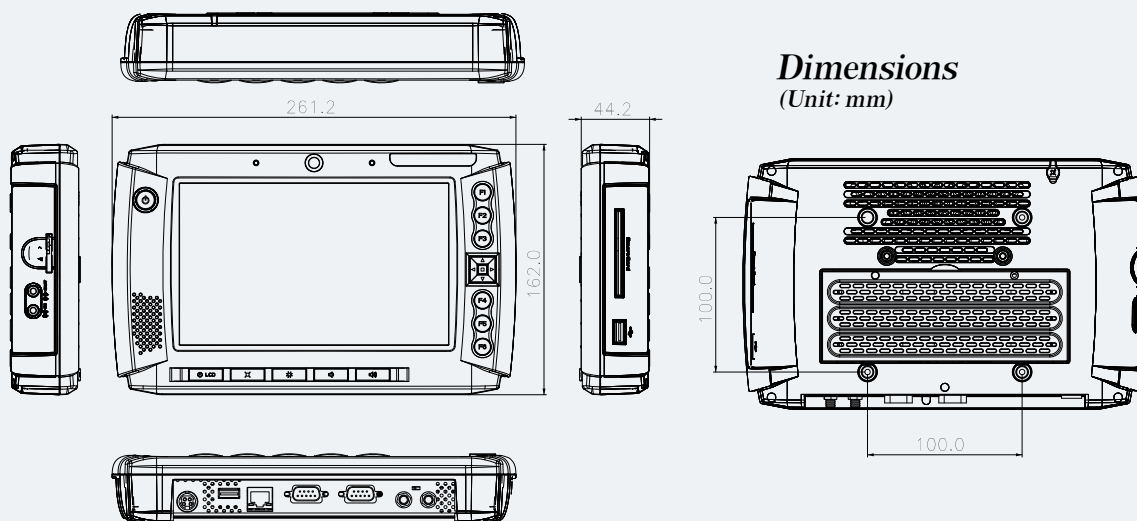
Dimensions
(Unit: mm)

261.2

44.2

162.0

100.0

100.0

Specifications

Model	iKarPC	
Display	LCD Size	8" TFT-LCD (Sunlight readable)
	Brightness (cd/m²)	600 cd/m² High Brightness
	Max Resolution	800 x 480 pixels WVGA
	Viewing Angle	60/60/50/50 Deg.
	Touch Screen	5-wire resistive type touch
System	CPU	Intel® Atom™ Z510 1.1 GHz
	Chipset	Intel® US15WP
	Operating System	Microsoft® Windows® XP Embedded
	Memory	1 GB DDR2 533 MHz On-board
	Storage	4 GB CompactFlash® SD Card Slot
Communication	Wireless LAN	Wi-Fi 802.11 b/g/n
	Bluetooth	Bluetooth V2.0+ EDR (Class 1)
	Modem	WCDMA/HSUPA
	GPS	GPS
Multimedia	Audio	1 x Line-in 1 x Line-out 1 x 3 W Speaker
	Camera	0.3 megapixels CMOS Camera
LED Indicators & Buttons	Indicators	Wi-Fi/Bluetooth/HDD/3.75G/DVB-T/Power Status LED
	Hot Key & Buttons	F1~F6 Function Key, Direction Key, Power Button
I/O Interface	USB	2 x USB 2.0
	Serial	1 x DB-9 OBD-II 1 x DB-9 RS-232/422/485 (Software selectable w/ 5V DC)
	LAN	1 x 10/100/1000 Mbps GbE RJ-45
Power	Cigarette Lighter Power	Cigarette Lighter Power Cable DC 9~30V
	ACC Power	Manual power mode and ignition detection supported ACC power on/off mode with software configurable delay time
Environment	Operating Temperature	-20˚C ~ +60˚C
	Storage Temperature	-30˚C ~ +70˚C
	Humidity	5%~95% non-condensing
	Drop Survival	1 M
	Environmental Protection	IP54 compliant front panel (Water, dust and splash resistant)
	Certification	CE/FCC/e-Mark/ISO7637
Physical Characteristics	Dimensions (LxWxH) (mm)	261 x 162 x 44
	Net Weight	1.7kg

Ordering Information

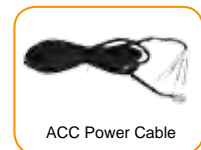| Part Number	Description
IKARPC-W08A-510-HU-R12	8.0" TFT-LCD 600 cd/m² WVGA In Vehicle PC with Intel® Atom™ Z510 1.1GHz CPU, 1GB SDRAM, 802.11 b/g/n Wireless, Bluetooth, HSUPA, OBD-II, Touch screen, 0.3 Megapixel Camera, XPE OS, 4GB CF, RoHS
IKARPC-W08A-510-HW-R12	8.0" TFT-LCD 600 cd/m² WVGA In Vehicle PC with Intel® Atom™ Z510 1.1GHz CPU, 1GB SDRAM, 802.11 b/g/n Wireless, Bluetooth, HUAWEI HSUPA, OBD-II, Touch screen, 0.3 Megapixel Camera, XPE OS, 4GB CF, RoHS

Packing List

Item	Part Number	Q'ty
Remote Controller	7Z000-8T00322ICP06G-RS	1
GPS/3.75G Integrate Antenna	32506-000100-100-RS	1
ACC Power Cable	32002-001900-100-RS	1
Cigarette Lighter Power Cable	32002-004000-100-RS	1
OBD-II Cable	32025-000300-100-RS	1
J1939 Cable	32025-000400-100-RS	1
Uesr's Manual CD-ROM	IEI-7B000-000544-RS	1
IEI One Key Recovery CD	IEI-7B000-000478-RS	1
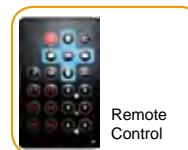
Remote Control

OBD-II Cable

ACC Power Cable

GPS / 3.75G Integrate Antenna
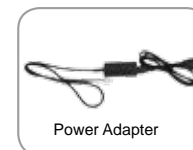
Cigarette Lighter Power Cable

J1939 Cable

Optional Accessory List

Item	Part Number	Description
Power Adapter	IVIPOWER-4PIN-R10	Power Adapter, PFC; Vin:90~264VAC; 60W; Vout: 12VDC; Din 4Pin/lock; CCL; RoHS
Bracket	iKarPC-W08A-MK01-R10	iKarPC 100 x 100 VESA mount kit
Bracket	iKarPC-W08A-MK02-R10	iKarPC ram-mount 100 x 100 VESA mount kit

Ram Mount

Power Adapter

Bracket

Support Function

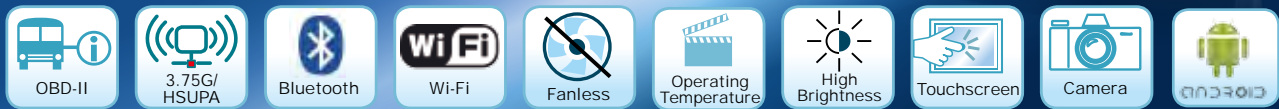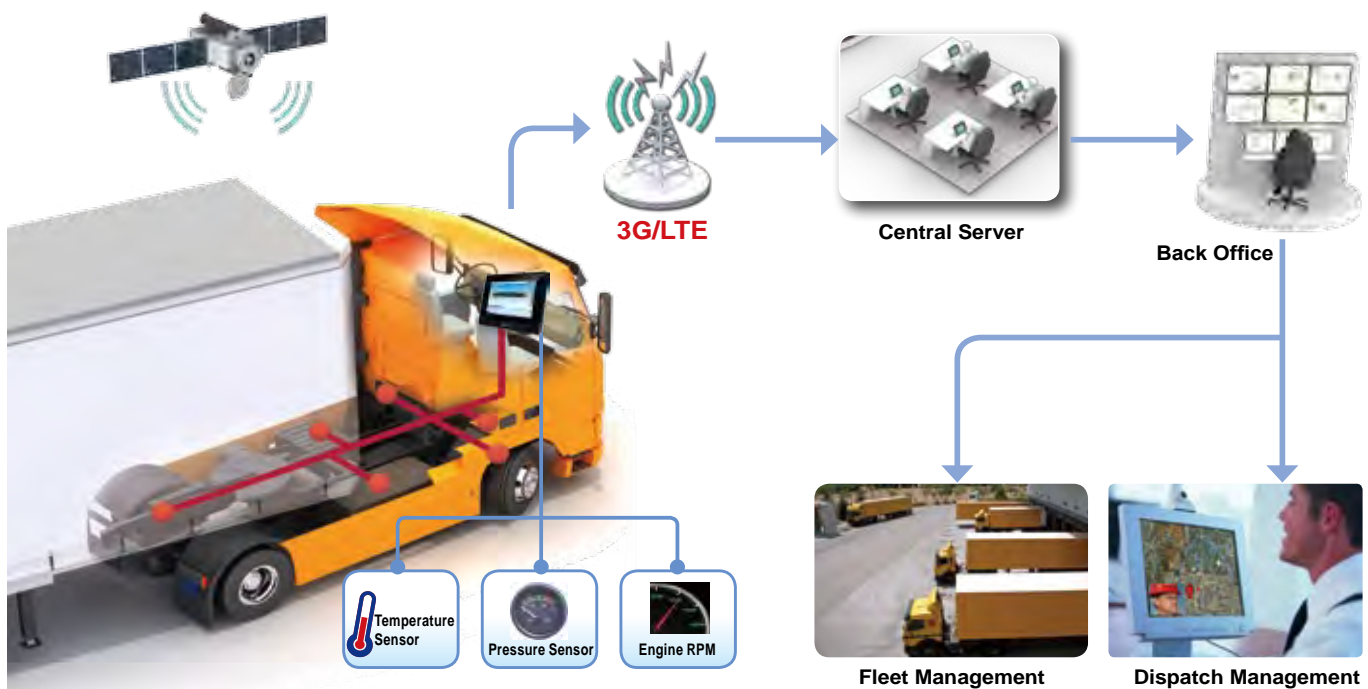| Part Number	Wireless	Bluetooth	GPS	3.75G	OS
iKarPC-W08A-510-HU-R12	802.11 b/g/n	V2.0+EDR, Class 1	U-blox	Qualcomm	XPE
iKarPC-W08A-510-HW-R12	802.11 b/g/n	V2.0+EDR, Class 1	U-blox	HUAWEI	XPE

iKarPC Lite *New*

Vehicle Computer Series

- 7" TFT sunlight readable TFT LCD with projective capacitive touchscreen
- TI ARM Cortex-A8 AM3715 1GHz
- Pre-installed Android 2.3.4 Operating System
- Built-in HSUPA/GPRS/GSM, Wi-Fi and Bluetooth
- Built-in GPS receiver
- Supports On-Board Diagnostics: one CAN 2.0B or OBD-II
- On-board RFID with antenna

OBD-II	3.75G/ HSUPA	Bluetooth	Wi-Fi	Fanless	Operating Temperature	High Brightness	Touchscreen	Camera	android

Applications

IEIMobile's new Android rugged infotainment car PC is pointing to dramatic changes in the field use of mobile devices thanks to the superior touch screen performance and integrated functionality.

3G/LTE   Central Server

Back Office

Temperature Sensor   Pressure Sensor   Engine RPM

Fleet Management   Dispatch Management

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Optional Peripherals

Power Saving and Trendy Platform

TI Cortex-A8 CPU

■ TI's Sitara™ family of highly-integrated ARM9™ and ARM Cortex™-A8 microprocessor portfolio offers various combinations of high-performance and low power levels, providing the ability to create an array of products using a common hardware and software platform.

■ Reduce system risks and accelerate time to market using standard and comprehensive ARM-based software development tools.

■ TI is the largest ARM core licensee supporting all major high-level operating systems such as Android and Windows CE.

Sitara™ offers

Performance
● Up to 450MHz ARM9 to 1.5GHz Cortex-A8 devices
● Industry's first widely available Cortex-A8 devices - 2DMIPS per MHz
● Graphics acceleration up to 27M polygons/s performance for advanced user interface
● High speed DDR2 and DDR3 memory performance

Connectivity
● 10/100/1000 Mbps Ethernet
● CAN 2.0 and high speed USB interface
● Multiple serial port options per device
● **Cost effective** processor with SATA interface
● Flexible LCD controller for up to 720p displays and moving to 1080p in future devices
● Industrial peripheral support

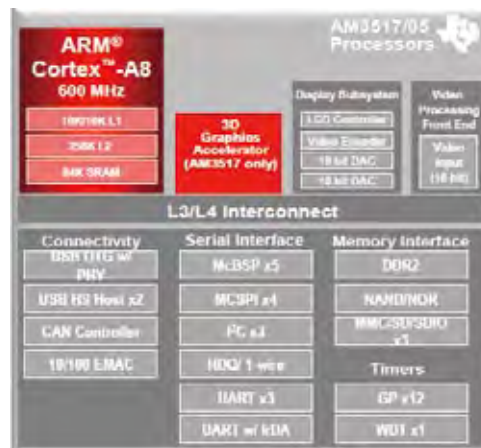### AM3517/05 Cortex™-A8 based processors

Benefits
■ Support OS such as Linux, Win CE, RTOS
■ 10M polygons/second for robust GUIs
■ Multi windows overlay for hardware accelerated user

**Power**
■ Total Power: L700mW
■ Standby Power: 12mW

Suggested Applications
■ Industrial/Home automation
■ Point of service

Android 2.3.4 Operating System

■ Android is an operating system for mobile devices such as smartphones and tablet computers. It is developed by the Open Handset Alliance led by Google.

■ Android was listed as the best-selling smartphone platform worldwide in Q4 2010 by Canalys with over 200 million Android devices in use by November 2011.

■ 2.3 Gingerbread refined the user interface, improved the soft keyboard and copy/paste features, improved gaming performance, added SIP support (VoIP calls), and added support for Near Field Communication.
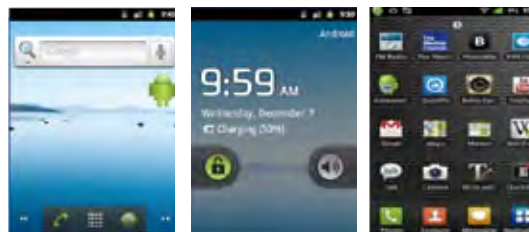
Seamless Wireless Communication

The iKarPC-Lite excels on the wireless side. There's 802.11b/g/n WiFi, Bluetooth version 2.1, a vehicle-specific GPS receiver could provide drivers communications capabilities and precisely positioning.

Local-Area Communication

Compliant with the 802.11 b/g/n. This feature allows fast data transfer for near field or ad-hoc data communication.

Wi-Fi

Peripheral Communication

Compliant with the Bluetooth 2.1+EDR specification. This feature ensures easy and quick access to nearby peripherals.

Bluetooth

Wide-Area Mobile Communication

With up to 3.5G wireless technology, outfield workers can maintain and share constant contact with the back office.

3.5G/HSUPA

Vehicle-specific GPS receiver: Ublox LEA 6 series

High sensitivity, multi GNSS1)receivers with low power consumption

■ Standalone GNSS: no host integration required

■ Highest accuracy in urban areas

■ Jamming detection and elimination

■ Meets demanding automotive requirements

Parameter	Specification	
Receiver type	50 chaneels GPS L1 frequency, C/A code GALILEO Open Service Capable GLONASS FDMA SBAS: WAAS, EGNOS, MSAS	
Tim-To-First-Fix	Cold Start (W/o Aiding) Warm start(W/o Aiding) Hot Start(W/o Aiding) Aided Start	26s 26s 1s 1s
Sensitivity	Tracking & Navigation Reacquisition Cold Start(W/o Aiding)	-162 dBm -160 dBm -148 dBm

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GNSS New Topic - eCall and ERA-Glonass Systems

Emergency response systems for road accidents in EU and Russia
- Emergency call generated following an accident using GSM service
- In-vehicle emergency system (IVS) creates emergency call (voice and data like position and car info) to the nearest Public Safety Answering Point (PSAP)
- Fundamentals of the two systems are the same
- Main differences are:
  - Positioning technology (GPS or Glonass)
  - SMS allowed as backup in ERA-Glonass system
- Both systems use 3GPP specified In-Band modem technology to send data and voice on the same channel
- Expected rollout
  - eCall: 2014
  - ERA-Glonass2013

I/O Expansions
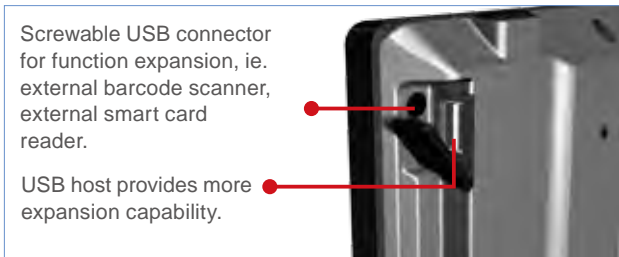
Screwable USB connector for function expansion, ie. external barcode scanner, external smart card reader.

USB host provides more expansion capability.

Integrated connectors

- 2 x D/I (3-pin)
- 2 x D/O (3-pin)
- 1 x OBD-II (7-pin)
- 2 x CAN2.0B (2-pin)
- USB (4-pin)
- CTS CSI-3584-2010

- Video in x1 (2-pin)
- Ethernet x1 (4-pin)
- RS-232 x1 (9-pin)
- Audio out (R+L) x1 (3-pin)
- Mic in x1 (3-pin)

- SD card slot for extra storage expansion
- SIM card -> easy installation

Ultimate Form Factor- Meet Vehicle Standard

Operating Temperature -20°C~60°C

Operating Temperature -20°C ~ 60°C
The system can operate in a wide range of temperatures

Storage Temperature -30°C~70°C

Storage Temperature -30°C ~ 70°C
The system can be stored in a wide range of temperatures

IP 54

IP 54 Rating
Dust tight and protected against water splashed against the component from any direction

Vehicle Power Management

GND

VCC

ACC

Ignition Signal

3.3 V/5V Standby Power

4-pin power connector

3.3 V Power

MCU

SYSTEM

Shutdown flag

- The special MCU enables system to automatically reboot or shutdown based on the adjustable delay time by detecting ACC status.

- Surge protection and low power consumption hardware design

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3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Specifications

Model		iKarPC-Lite
Display	LCD Size	7" TFT LCD with LED backlight
	Brightness (cd/m²)	500 cd/m² high brightness
	Max Resolution	800 x 480 pixels WVGA
	Viewing Angle	60/70/70/70
	Touch Screen	5-wire projective capacitive type
System	CPU	TI ARM Cortex A8 AM3715 1GHz
	Operating System	Android 2.3.4
	Memory	4GB iNAND flash and 512 MB DDR SDRAM on board
	Storage	Built-in SD card slot (supports SD 2.0, max. 32GB)
Communication	Wireless LAN	Wi-Fi 802.11 b/g/n
	Bluetooth	Bluetooth® 2.1+ EDR (Class I)
	Data Rate	WCDMA/HSDPA or GPRS
	GPS	GPS w/ external antenna
Multimedia	Audio	1 x Audio out (R+L) (3-pin) 1 x Mic-in (3-pin)
Data Collection	RFID	13.56MHz ISO14443 A/B Read-Write Capable ISO14443A (Mifare) ISO14443B (Felica)
	Camera	2 Megapixels CMOS Camera

LED Indicators & Buttons	Indicators	3.5G/Wi-Fi/BT/Power status LED
	Hot Keys & Buttons	4 x Function keys
I/O Interface	USB	2 x USB 2.0 Full Speed
	Serial	1 x OBD-II (7-pin) 1 x USB (4-pin) 1 x RS-232 (9-pin)
	LAN	1 x 10/100/1000 Mbps GbE (4-pin)
	CAN	1 x CAN2.0B (2-pin)
	Digital I/O	2-bit input (3-pin), 2-bit output (3-pin)
Power	Cigarette Lighter Power	Cigarette lighter power cable DC 9~36V
	ACC Power	ACC power on/off mode with software configurable delay time
Environment	Operating Temperature	-20ºC to +60ºC
	Storage Temperature	-30ºC to +70ºC
	Humidity	5%~95%, non-condensing
	Drop Survival	1M
	Environmental Protection	IP 54 compliant front panel (water, dust and splash resistant)
	Certifications	CE/FCC/e-MARK/ISO7637
Physical Characteristics	Dimensions (LxWxH) (mm)	210 x 154 x 28
	Net Weight	0.8kg

Ordering Information

| Part Number	Description
IKARPC-07A-A8-R10	7" 500 cd/m² In-Vehicle Panel PC with TI Cortex-A8 AM3715 Processor, 1GHz , 4GB iNAND flash, 512 MB DDR SDRAM, OBD-II, HSUPA , GPS, Wi-Fi b/g/n, BT 2.1, 2 Megapixels Camera, RoHS

Dimensions *(Unit: mm)*

Packing List

Item	Part Number	Q'ty
IKARPC-Lite	IKARPC-07A-A8-R10	1
3.75G+GPS Antenna	32503-000100-100-RS	1
ACC Power Cable	32002-000901-100-RS	1
Cigarette Lighter Power Cable	32002-001700-100-RS	1

Optional Accessory List

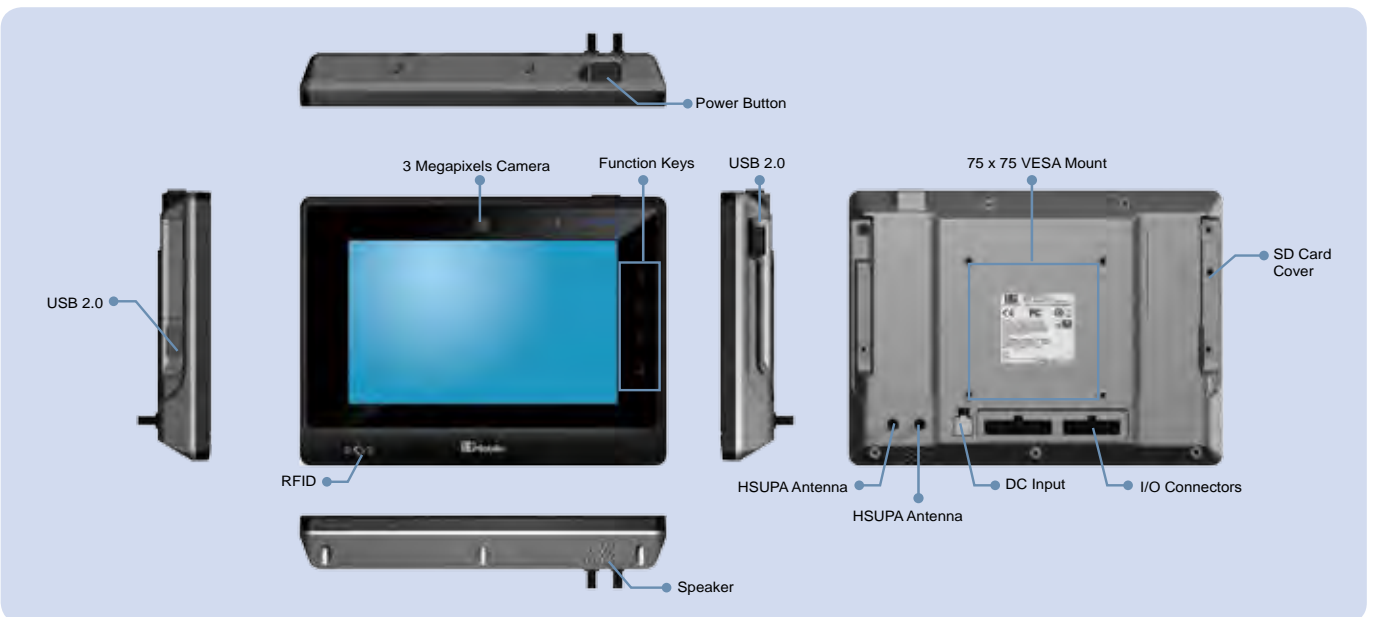| Item	Part Number	Description
Power Adapter	IVIPOWER-4PIN-R10	Power Adapter; 63000-FSP040DGAA1107-RS + Switching Cable 32002-005100-100-RS
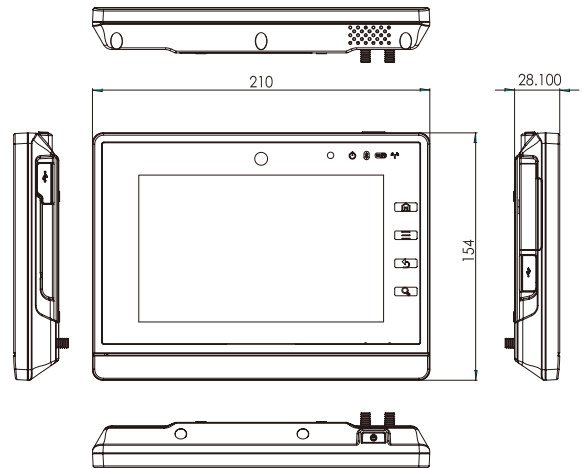
1

IEIMobile Solutions

2

Automation Panel Solutions

3

RISC-based Solutions

4

PACSmate Medical Solutions

5

Optional Peripherals

1-77   iKarPC-Lite-2013-V10

VTT-1000

Vehicle Tracking Terminal

- **3.5" TFT LCD touch screen**
- **Embedded with ARM9 400MHz CPU**
- **Pre-installed Windows® CE 6.0**
- **Built-in GSM/GPRS and antenna**
- **SiRF Star III 20-channel GPS receiver**
- **Supports On-Board Diagnostics (OBD)**

ARM

Windows CE.net

| GPRS | Touch screen | GPS | OBD-II | microSD | Fanless |

Applications
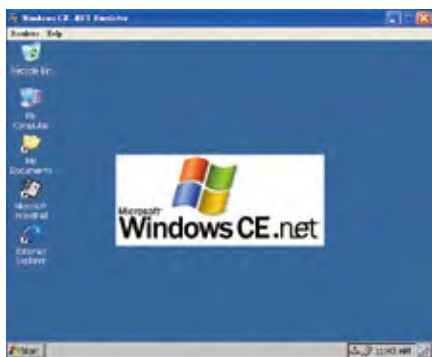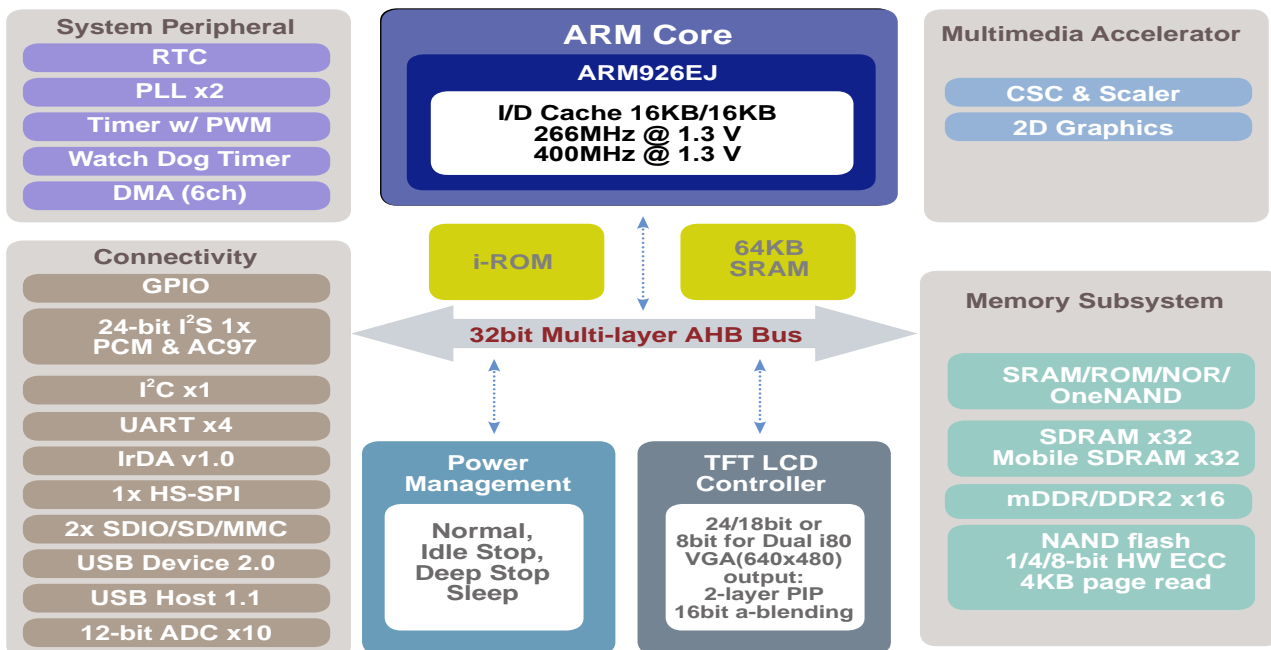
- Fleet Management System
- In-Vehicle Infotainment
- Location-Based Services
- Real-time Vehicle Diagnostic
- Emergency and Security Services

VTT-1000

Compact, Rugged, High Performance, and Low Power Consumption

■ ARM926EJ core with built-in 2D graphics accelerator

System Peripheral
RTC
PLL x2
Timer w/ PWM
Watch Dog Timer
DMA (6ch)

ARM Core
ARM926EJ
I/D Cache 16KB/16KB
266MHz @ 1.3 V
400MHz @ 1.3 V

Multimedia Accelerator
CSC & Scaler
2D Graphics

Connectivity
GPIO
24-bit I²S 1x PCM & AC97
I²C x1
UART x4
IrDA v1.0
1x HS-SPI
2x SDIO/SD/MMC
USB Device 2.0
USB Host 1.1
12-bit ADC x10

i-ROM   64KB SRAM

32bit Multi-layer AHB Bus

Power Management
Normal, Idle Stop, Deep Stop Sleep

TFT LCD Controller
24/18bit or 8bit for Dual i80 VGA(640x480) output: 2-layer PIP 16bit a-blending

Memory Subsystem
SRAM/ROM/NOR/OneNAND
SDRAM x32 Mobile SDRAM x32
mDDR/DDR2 x16
NAND flash 1/4/8-bit HW ECC 4KB page read

■ Pre-installed Windows® CE 6.0 R3

■ Waterproof Front Panel LCD Display

■ IP54 Compliant Dustproof Housing

■ -20°C ~ 70°C Wide Operating Temperature

■ Shock and Vibration Protection in Vehicle Environment

IP54   **Wide Range of Temperatures**   **Shock/Vibration Protection**

Global Positioning System (GPS) Receiver

Specifications	
Chipset	SiRF Star III, GSC3f/LPx (Digital, RF in a single package)
Frequency	L1, 1575.42 MHz
Channels	20 parallel
C/A Code	1023 MHz
Chipset TTFF	Reacquisition: Less than 1s Hot start: Less than 1s @ open sky Warm start: Less than 35s @ open sky Cold start: Less than 35s @ open sky
Accuracy	Position: Within 10m for 90% Velocity: 0.1m/s
Interface Protocol	1. NMEA 0183 ver 3.0, GGA, GSA, GSV, RMC, 4800bps 2. SiRF Protocol 57600bps, 8 data bits, no parity, 1 stop bits
LNA	15dB Gain.(Typ.) LNA only enable by LPX series
Internal Memory	Flash type on 4MB
TCXO	16.369 MHz
Trickle Power Mode	Duty cycle ≤ 34%. (Variable) Default: Disable (Option: Enable)

GSM/GPRS Telecommunication

VTT-1000 is equipped with a Cinterion (formerly Siemens) MC55i wireless module and built-in antenna for machine-to-machine (M2M) communication over GPRS. The MC55i is awarded full type approval and certified by global carriers and operators. It is optimized with quad-band technology for worldwide roaming.

- Quad-Band GSM 850/900/1800/1900 MHz
- GPRS multi-slot class 10
- GSM phase 2/2+ compliant
- TCP/IP stack access via AT commands
- Internet Services: TCP, UDP, HTTP, FTP, SMTP, POP3
- Control via AT commands
  (Hayes 3GPP TS 27.007, TS 27.005)

- SIM Application Toolkit
- Specification for GPRS data transmission:
  - GPRS class 10: max. 86 kbps (DL)
  - Mobile station class B
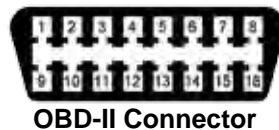 - PBCCH support
  - Coding schemes CS 1-4

In-Vehicle Communication

- Almost all of the automobiles produced today are required by law to provide an interface for connecting the diagnostic test equipment. The VTT-1000 provides a connection to vehicle On-Board Diagnostics (OBD) port (OBD-II connector) and supports the most common data transfer protocols and standards in use today.

Protocols and Standards

SAE J1850 PWM (41.6 kbaud)
SAE J1850 VPW (10.4 kbaud)
ISO 9141-2 (5 baud init)
ISO 14230-4 KWP (5 baud init)
ISO 14230-4 KWP (fast init)
ISO 15765-4 CAN (11-bit ID, 500 kbaud)
ISO 15765-4 CAN (29-bit ID, 500 kbaud)
ISO 15765-4 CAN (11-bit ID, 250 kbaud)
ISO 15765-4 CAN (29-bit ID, 250 kbaud)
SAE J1939 CAN (29-bit ID, 250* kbaud)

OBD-II Connector

VTT-1000 connector

Supported OBD-II Connector Pins

OBD-II Pin	Description
1	-
2	Bus positive line of SAE-J1850 PWM and SAE-1850 VPW
3	-
4	-
5	-
6	CAN high (ISO 15765-4 and SAE-J2284)
7	K line of ISO 9141-2 and ISO 14230-4
8	-
9	-
10	Bus negative line of SAE-J1850 PWM only (not SAE-1850 VPW)
11	-
12	-
13	-
14	CAN low (ISO 15765-4 and SAE-J2284)
15	Line of ISO 9141-2 and ISO 14230-4
16	-

- In addition to traditional applications for diagnostic trouble code readers and automotive scan tools, emerging applications such as Location-based Services (LBS) and Fleet Management System (FMS) have started to combine OBD with GPS and telecommunication technology, making remote real-time diagnostics available.

Built-in Sensors and I/O

VTT-1000 includes built-in temperature sensor, G-sensor, E-compass, and digital I/O to provide advanced vehicle monitoring and control applications. For example:

- Alarm, light and sound supplier whichautomatically checks for unusual tags.
- An automatic emergency call will be initiated when airbag deployment is detected.
- When the G-Sensor detects a sudden brake or acceleration, system begins to log critical vehicle data, navigation data, and real-time picture or video.
- Real-time navigation and position logging.

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Software Development Kits (SDK) and Built-in Software

- In addition to Windows CE SDK, the VTT-1000 SDK contains easy to use API's for application software development

  - **Detect function key status (F1 ~ F4, and Menu1 ~ Menu3) and to program user interface applications**

  - **Digital I/O offers an easy to use 4-bit digital I/O (2 inputs/2 outputs) configuration. Allows you to set digital outputs and read digital inputs**

  - **Read temperature sensor data to monitor vehicle ambient temperature**

  - **Read G-sensor data to monitor vehicle status**

  - **Read E-compass data to log or display directions**

  - **Open OBD-II port and read OBD-II PIDs (P-codes)**

  OBD-II PIDs are defined by SAE J1979. The expected response for each PID is given along with information on how to translate the response into meaningful data. Information includes:

- Vehicle speed
- Engine RPM

- Total fuel used (litre since life time)
- High resolution vehicle distance

- Engine coolant temperature
- Vehicle ambient temperature

- Tachograph information
- Total engine hours (h)

- Fuel level (0–100 %)
- Fuel pressure
- Fuel system status

- DTC (Diagnostic Trouble Code)

- Calculated engine load
- Intake air temperature
- Throttle position

- Accelerator pedal position (0–100 %)
- Axle weight (kg)
- Oxygen sensors and status

- Clutch switch (on/off)
- Brake switch (on/off)
- Cruise control (on/off)
- PTO (Status/Mode)

VTT-1000 Runtime | User Application

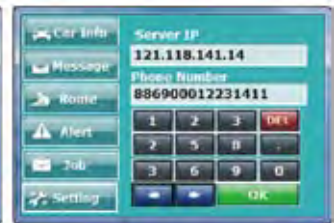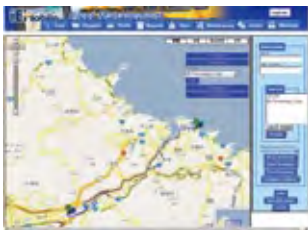iEiMobile SDK | iEiMobile® SDK | Protocol Firmware

OS and Drivers

- The VTT-1000 SDK also provides free fleet management demo software, IEI FMS. This software is based on client/server architecture. Server-side software is contained in the bundled CD and can be installed in a Windows® desktop PC. Client-side software (VTT-1000 Runtime) is pre-installed in each VTT-1000. IEI FMS demonstrates the most basic function of fleet management software with the ability to gather, store, process, monitor, report on and export information.

IEI FMS Architecture

GPS coordinates

GPRS communication

Vehicle data

OBD-II CAN

Store and Import | Internet web browser

■ Server-side Screen Shot   ■ Client-side Screen Shot

OEM Built-in Optional 3rd Party Navigation Software
(May Require MOQ and NRE Depending On Project Base)

Tailoring to your specific needs, VTT-1000 supports a diverse array of popular Navigation softwares currently on the market, such as Lingtu for China.

■ **Lingtu**   With map of China

Sidebar

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

VTT-1000 WiFi

New

Vehicle Tracking Terminal

- 3.5" TFT LCD touch screen
- Embedded with ARM9 400MHz CPU
- Pre-installed Windows® CE 6.0
- Built-in GSM/GPRS and Wi-Fi
- SiRF Star III 20-channel GPS receiver

ARM
Windows CE.net

| GPRS | Wi-Fi | Touch screen | GPS | microSD | Fanless |

Flexible Applications

The VTT-1000-wifi serves as a vehicle terminal that provides users with highly expandable options, allowing for a wide range of fleet management applications. It features a built-in Wi-Fi antenna that can access wireless network in surroundings. Vehicles with built-in wireless modems can greatly benefit from the VTT-1000-wifi.

- Fleet Management System
- In-Vehicle Infotainment
- Location-Based Services
- Emergency and Security Services

Back Office

3G Wireless Modem

VTT-1000 WiFi

External GPS Antenna

SIM Card Slot

microSD Card Slot

Programmable Function Keys

Power On/Off

Headphone

Reset Button

1.5 W Mono Speaker

Power On/Off / GPRS / GPS LED Indicators

20mm x 50mm Mount Support

Mini USB

DIO / RS-232

12 V DC Input

OBD-II

VTT-1000 Mount

Dimensions *(Unit: mm)*

128

31

88

69

33

20

50

128

1

IEIMobile Solutions

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Automation Panel Solutions

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RISC-based Solutions

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PACSmate Medical Solutions

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Optional Peripherals

1-83

VTT-1000-WIFI-2013-V10
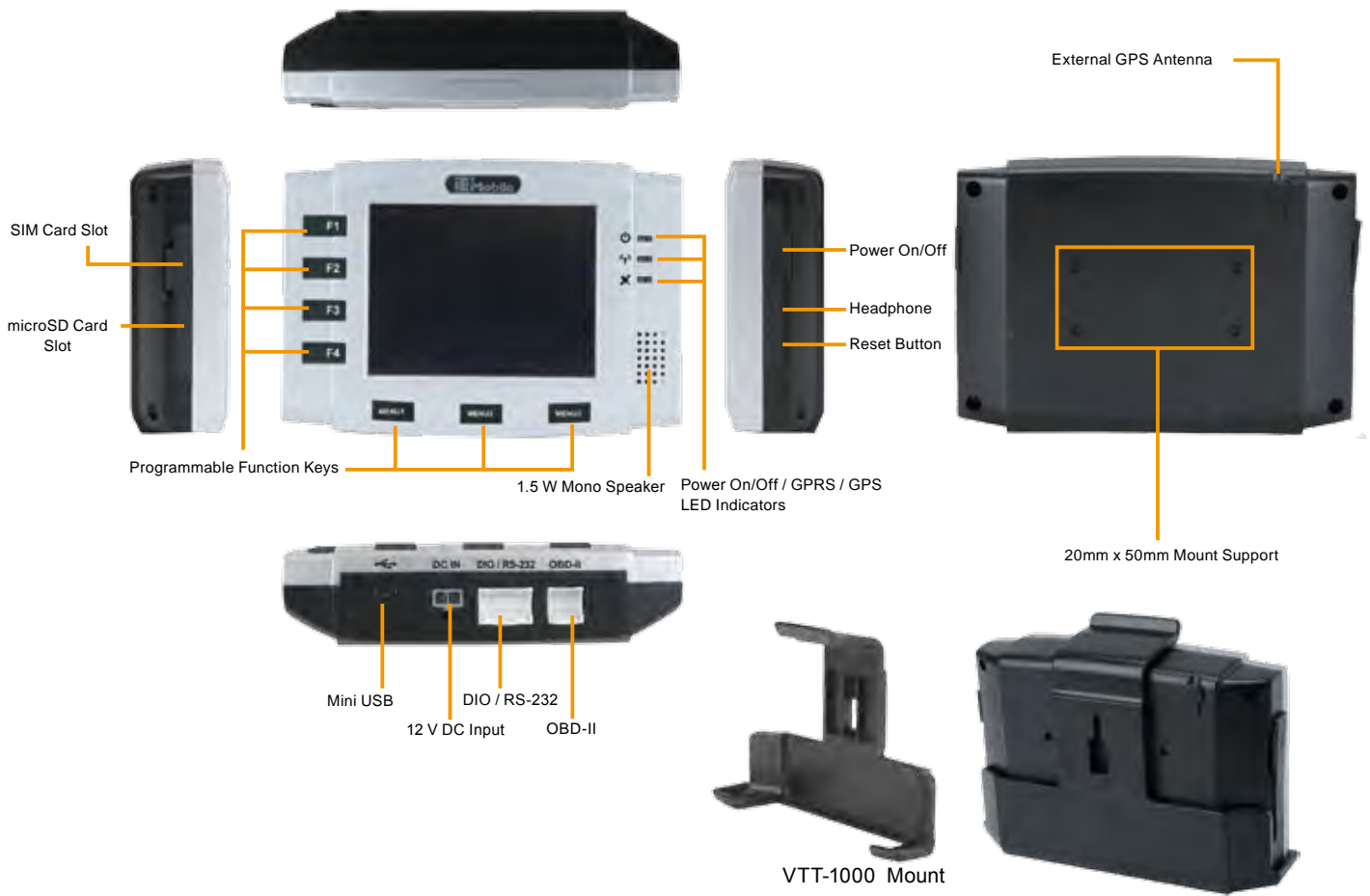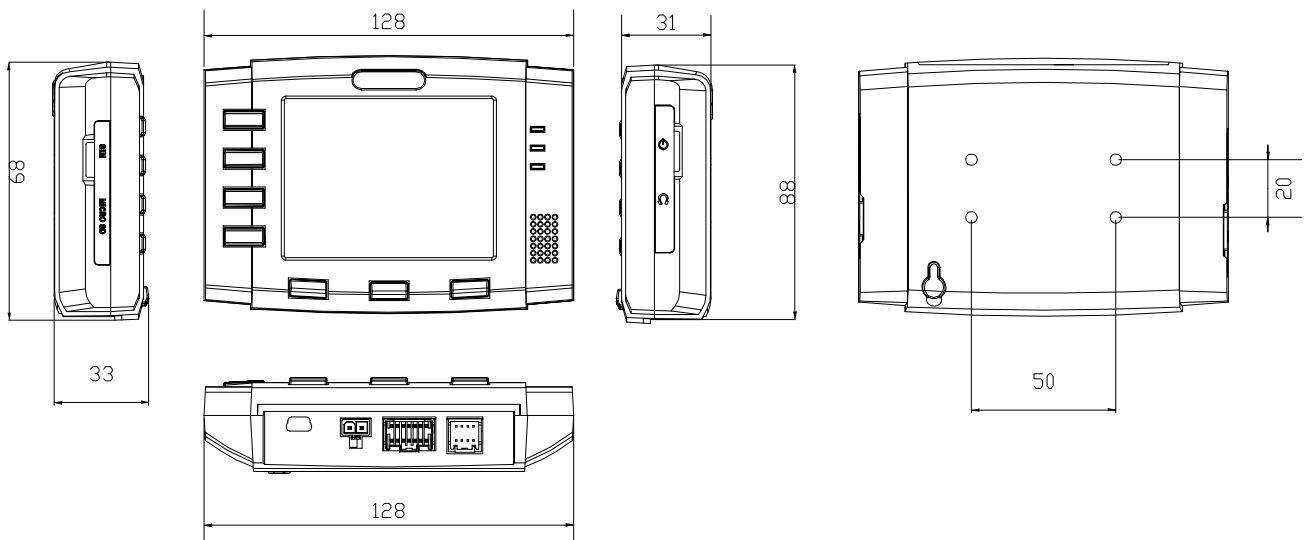
Specifications

Model		VTT-1000	VTT-1000-WiFi
Display	LCD Size	3.5" TFT-LCD	
	Brightness (cd/m²)	450 cd/m²	
	Max. Resolution	320 x 240 pixels QVGA	
	Viewing Angle	50/55/60/60 Deg.	
	Touch Screen	4-wire Resistive Type Touch	
System	CPU	Samsung S3C2416 ARM9 400 MHz	
	Operating System	Microsoft® Windows® CE 6.0	
	Memory	128MB DDR2 133MHz On-board	
	Storage	256MB NAND FLASH microSD Card Slot	
Communication	Modem	GSM/GPRS	
	GPS	GPS w/ Internal / External Antenna	
	Wi-Fi	N/A	802.11 b/g
Multimedia	Audio	1 x Line-out, 1 x 1.5W Speaker	
LED Indicators & Buttons	Indicators	Power/GPS/2.5G Status LED	
	Hot Keys	7 x Programmable Keys , Power Button, Reset Button	
I/O Interface	USB	1 x Mini USB 1.1	
	Serial	1 x DB-9 OBD-II, 1 x RS-232	1 x CAN BUS 2.0B
	Digital I/O	2-bit input, 2-bit output	
Power	Cigarette Lighter Power	DC 9-30V	
Environment	Operating Temperature	-20˚C to +70˚C	
	Storage Temperature	-30˚C to +80˚C	
	Humidity	5%~95% Non-Condensing	
	Drop Survival	1M	
	Environmental Protection	IP 54 compliant front panel (water, dust and splash resistant)	
	Certifications	CE/FCC/e-MARK/ISO7637	
Physical Characteristics	Dimensions (LxWxH) (mm)	128 x 89 x 32	
	Net Weight	0.17kg	

Ordering Information

Part Number	Description
VTT-1000-T35A/128MB-00-R10	3.5" 450cd/m² QVGA Fanless Vehicle Computer with ARM S3C2416X40-Y640 400MHz CPU, 128MB SDRAM, GSM/GPRS, OBD-II, GPS, without AC Adapter, RoHS
VTT-1000-WiFi-R10	3.5" 450cd/m² QVGA Fanless Vehicle Computer with ARM S3C2416X40-Y640 400MHz CPU, 128MB SDRAM, GSM/GPRS, Wi-Fi, CAN BUS 2.0B, GPS, without AC Adapter, RoHS

Model Variations

Part No.	WiFi	Modem	GPS	OBD-II	CAN BUS 2.0
VTT-1000-T35A/128MB-00-R10	NA	GSM/GPRS	Yes	Yes	NA
VTT-1000-WiFi-R10	Yes	GSM/GPRS	Yes	NA	Yes

Packing List

Item	Part Number	Q'ty
DIO and RS-232 Cable	32016-000300-100-RS	1
OBD-II Cable	32016-000400-100-RS	1
GPS Antenna	32502-000200-100-RS	1
Cigarette Lighter Power Cable	32002-004600-100-RS	1
Uesr's Manual CD-ROM	7B000-000569-RS	1

Optional Accessory List

Item	Part Number	Description
Bracket	VTT-1000-MT01-R10	VTT-1000 Mounting Kit
AC Adapter	IVIPOWER-2PIN-R10	Power Adapter 63000-FSP040DGAA1107-RS + Switching Cable 32002-005000-100-RS

GPS Antenna

OBD-II Cable

DIO and RS-232 Integrate Cable

Cigarette Lighter Power Cable

Bracket

AC Adapter

AVL-2000PLUS

Auto Data Server

- **Intel® Atom™ Z510 1.1GHz Processor**
- **Pre-installed Windows® XP Embedded**
- **Built-in HSUPA/GPRS/GSM and Wi-Fi**
- **Built-in GPS with Dead Reckoning Support**
- **Built-in VGA Port Output and NTSC/PAL/SECAM Video Capture NTSC: 120fps@ D1 PAL/SECAM: 100fps@ D1 for Display**
- **Optional UHF RFID Reader Module**
- **Supports On-Board Diagnostics (OBD)**

intel Intelligent Systems Alliance

| 3.75G/HSUPA | Wi-Fi | GPS | Dead Reckoning | Power Management | RFID | Windows XP |

Advanced Vehicle Tracking/Monitoring with Auto Data Server

The AVL-2000PLUS comes integrated with a remote on-line and real time diagnostic system for vehicles via HSUPA/GPRS/GSM, Global Position System(GPS) and On-Board Diagnostic System(OBD) technologies. The compact design of the AVL-2000PLUS makes it easy to track goods or vehicles at any location and at anytime. The AVL-2000PLUS also provides video/audio capture and recording functions. Optional functions include UHF RFID Readers for a wide range of industrial and commercial applications, including supply chain management, asset tracking, authentication and access control. These complete advanced functions make an Auto Data Server suitable for accurate vehicle tracking, security ,monitoring, and data collection.

1 IEIMobile Solutions

2 Automation Panel Solutions

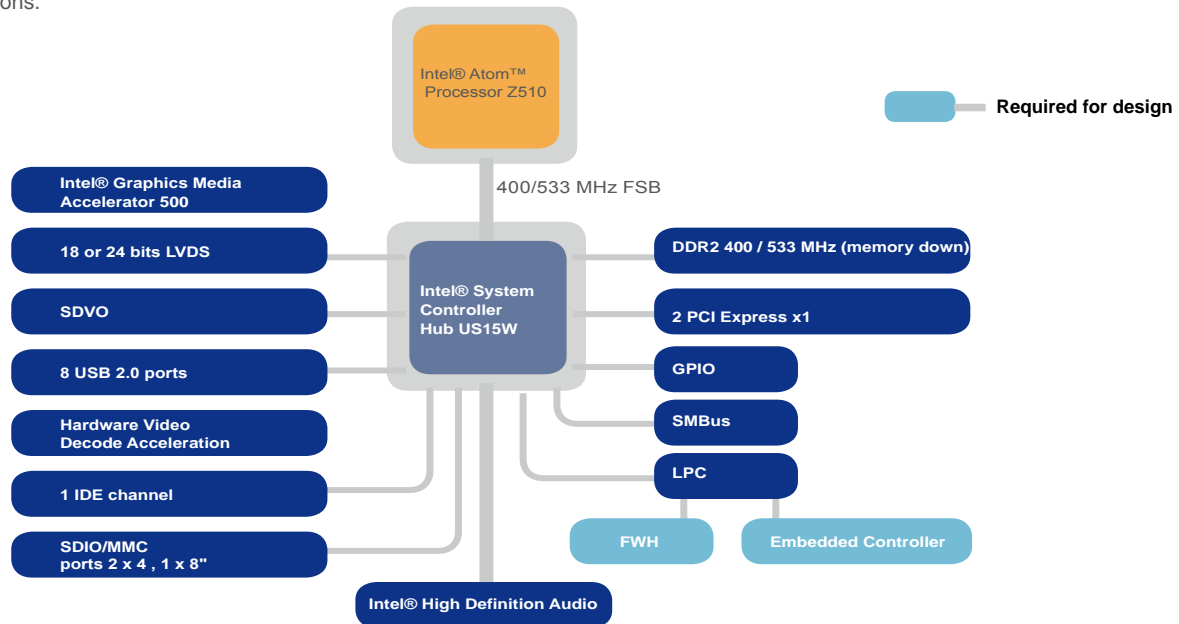**3** RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

3.75 G

Surveillance and Security

Vehicle Tracking and Dead Reckoning

Server

OBD-II

Asset Tracking and Management

Monitoring Center

Vehicle Diagnostics

Low Power Consumption and High Performance with Intel® Atom™ Z510 Processor

■ The AVL-2000PLUS features an Intel® Atom™ Z510 processor and Intel® System Controller Hub US15WP for embedded lifecycle support. The combination of high performance, low power consumption and integrated graphics/video makes this platform well suited for many embedded market segments such as in-vehicle infotainment, industrial control and automation, diagnostics and retail transaction solutions.

Intel® Atom™ Processor Z510

Required for design

Intel® Graphics Media Accelerator 500

18 or 24 bits LVDS

SDVO

8 USB 2.0 ports

Hardware Video Decode Acceleration

1 IDE channel

SDIO/MMC ports 2 x 4 , 1 x 8"

400/533 MHz FSB

Intel® System Controller Hub US15W

DDR2 400 / 533 MHz (memory down)

2 PCI Express x1

GPIO

SMBus

LPC

FWH

Embedded Controller

Intel® High Definition Audio

■ Supporting Window® XP operating systems in a componentized form allows developers to create advanced commercial and consumer devices.
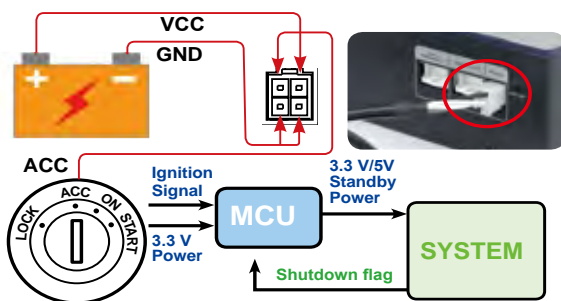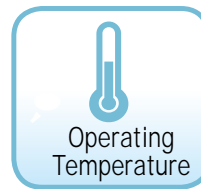
IEIMobile supports MeeGo. MeeGo is a combined effort between Intel®, the world's largest chip manufacturer, and Nokia, the world's largest mobile handset manufacturer. It is a Linux-based open source platform designed from the ground up to provide cross-device support.

MeeGo API is based on Qt and Qt Mobility. Qt, a well established tool for developers, allows MeeGo to offer its unique advantage of portability and expandability.

Windows xp

MeeGo

Wide Temperature Range and Compact, Rugged Design

■ -20°C ~ 70°C Operating Temperature
■ Shock and vibration protection ideal in vehicle environments

Operating Temperature

Shock/Vibration Protection

VCC
GND
ACC

Ignition Signal

3.3 V Power

MCU

3.3 V/5V Standby Power

SYSTEM

Shutdown flag

Vehicle Power Management

■ The unique MCU enables system to automatically reboot or shutdown based on the adjustable delay time by detecting ACC status

■ Surge protection and low power consumption hardware design

One Key Recovery

Without having to go through complicated settings, IEI One Key Recovery uses exclusive technology to recover and backup your system with just one click.

Recover your system from
● Severe virus attack
● Operating system crash
● Man-made disasters

F3 One Key Recovery
iEi symantec.

IEI Recovery Kit

▍Built-in Global Positioning System (GPS) with Dead Reckoning Support

Dead-Reckoning (DR) is a new feature implemented in some high-end automotive navigation systems in order to compensate for the limitations of GPS technology. The solution ensures uninterrupted navigation and tracking when satellite signals are blocked or unavailable, such as near tall buildings, mountains, canyons, in tunnels or in underground parking. With Dead Reckoning, the AVL-2000PLUS can still provide continuous position reporting even during GPS satellite blockage.

GPS ✕	Dead Reckoning	GPS	Dead Reckoning	GPS ←	Dead Reckoning

NO GPS reception | **Poor GPS reception** | **Good GPS reception**

**Armored Money Truck**   **Hazardous Material Handling**

A built-in gyroscope is used to measure angular velocity. It provides highly accurate results when measuring an angular turn in any direction. The OBD-II, on the other hand, can accurately measure the speed of the vehicle. By combining gyroscopes with OBD-II, the AVL-2000PLUS is able to perform non-stop calculation of the dead reckoning position, orientation, and velocity (direction and speed of movement) of a moving object without any external references. It also eliminates the trouble and cost of a traditional speedometer cable installation. The AVL-2000PLUS is an ideal choice to enhance GPS performance and improve overall tracking ability.

AVL-2000PLUS uses standard OBD-II interface plug, allowing for quick and easy access to cruise data.
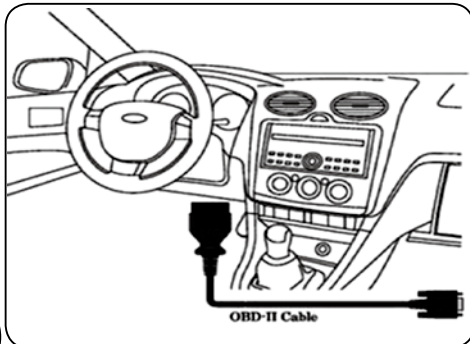
Traditional data retrieval via wired speedometer is cumbersome and time-consuming.
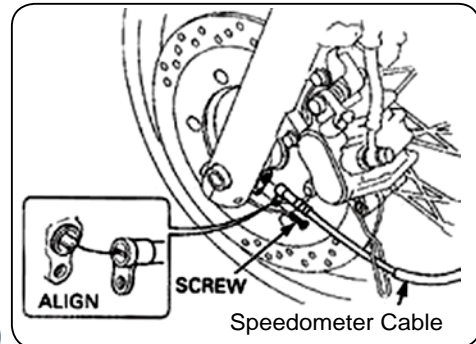
OBD-II Cable

ALIGN   SCREW

Speedometer Cable

☺ **Simple "Plug-and-Play"**   ☹ **Hard to Install**

Leading the Wireless Revolution

WWAN 2.5G/3.5G/3.75G

- Receive the localization coordinate of each vehicle through efficient mobile connectivity.

Technology/Bands

- HSUPA/HSPA/UMTS-800/850/900/1900/2100 MHz
- Quad-band EDGE/GPRS/GSM-850/900/1800/1900 MHz
- Dual-band EV-DO/CDMA-800/1900 MHz

802.11b/g Wi-Fi

- Delivers broadband-speed browsing and connectivity, compared to traditional wired LAN connections. Best for near field or ad-hoc data communications.

Extended Connectivity

Multi-Channel Real Time Video and Audio Capture Applications

- On-board video surveillance made easy with the AVL-2000PLUS. With multi-channel real time video and audio capture capabilities, it's designed to meet the requirements of modern security systems, especially in the transportation industry. It reduces loss and damage to goods and assets and increases the safety of the drivers. The AVL-2000PLUS SDK contains a library of four active channels video demo program, allowing for quick and easy customization of audio/video preview and capture application.

Key Features

- Internal 4-channel video decoder and audio ADC
- High quality proprietary fast video locking system for non-real-time application
- Supports 4-channel D1 video plus 1-channel audio simultaneously with independent channel control
- Dynamic synchronization: video processing; multiple video format output support Y422, Y420, IYUI/Y411, Y41P, RGB555 and RGB565
- Dual support for Direct Show and Direct Draw
- Accepts all NTSC(M/N/4.43) / PAL(B/D/G/H/I/ K/L/M/N/60) / SECAM standards with auto detection

3.75 G

Web Server

Internet

PC-Style Peripherals

● 3-in-1 RS-232/422/485 serial interface

The AVL-2000PLUS is a ideal choice for connecting RS-232/422/485 serial devices to an Ethernet network, making it possible for software to access serial devices anywhere on a local network.

● Full speed USB 2.0 host

Supports connection to USB devices such as standard HIDs (Human Interface Device) like keyboard and mouse, USB storage, USB card reader, or proprietary USB devices.

● 10/100/1000 Mbps Ethernet LAN

Wherever Ethernet LAN is available, the AVL-2000PLUS LAN port provides another faster and more efficient networking option.

1

IEIMobile
Solutions

2

Automation
Panel
Solutions

3

RISC-
based
Solutions

4

PACSmate
Medical
Solutions

5

Optional
Peripherals

In-Vehicle Communication

●Almost all of the automobiles produced today are required by law to provide an interface for the connection of diagnostic test equipment. The AVL-2000PLUS provides a connection to the vehicle's On-Board Diagnostics (OBD) port (OBD-II connector), and supports several popular data transfer protocols and standards.

Protocols and Standards

SAE J1850 PWM (41.6 kbaud)
SAE J1850 VPW (10.4 kbaud)
ISO 9141-2 (5 baud init)
ISO 14230-4 KWP (5 baud init)
ISO 14230-4 KWP (fast init)
ISO 15765-4 CAN (11-bit ID,500 kbaud)
ISO 15765-4 CAN (29-bit ID,500 kbaud)
ISO 15765-4 CAN (11-bit ID,250 kbaud)
ISO 15765-4 CAN (29-bit ID,250 kbaud)
SAE J1939 CAN (29-bit ID,250* kbaud)

OBD-II Connector

AVL-2000PLUS Connector

Supported OBD-II Connector Pins

OBD-II Pin	Description
1	-
2	Bus positive Line of SAE-J1850 PWM and SAE-1850 VPW
3	-
4	-
5	-
6	CAN high (ISO 15765-4 and SAE-J2284)
7	K line of ISO 9141-2 and ISO 14230-4
8	-
9	-
10	Bus negative Line of SAE-J1850 PWM only (not SAE-1850 VPW)
11	-
12	-
13	-
14	CAN low (ISO 15765-4 and SAE-J2284)
15	L line of ISO 9141-2 and ISO 14230-4
16	-

●Besides traditional applications for diagnostic trouble code readers and automotive scan tools, emerging applications like Location-Based Services (LBS) and Fleet Management Systems (FMS) adopt OBD combined with GPS and telecommunication to realize remote real-time diagnostics.

Built-in Sensors and I/O

■ The AVL-2000PLUS has digital I/O to provide advanced vehicle monitoring and control applications. For example:

●Alarm, light and sound supplier which automatically checks for unusual tags.

●Sends security calls automatically when an unusual door-open is detected.

●An automatic emergency call will be initiated when an airbag deployment is detected.

■ Optional UHF RFID readers with antenna support

●The AVL-2000PLUS extends the benefits of 4-channel UHF RFID technology to in-vehicle applications via the long range UHF RFID readers which are ISO 18000-6C standard complaint and suitable for industrial warehouse management. It can be used in any harsh environment or temperature. It also supports error-free read performance in vehicles. The non line-of-sight tag reading is effectively used in item level identification, warehouse logistics, and security access management. The AVL-2000PLUS SDK contains libraries to read, write, lock and kill RFID tags, which can be easily integrated into software applications.

Key Features :

● High Gain, high performance
● Easy installation
● UV resistance
● IP65 waterproof and dustproof
● Pole mount & wall mount available

3.75 G

Web Server

Internet

Item-level Inventory Management

Pallet tracking

Management Center

Software Development Kits (SDK) and Built-in Software

IEI AVL-2000PLUS SDK

Allows third-parties to develop software to send requests to the protocol firmware to acquire vehicle data

●**Detects function key status (F1~F3) to program user interface application**

●**Implements digital I/O**
  Offers an easy-to-use 8-bit digital I/O (4 inputs/4 outputs) configuration. Allows you to set digital outputs and read digital inputs.

●**Multi-channel video capture card provides:**
  Four active channels video settings
  Captured video preview
  Frame rate information
  Image property settings
  Fast configuration and ready-to-run
  Complete source code

●Channel Video Capture Card

●Implement Digital I/O

●**UHF module provides:**
  A selection of 4 active antennas.
  Antenna in use identification
  Interface to read/write/lock/kill tag and retrieve product information such as product names, inventory, place of production, specification and read count information.

●**OBD-II provides:**
  Demo the query results of OBD-II interface with CAN protocol data. There are 4 types of CAN data supported. Also features an interface for users to acquire diagnostic vehicle data and over 79 kinds of vehicle for diagnostic or travel information such as speed, engine loading, engine R.P.M and more.
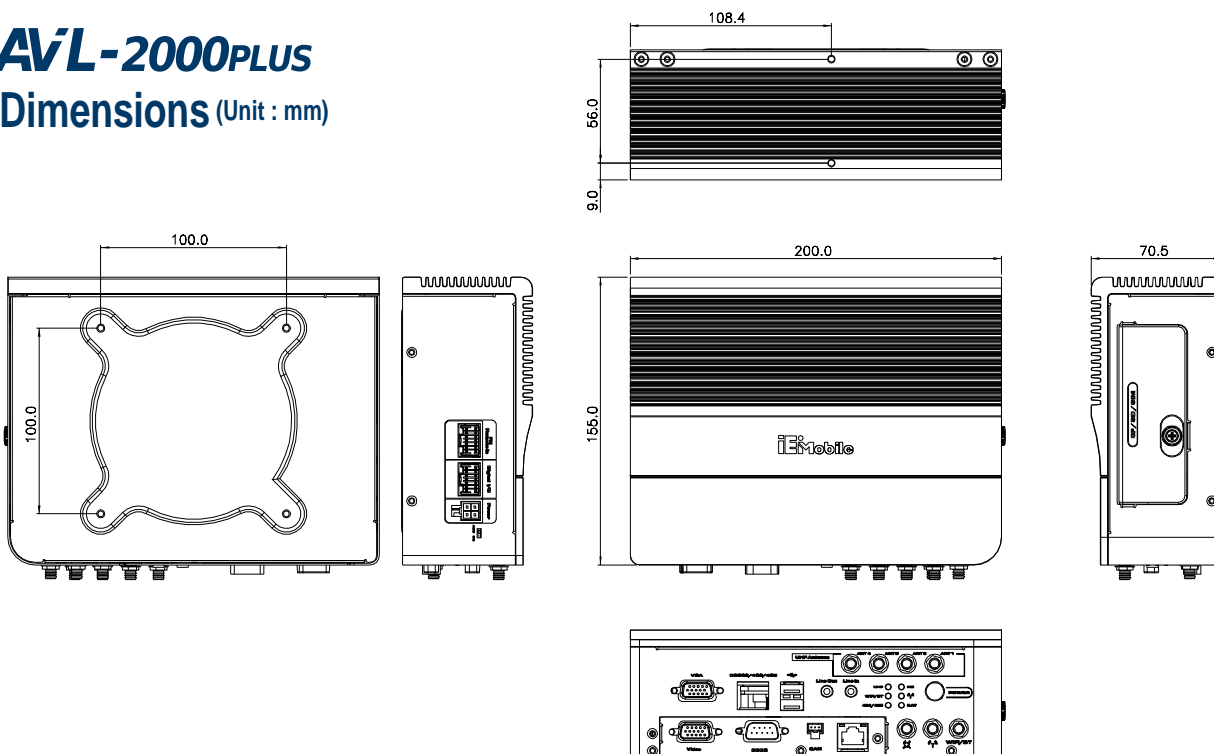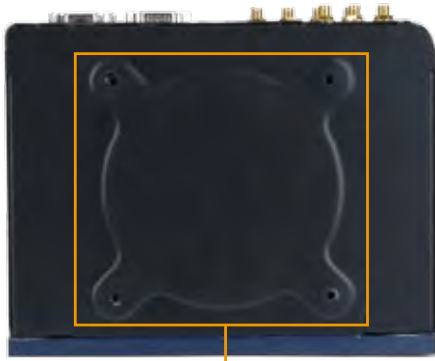

●Data provided by OBD-II
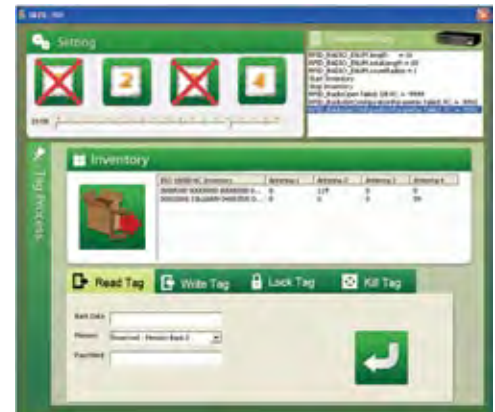
●UHF Module

AVL-2000PLUS
Dimensions (Unit : mm)

108.4
56.0
9.0
100.0
100.0
200.0
155.0
70.5

iEiMobile

DIN Rail 100 Mount

Easy Access to CF, SD and SIM

FN Remote In

Digital I/O 12 V DC IN

ACC/Manual Power Mode Switch

2 x USB Host
Connectivity LED Indicators
Line-Out
Line-In
RS-232/422/485
VGA
4 x UHF Antenna
Power LED Indicators
Power Button

Video OBD-II CAN GPS Antenna Wi-Fi Antenna
GbE RJ-45 3.75G Antenna

SD Card Slot
SIM Card Slot CF Card Slot

Specifications

Model		AVL-2000PLUS
System	CPU	Intel® Atom™ Z510 1.1 GHz
	Chipset	Intel® US15WP
	Operating System	Microsoft® Windows® XP Embedded
	Memory	1 GB DDR2 533 MHz On-board
	Storage	4GB CompactFlash® SD Card Slot
Communication	Wireless LAN	Wi-Fi 802.11b/g/n
	Bluetooth	N/A
	Modem	WCDMA/HSUPA
	GPS	GPS
Multimedia	Audio	1 x Line-in / 1 x Line-out
Data Collection	RFID	Read-Write Capable / ISO18000-6C UHF module (option)
	Video Capturing	Video Input: 4 channels composite video(NTSC/PAL/SECAM) / Frame rate: 4 channels with 120fps@D1 per channel(NTSC), 4 channels with 100fps@D1 per channel(PAL/SECAM)
LED Indicators & Buttons	Indicators	UHF/Wi-Fi/ RS-422/485/HDD/3.75G/BAT/Power Status LED
	Buttons	Power Button
I/O Interface	USB	2 x USB 2.0
	Serial	1 x DB-9 OBD-II / 1 x RJ-45 RS-232/422/485
	LAN	1 x 10/100/1000 Mbps GbE RJ-45
	VGA	1 x VGA
	CAN	1 x CAN 2.0b
	Digital I/O	4 Inputs / 4 Outputs
Power	Cigarette Lighter Power	Cigarette Lighter Power Cable DC 9~30V
	ACC Power	Manual power mode and ignition detection supported ACC power on/off mode with software configurable delay time
Environment	Operating Temperature	-20˚C to +70˚C
	Storage Temperature	-30˚C to +80˚C
	Humidity	5%~95% non-condensing
	Certification	CE/FCC/e-Mark/ISO7637
Physical Characteristics	Dimensions (LxWxH) (mm)	200 x 155 x 70
	Net Weight	1.9kg

1
IEIMobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

AVL-3000
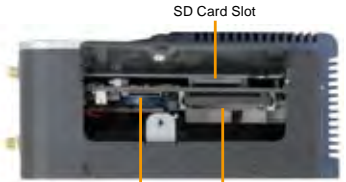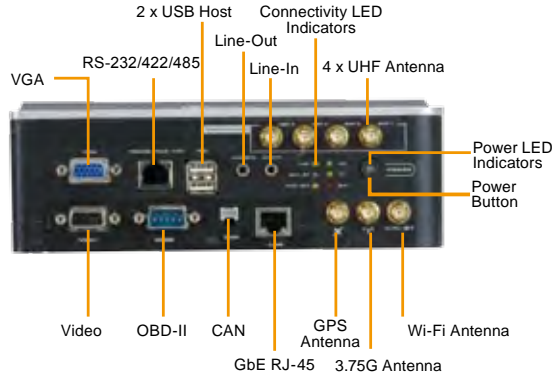
Advanced Auto Data Server

- ■ **Intel® Atom™ N2600 1.6GHz CPU**
- ■ **Powered by Windows® Embedded Standard 7 E (WES7E)**
- ■ **Built-in 2.5" 16 GB SATA SSD**
- ■ **Built-in Wi-Fi, Bluetooth, HSUPA, and GPS**
- ■ **Built-in VGA Output and NTSC/PAL/SECAM Video Capture**
- ■ **Supports On-Board Diagnostics (OBD)**
- ■ **Optional UHF RFID reader module**

| 3.75G/ HSUPA | Bluetooth | Wi-Fi | Power Management | Video Capture | UHF | GPS | |
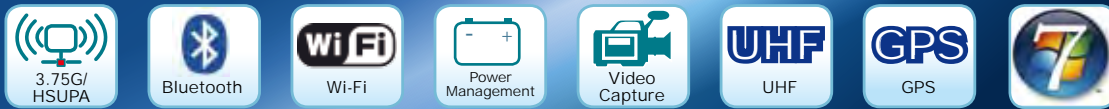
Advanced Auto Data Server with Upgraded Tracking and Surveillance Function

The AVL-3000 comes integrated with a remote on-line and real time diagnostic system for vehicles via HSUPA/GPRS/GSM, Global Position System (GPS) and On-Board Diagnostics System (OBD) technologies.

The AVL-3000 provides video/audio capture and recording functions. With the codec solution, the AVL-3000 offers enhanced data streaming performance. Optional functions include UHF RFID Readers for a wide range of industrial and commercial applications, including supply chain management, asset tracking, authentication and access control. These complete advanced functions make an Auto Data Server suitable for accurate vehicle tracking, security ,monitoring, and data collection.

1 IEIMobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

	AVL-2000	AVL-3000
CPU	eMenlow	Cedarview
	Z510 1.1 GHz	N2800 (optional) N2600
OS	Windows® XP Embedded	Windows® 7 Embedded
Memory	DDR2 533MHz (2 GB max.)	DDR3 1066MHz

3.75 G

Surveillance and Security

Asset Tracking and Management

Monitoring Center

Server

Vehicle Tracking and Dead Reckoning

Vehicle Diagnostics
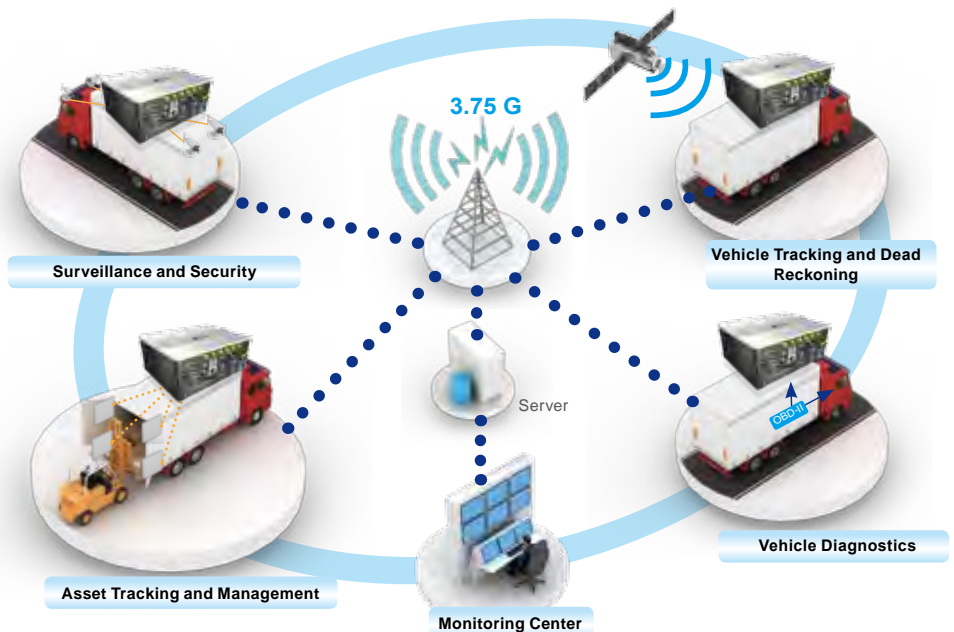
2012 New Atom™ Dual Core Platform

Benefit

- CPU TDP (3.5/6.5/10W) and average power are lower than Pine Trail (6.5/10/13W)
- Display options including 2 digital ports supprot for extra LVDS/HDMI/VGA options
- 2 times improved graphics with 2 HD video support
- Faster memory up to DDR3 1066MHz
- HD decoding with Blu-ray support

Specifications Comparison

	Navy Pier (N270)	Pine Trail (D525/D425/N455)	Cedar Trail (N2800/N2600)
Process	45nm	45nm	32nm
Processor Frequency	N270: 1.6GHz	D525/D524: 1.8GHz N455: 1.66GHz	N2800: 1.86GHz N2600: 1.6GHz
CPU TDP	N270: 2.5W	D525: 13W D425: 10W N455: 6.5W	N2800: 6.5W N2600: 3.5W
Chipset/ PCH TDP	945GSE: 5.5W ICH7M: 1.9W	ICH8M: 2W	Intel® NM10: 1.5W
Memory	DDR2 400/533MHz (2GB max.)	DDR2/DDR3 up to 667 for N455 800MHz for D525/D425 (4GB max.)	DDR3 1066MHz for N2800 (4GB max.) DDR3 800MHz for N2600 (2GB max.)
Graphics	DX9, OGL 1.4	DX9, OGL 1.5	DX9, OGL 3.0
	Gfx @ 133 MHz	Gfx @ 200 MHz (N455) Gfx @ 400 MHz (D525/D425)	Gfx @ 400 MHz (N2600) Gfx @ 640 MHz (N2800)
Video Decode	MPEG2	Discrete 3rd part decoder	MPEG2, H.264, VC-1/WMV9 Up to 1080p decoding

Note: Standard product is N2600, By customization can upgrade to N2800.

Block Diagram
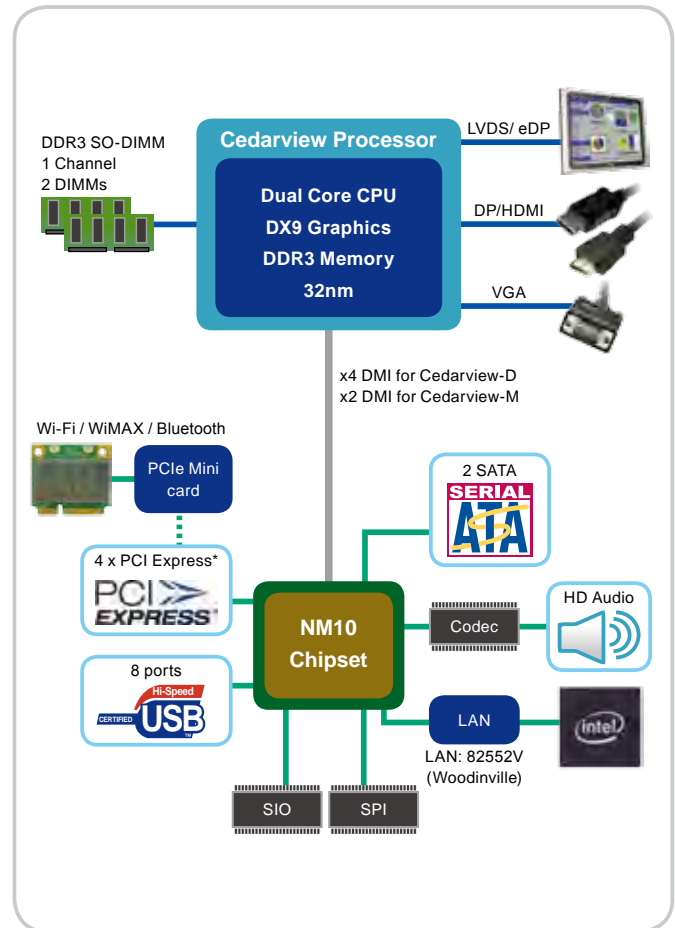
Microsoft® Windows® Embedded Standard 7

Benefit Category	Top Features
Performance/ Reliability	• 64/32 bit support • Less boot time • Improved power management • Aero glass
Compatibility/ Security	• Enhanced driver compatibility • Enhanced application compatibility • Credential manager (allows you to maintain all your credentials related to websites or when you connect to another computer)
Connectivity	• Sensor and location platform • Bluetooth 2.1+EDR and Extended Inquiry Response (EIR) (Windows® XP only supports Bluetooth 2.0+EDR; EIR is not supported by Windows® Vista)
Development/Deployment/ Serving	• Simplified installation (2 tools vs. 4 tools compared with previous versions of wes/xpe); installation wizard (ibw) is also available. • Supports imagex/dism for easier recovery and service solutions • Supports Windows® update

Wide Temperature Range and Compact, Rugged Design

- -20°C ~ 70°C Operating Temperature
- Shock and vibration protection ideal in vehicle environments

Operating Temperature

Shock/Vibration Protection

VCC
GND
ACC

Ignition Signal
3.3 V/5V Standby Power
MCU
3.3 V Power
Shutdown flag
SYSTEM
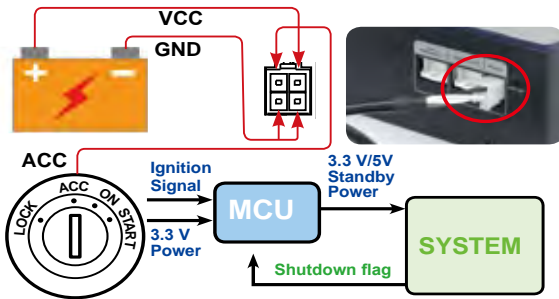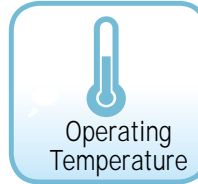
Vehicle Power Management

- The unique MCU enables system to automatically reboot or shutdown based on the adjustable delay time by detecting ACC status
- Surge protection and low power consumption hardware design

Extended Connectivity

Multi-Channel Real Time Video and Audio Capture Applications

The AVL-3000, featuring multi-channel real time video and audio capture capabilities, is desinged to meet the requirements of modern security systems in the transportation industry. It can reduce loss and damage to goods and assets while increasing the safety of drivers at the same time. The AVL-3000 SDK contains a library of four active channels video demo program, allowing for quick and easy customization of audio/video preview and capture application.

Key Features

- Internal 4-channel video decoder and audio ADC
- High quality proprietary fast video locking system for non-real-time application
- Supports 4-channel D1 video plus 1-channel audio simultaneously with independent channel control
- Dynamic synchronization: video processing; multiple video format output support Y422, Y420, IYUI/Y411, Y41P, RGB555 and RGB565
- Dual support for Direct Show and Direct Draw
- Accepts all NTSC(M/N/4.43) / PAL(B/D/G/H/I/ K/L/M/N/60) / SECAM standards with auto detection

3.75 G
Web Server
Internet

UHF RFID Readers

The AVL-3000 extends the benefits of UHF RFID technology to in-vehicle applications via the long range UHF RFID readers which are ISO 18000-6C standard complaint and suitable for industrial warehouse management. It can be used in any harsh environment or temperature. It also supports error-free read performance in vehicles. The non line-of-sight tag reading is effectively used in item level identification, warehouse logistics, and security access management. The AVL-3000 SDK contains libraries to read, write, lock and kill RFID tags, which can be easily integrated into software applications.

Key Features :
- High Gain, high performance
- Easy installation
- UV resistance
- IP 65 waterproof and dustproof
- Pole mount & wall mount available

3.75 G
Web Server
Internet
Item-level Inventory Management
Pallet tracking
Management Center

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2 Automation Panel Solutions
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4 PACSmate Medical Solutions
5 Optional Peripherals

Rich Wireless Communication

▌ Built-in Global Positioning System (GPS)

The built-in GPS allow drivers to perform real-time navigation and access Location Based Services (LBS) while on the road. On the other hand, this information can be transmitted through 3G wireless, which enables the management center to track their vehicles on the road.

● 802.11 b/g/n Wi-Fi
Delivers broadband-speed browsing and connectivity, compared to traditional wired LAN connections. Best for near field or ad-hoc data communications.

● Leading the Wireless Revolution
WWAN 2.5G/3.5G/3.75G
Receives the localization coordinate of each vehicle through efficient mobile connectivity.
Technology/Bands
● HSUPA/HSPA/UMTS-800/850/900/1900/2100 MHz
● Quad-band EDGE/GPRS/GSM-850/900/1800/1900 MHz
● Dual-band EV-DO/CDMA-800/1900 MHz

▌ Solid and Expansion Storage

The AVL-3000 uses a 16 GB 2.5" SATA SSD for storage. This design has 2 benefits:

● It allows more information to be stored. This is a great significance for vehicle surveillance applications as video/audio information requires large storage space.

● It is more durable and is hardly to be damaged by vibrations and tough vehicle environment.

SSD vs HDD

SSD is more suitable for IVI solutions as it can pass the tests of operating shock and vibration.

	HDD	SDD
Life Expectancy	●●●	●●●●●
Operating Temperature	●●●	●●●●●
Storage Temperature	●●●●	●●●●●
Operating Shock	●	●●●●●
Operating Vibration	●	●●●●●
Humidity	●●●●	●●●●●
Altitude	●●●	●●●●●
Power Read/Write	●●●	●●●●
Capacity	●●●●●	●●●●

Dimensions
(Unit: mm)
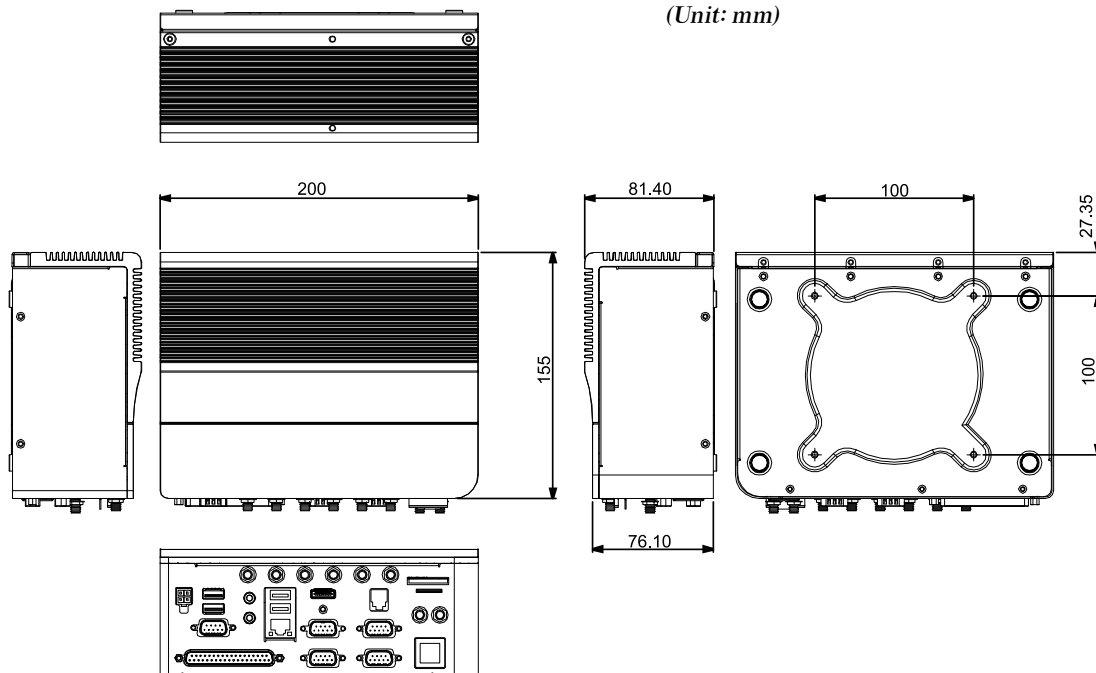
200

155

81.40

76.10

100

27.35

100

Wi-Fi Antenna
4 x UHF Antenna
Wi-Fi Antenna
DC 9~30(36)V 2 x USB   HDMI   RJ-12   SDHC Card Slot

SIM Card Slot
GPS Antenna
Power Button

COM1
COM 7~ COM10
Microphone in / Speaker Out
2 x USB Host
1 x GbE RJ-45
VGA
RS-422 / 485 & GPIO
OBD-II
Video
HSUPA Antenna
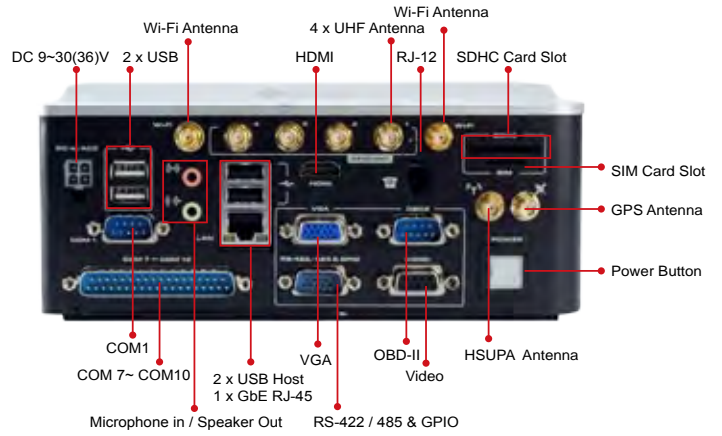
Specifications

Model		AVL-3000
System	CPU	Intel® Atom™ processor N2600 1.6Ghz
	Chipset	Intel® NM10
	Operating System	Windows® Embedded Standard 7 E (WES7E)
	Memory	2GB 800 MHz DDR3
	Storagy	1 x Built-in 16G 2.5" SATA SSD
		1 x SDXC Slot for data storage
Communication	Wireless LAN	802.11b/g/n
	Bluetooth	Bluetooth V2.0+EDR (class I)
	3.75G	HSUPA/UMTS-800/850/900/1900/2100 MHz
		Quad-band EDGE/GPRS
		GSM-850/900/1800/1900 MHz
		Dual-band EV-DO/CDMA
	GPS	GPS
Data Collection	RFID	Read-Write Capable ISO18000-6C UHF module ETSI/FCC
Multimedia	Audio	1 x MIC IN 1 x Line-out
	Camera	4 x Channel camera D1 120FPS
LED Indicator		1 x Power LED
Power	Power Input	Cigarette lighter power cable DC 9~30(36)V
	Vehicle Power	ACC Power Cable
I/O Interface		4 x USB
		1 x OBD-II
		6 x COM port: DB-9 (COM1), RS-422/485 (COM4, 4-PIN), DB-37 (COM7~COM10)
		1 x GIGA LAN
		1 x VGA support up to 1920 x 1200
		4 x VIDEO IN
		1 x 8 bit Digital I/O (selectable by software) 4 x DI 4 x DO
		1 x Line in
		1 x Line out
		1 X RJ11 3.5G Voice
		1 x HDMI
Environment	Operating Temperature	-20°C~70°C
	Storage Temperature	-30°C ~80°C
	Humidity	5%~95% non-condensing
	Drop Survival	ISO 16754
	Certification	CE/FCC/e-Mark
Physical Characteristics	Dimensions (LxWxH) (mm)	200 x 150 x 76
	Weight	2kg

Ordering Information

Part No.	Description
AVL-3000-N26-R10	Vehicle PC Box with Intel® Atom™ N2600 1.6GHz CPU, WES7E OS, 2GB SDRAM, 16GB 2.5" SSD, 802.11 b/g/n Wireless, HSUPA, OBD-II, GPS, RoHS

Packing List

Item	Part Number	Quantity
GPS/3.75G Integrate Antenna	32506-000100-100-RS	1
Wi-Fi Antenna	32505-000400-100-RS	2
ACC Power Cable	32002-001900-100-RS	1

Optional Accessory List

Item	Part Number
Cigarette Lighter Power Cable	32002-001800-100-RS
RS-232 Cable	32005-000200-200-RS
Capture Cable	32007-001400-100-RS
OBD-II Cable	32025-000300-100-RS
J1939 Cable	32025-000400-100-RS
User Manual CD-ROM	7B000-000568-RS
IEI One Key Recovery CD	IEI-7B000-000478-RS
UHF RFID Antenna w/Cable (PATCH Antenna 915MHZ)	AVL-2000PLUS-FCC01-R10
UHF RFID Antenna w/Cable (PATCH Antenna 867.5MHZ)	AVL-2000PLUS-ETSI01-R10
Power Adapter	IVIPOWER-4PIN-R10

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Optional
Peripherals

ACC Power Cable

J1939 Cable

Cigarette Lighter Power Cable

RS-232 Cable

Power Adapter

Capture Cable

OBD-II Cable

GPS / 3.75G Integrate Antenna

Wi-Fi Antenna

UHF RFID Cable

UHF RFID Antenna

AFOLUX GEN II Panel PC

New flat bezel, multi-touch, wide voltage AFOLUX panel PC

From the heritage of affordable Luxury AFOLUX Panel PC, AFOLUX GEN II Panel PC shows it's spirit to exceed the history. The AFOLUX GEN II Panel PC is slim and stylish and provides two types of touch option. RFID reader, wide voltage power input are its features which make it more flexible and more powerful than ever!

Innovative product design:
● AFOLUX GEN II flat bezel design is thinner than AFOLUX
● Projected capacitive multi-touch and resistive single touch screen options

New technology for more functions:
● LED dash system for eye-catching notification
● Integrated EM/ Mifare RFID reader
● Light fanless temperature management
● 9~36VDC wide voltage fits all power requirements

9~36VDC wide voltage input   **EM/Mifare RFID reader**   **LED dash system**

AFOLUX GEN II – More than Affordable Luxury

The AFOLUX Panel PC positions itself as an affordable luxury system by offering comprehensive functions. In heritage of AFOLUX spirit, AFOLUX GEN II enhances its ability to show its ambition to be advanced flagship industrial panel PC in the world with more stylish and more functions.

	AFOLUX	AFOXLUX GEN II
Type of Touch	Resistive single touch	Resistive single touch / Projected capacitive multi-touch
Front Panel Design	Conventional bezel	Flat bezel
RFID Reader	N/A	EM/ Mifare RFID reader
Function Key	N/A	Yes
LED Indicator	N/A	Yes

2013 New AFOLUX GEN II at a Glance

Platform	W7"	8"	W10.2"	10.4"	12.1"	15"	W15.6"	17"	W18.9"	W21.5"
Intel® Atom™ N2600 / N2800	AFL2-W07A-N26	AFL2-08A-N26	AFL2-W10A-N28	AFL2-10A-N28						
Intel® Atom™ N270							AFL2-W15A-N270			
Intel® Atom™ D525					AFL2-12A-D525					
Intel® HM65					AFL2-12A-HM65					
Intel® H61						AFL2-15A-H61	AFL2-W15B-H61	AFL2-17A-H61	AFL2-W19A-H61	AFL2-W21A-H61

Rugged While Stylish

Flat Bezel Design with IP64 Protection

AFOLUX Gen II series is designed in flat bezel panel and against dust and water, enduring flawless operation.

Flat-bezel Features:
- Better visual effects
- No edge effect
- Sleek and stylish
- Easy to clean

Enhanced touch technology – projected capacitive touch

Projected capacitive touch panel is stronger and with higher transparency than the resistive type of touch. It also supports Windows 7 multi-touch function compatible with glove-wearing users and enhancing ease-of-use.

Model	AFL2-17A-H61/PC	AFL2-17A-H61/R
Type of Touch	Projected capacitive type	Resistive type 5-wire touch
Touch Function	Multi-touch	Single-touch
Transparency	85%	80%
Hardness	≥6H	≥3H
Input Flexibility	Hand/ glove	Hand/ glove/ stylus

Glove-friendly multi-touch

6H Anti-scratch Surface (Projected capacitive type touch screen)

Projected Capacitive touch technology utilizes a durable glass front surface. 6H hardness is stronger than the conventional touch panel and therefore is able to protect the screen from damage.

Typical Panel	Fingernail	Knife	Steel	Quartz	Beryl	Diamond
2H	3H	5H	6H	7H	8H	10H

MOH's Hardness Rating
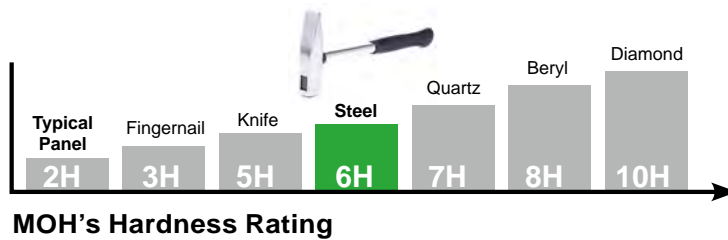
Superior Performance

Better Performance and Cost-effective Solution

Comparing to mobile solution, Intel H61 with desktop CPU provides low power consumption but high performance.

Mobile 2nd Core i3 V.S. Desktop Pentium & 2nd Core i3
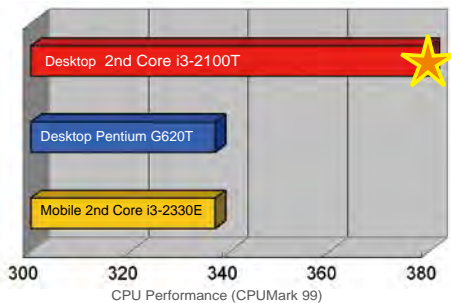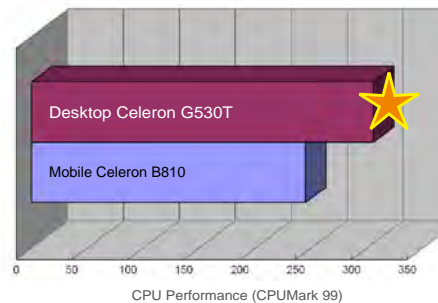
Desktop 2nd Core i3-2100T
Desktop Pentium G620T
Mobile 2nd Core i3-2330E

300 320 340 360 380

CPU Performance (CPUMark 99)

Mobile Celeron V.S. Desktop Celeron

Desktop Celeron G530T
Mobile Celeron B810

0 50 100 150 200 250 300 350

CPU Performance (CPUMark 99)

CPU Type	Intel 2nd Core i3-2330E (Mobile 35W CPU)	Intel Pentium G620T (Desktop 35W CPU)	Intel 2nd Core i3-2100T (Desktop 35W CPU)
CPU Performance (CPUMark 99)	337	337	380

CPU Type	Intel Celeron B810 (Mobile 35W CPU)	Intel Celeron G530T (Desktop 35W CPU)
CPU Performance (CPUMark 99)	245	306

1 IEI Mobile Solutions

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3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Better efficiency with Intel cedaview dual core processor

AFL2-N26 new series integrates with Intel dual core running at 800 MHz DDR3 Capability for processor running fast. Attached with Fanless system to reduce noise and unable to stuck dust on the fan in lower CPU utilization.

N2600 CPU Performance is 31% better than N270,
Graphics performance is 36% better than N270,
Memory performance is 21% better than N270

■ Intel® Atom™ processor N270 (1.6GHz)
■ Intel® Atom™ processor D425 (1.8GHz)
■ Intel® Atom™ processor N2600 (1.6GHz)

1.31x **1.36x** **1.21x**

CPU PC Mark 2005 | 3D 3D Mark 2001 SE | Memory Sisoftware sandra pro 2007
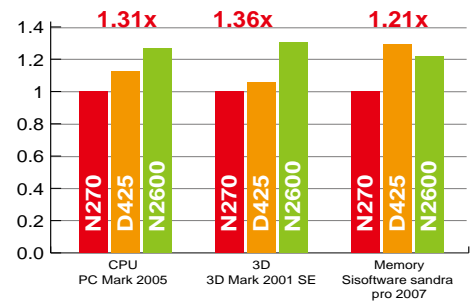
Latest Display Technology

AFL GEN II supports latest display technology : DisplayPort. It's not only used to connect a video source to a display device, but also be used to transmit audio, USB, and other forms of data. DisplayPort lets you take advantage of today's high-bandwidth content, enabling you to create a professional and powerfully compelling digital signage solution.

Reception

Hospital-Medical Imaging
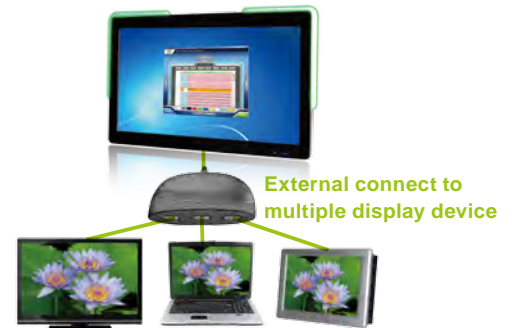
External connect to multiple display device

Advantages
● Backward compatible with DVI/HDMI with the adapter
● Support Multi-Display simultaneously : It can be Monitor, Notebook, All-In-One computer.

Faster Transmission

Super Speed USB 3.0

AFL2-N26 series support both USB 2.0 and USB 3.0 for the necessary. USB 3.0 has higher transmission speed and wider data bandwidth. Support faster transferring for the user.

Data Rate Comparison

USB 3.0 **5Gbps**
USB 2.0 **480Mbps** **10 times faster!**

USB version	USB1.0	USB2.0	USB3.0
Data Transfer Rate)	*12Mbps*	*480Mbps*	*5Gbps*
Media (Data Size)	Transfer Time		
Song / Pic (4 MB)	5.3 sec	0.1 sec	0.01 sec
HD-Movie (25GB)	9.3 hr	13.9 min	70 sec

Down loading
USB 2.0
14 minutes to download HD movie

Down complete
USB 3.0
70 sec to download HD movie
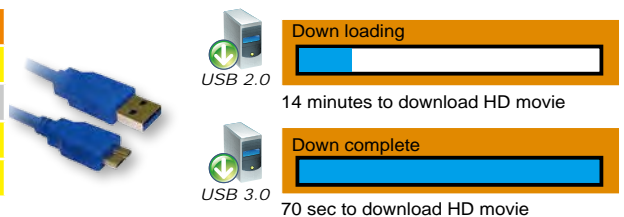
Wi-Fi 2T2R Wireless LAN

The AFL2 new series integrate a PIFA antenna and provides 802.11n 2T2R wide bandwith wireless communication.

T: Transmitter: the number T is absolutely relative with speed, 1T up to 150Mbps, 2T up to 300Mbps

R: Receive: the number R is relative with receiving dead angle and distance. The higher R is, the wider the receiving range.

300Mbps
150Mbps
54Mbps
1X 4X 6X
2T2R 1T1R

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IEI Mobile Solutions

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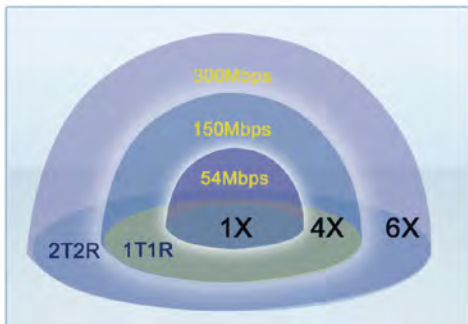
5
Optional Peripherals

Easy to Use

LED Indicator and Function key

● Function key can be more convenient for panel PC users to operate this panel without any keyboard or mouse.

● Indicator is located in front of panel, it can tell users which function is enable or disable

● **LED Function Key**

Fn Fn
Backlight On/Off
Audio -
Audio +
Brightness -
Brightness +

Fn + RFID Enable/Disable
Fn + Audio Mute
Fn + Camera Enable/Disable
Fn + Front Side USB Enable/Disable
Fn + Power On / Off

● **LED Indicators**

AT/ATX Mode | Wi-Fi | Bluetooth | MIC
Power | CPU Temperature Alert | RFID | Auto-Dimming | Audio Mute

Mini USB 2.0 Port & micro SD Card Slot on Front Panel

Mini USB 2.0

AFOLUX2 new series conducts mini USB 2.0 on front panel providing different com port for connecting device directly and more convenient

Micro SD card

AFOLUX2 new series conducts micro SD card on front panel for saving memory easier and supports

Auto dimming Advantage

Auto dimming Advantage
● Power Consumption Saving
● Comfortable Viewing Brightness
● Extend Product Lifetime

Auto dimming
Adjust the optimal brightness to fit the circumstance change in automation.

Day: Higher Ambient Luminance **Night: Lower Ambient Luminance**

Flexible Design to Fit Various Scenarios

Wide Application to Extreme Circumstance

Power supply requirement varies from applications. Incorrect voltage input will damage electronic components thus cause system break down. AFOLUX GEN II series offers wide voltage power input, which fits different application scenarios and increase stability of the system.

Wide Range Power Input	9~ 36V DC*

Wide Range 9~36VDC input *

Wide range DC input fits different power source depends on what circumstance needed.

Automation Central Control   Factory Manufacture Control   Truck Control(24V)

1 IEI Mobile Solutions
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Flexible Power Mode

With the AT mode selected, the AFOLUX GEN II turns on automatically when the power is connected. With the ATX mode, the AFOLUX GEN II can be easily to control via network or a power switch

AT/ATX

AT Power Mode

Application
● Factory Automation platform
● Self-service kiosk

Advantage
● Easy to turn on/off with panel mounting
● Automatic start when power connected
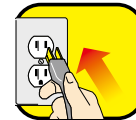
System On   System Off

ATX Power Mode

Application
● Security surveillance
● Advertising terminal

Advantage
● Power management
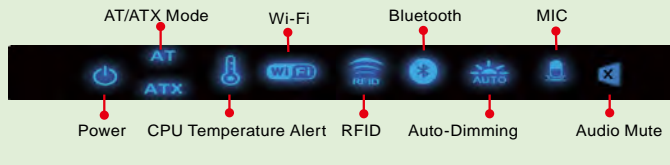● Remote control via network advantage
● Remote control individually

System On   System Off

Optional EM/Mifare Card Reader

EM card reader(125KHz):
It is called an ID card and has read/write function of contactless RFID chip with low consumption and can provide various data transmission rate and data encoding.

Mifare card reader (13.56MHz):
It is called an IC card and can be used to read and save the data information to implement certein data transmission.

100KHz		1MHz	100MHz	1GHz

		Low Frequency (125KHz)	High Frequency (13.56MHz)		
			ISO14443	ISO15693	Felica (NFC)
Data Rate		Up to 16 kbps	Up to 106 kbps Faster!	Up to 53 kbps	Up to 434 kbps
Reading Distance		0-200cm	0-10cm	0-150cm	0-10cm
Memory	R/O	48/64 bits	64 bits	64bits	64bits
	R/W	2048/1024 bits	512-4096 bits High Capacity!	Max. 2048 bits	N/A
Interfe-rence	Liquid	Low	Mid	Mid	Mid
	Metal	High	High	High	High
	RF	Very Low	Low	Low	Low
Security		32-bit password	High (AB keys)	Low	High (AB Keys)

Complete Peripherals

Optional Magnetic Stripe Card/ Hybrid Card Reader

Providing bracket kit to fix either MSR or MSI card for the user choose the optimal one. It can be used to deal with magnetic card.

Magnetic Card

● **Magnetic Card**
● **IC Card**
● **iButton**
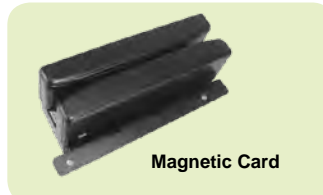
VESA Mounting

VSTAND-A12   STAND-B19

● Desktop Stand
● Wall Mount
● VESA Standard Multi-mounting Stand

Mounting Kits

Panel Mount   Wall Mount   V-Stand   Stand

OSD Remote Control Advantage

Advantage
● Convenient way to control visual setting
● Wherever for remote control
● Extend Product Lifetime

System On/Off   LCD On/Off
Volume Up/Down   Auto Dimming On/Off
Brightness Up/Down

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IEI Mobile Solutions

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Optional Peripherals

IEI Light Fanless System

IEI LIGHT FANLESS STSTEM is a highly effective smart system, embedded with smart sensor to test the ambient temperature. It can be used in high performance and silence both in need situation, such as: multimedia platform next to patient bedside, gaming machine, airport kiosk......etc.

Benefits
- **Power Saving**
  Auto switch on/off fan can reduce redundant power consumption
- **Expanding system lifecycle**
  Helping users to run system more effectively, it also enhances the lifecycle of CPU.
- **Effectively manage system environment**
  User can monitor the information of system easily
- **High performance with noiseless**
  IEI supports noiseless situation for the user having quiet and high performance simultaneously.

Environment Temperature (°C)

High Performance With Light Fanless

iCMC Setting (default: 32°C)

Smart-Fan Mode

Light Fanless Mode

IEI Light Fanless Application

Patient Bedside Entertainment System

Clean room

Semi-outdoor kiosk

iCMC (IEI Cooling Management Console)

IEI's exclusive software system provides embedded features for system integrator. Supporting reliability and simplify integration for AFL2 PPC series, moving from the BIOS level to the system level.

Real-time Monitoring

CPU Information

Light Fanless Settings
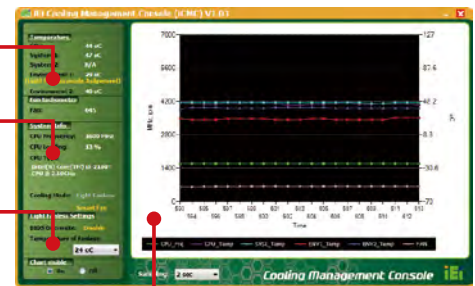
Graphical Data

LED Light Visual Management

Features
- LED 256 programmable colors
- Signaling light display user demand
- Manual scripts for LED lighting programs
- 100% software programmable for colors, light duration, and light patterns
- Totally 34 light sections for AFL2-W19A-H61 and AFL2-W21A-H61; 30 light sections for AFL2-17A-H61; each light section can be configured independently.

Function Button

Display time adjustment

30/34 light buttons

Access Key

Scripts

Full Colors

Support LED Light Bar control API for the customer to suit their own software program. Light bar signal are correspond to the light button. User can customize their own necessary to suit different condition.

LED Dash Board for Visual Alarm System/Status Notification!!

Helping product line to be fluent

Browsing medical list to be convenient

Showing appealing light simulation

AFOLUX II 7"~10" Selection Guide

New

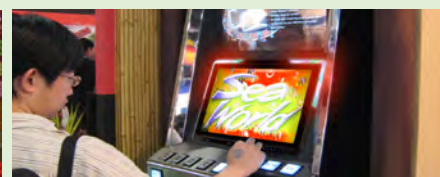|	Model	AFL2-W07A-N26	AFL2-08A-N26	AFL2-W10A-N28	AFL2-10A-N28
LCD Specifications	Size	Wide 7"	8''	Wide 10.2"	10.4"
	Resolution	800 (W) x 480 (H)	800 (W) x 600 (H)	1024 (W) x 600 (H)	800 (W) x 600 (H)
	Brightness (cd/m²)	400 cd/m²	250 cd/m²	400 cd/m²	400 cd/m²
	Contrast Ratio	500:1	500:1	400:1	700:1
	LCD Color	262K/16.2M	16.2 M	262K	262K/16.2M
	Pixel Pitch (mm)	0.1905(H) x 0.1905(V)	0.2025(H) x 0.2025(V)	0.2175 (H) x 0.2275 (V)	0.264 (H) x 0.264 (V)
	Viewing Angle (H-V)	160°(H) / 160°(V)	140°(H) / 130°(V)	140°(H) / 120°(V)	160°(H) / 140°(V)
	Backlight MTBF	30000 hrs (LED backlight)	30000 hrs (LED backlight)	30000 hrs (LED backlight)	30000 hrs (LED backlight)
System	CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU		Intel® Atom™ N2800 dual core 1.86 GHz CPU	
	Chipset	Intel® NM10			
	RAM	Support One 800 MHz 204-pin DDR3 SO-DIMM slot (max. 2GB) pre-installed wiith 2GB		Support One 1066MHz 204-pin DDR3 SO-DIMM slot (max. 4GB) pre-installed wiith 2GB	
	Ethernet	Realtek RTL8111E PCIe GbE controller support ASF2.0			
	SSD	PCIe mSATA		2.5" SATA 2.0 HDD bay	
	Input / Output	1 x RS-232 COM Port (DB-9) 1 x 422/485 COM Port (RJ-11) 1 x GbE LAN (RJ-45) 2 x USB2.0 2 x USB3.0 1 x Audio jack 1 x Display port	1 x Mini USB 2.0 port on front panel 1 x Micro SD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack	1 x RS-232 COM Port (DB-9) 1 x RS-232 COM Port (RJ-45) 1 x RS-422/485 COM Port (RJ-45) 1 x GbE LAN (RJ-45) 2 x USB 2.0 2 x USB 3.0 1 x Audio jack 1 x Display port	1 x Mini USB 2.0 port on front panel 1 x Micro SD card slot on front panel Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack
	Expansion Interface	1 x PCIe by 1 for Wi-Fi		1 x PCIe by 1 for Wi-Fi	
Other Features	Audio	AMP 0.8 W + 0.8 W		AMP 1.5 W + 1.5 W	
	Microphone	Digital Microphone		2M pixels with low light function, digital microphone	
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)			
	MSR Card Reader	MSR card reader (optional)			
	OSD Function	LCD on/off, brightness up/down, volume up/down,hotkey			
	Ambient Light Sensor	Yes			
	Infrared Remote Controller	Yes			
	Touch Screen	5-wire resistive type			
	System Cooling	Fanless			
Wireless		1 x Wireless LAN 802.11b/g/n 2T2R module (internal PCIe Mini card interface)	1 x Wireless LAN 802.11b/g/n 2T2R module (internal PCIe Mini card interface) (Optional, internal USB interface, Bluetooth V2.0+EDR)	1 x Wireless LAN 802.11 b/g/n 2T2R module (internal PCIe Mini card interface) (Optional, internal USB interface, Bluetooth V2.0+EDR)	
Physical	Construction Front Panel	PC + ABS plastic front frame			
	Mounting	Wall, Panel, Stand and VESA 75 mm x 75mm			
	Color	Black			
	Dimensions (mm)	208 (W) x 158.5 (H) x 45.9 (D)	215 (W) x 188 (H) x 46 (D)	280 (W) x 198 (H) x 51(D)	282.5 (W) x 242.7 (H) x 51 (D)
	Weight (N/G)	1.12 kg / 2.08 kg	1.43 kg / 2.2 kg	2.5 kg / 4.02 kg	2.98 kg / 4.5 kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 40°C		-20°C ~ 45°C	
	Storage Temperature (°C)	-20°C ~ 60°C			
	Humidity	10% to 95% (non-condensing)			
	IP Level	Front panel IP 64			
	Safety&EMC	CE / FCC			
Power	Power Supply	36W adapter Input: 90VAC~264VAC, 50/60 Hz, Output: 12VDC		60W power adapter, Input: 90VAC~264VAC, 50/60 Hz, Output: 12VDC	
	Power Requirement	9 ~ 36 VDC			
	Power Consumption	19V@1.1A (Intel® Atom™ N2600 CPU with 2GB DDR3 momory)	19V@1.1A (Intel® Atom™ N2600 CPU with 2GB DDR3 momory)	19V@1.5A (Intel® Atom™ N2800 CPU with 2GB DDR3 memory)	19V@1.6A (Intel® Atom™ N2800 CPU with 2GB DDR3 memory)

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

AFOLUX II 12.1"~15" Selection Guide

	Model	AFL2-12A-D525	AFL2-12A-HM65	AFL2-W15A-N270	AFL2-15A-H61
LCD Specifications	Size	12.1"		Wide 15.6" TFT LCD	15" (4:3)
	Resolution	1024 (W) x 768 (H)		1366 (W) x 768 (H)	1024 (W) x 768 (H)
	Brightness (cd/m²)	600		250	400
	Contrast Ratio	700:1		500:1	700:1
	LCD Color	16.2 M		16.2 M	262K/16.2M
	Pixel Pitch (mm)	0.240 (H) x 0.240 (V)		0.252 (H) x 0.252 (V)	0.297 (H) x 0.297 (V)
	Viewing Angle (H-V)	160° / 140°		110° / 85°	160° / 140°
	Backlight MTBF	50000 hrs (LED backlight)		50,000 (LED backlight)	50,000 hrs (LED backlight)
System	CPU	Intel® Atom™ D525 1.8GHz dual core processor	2nd Generation Intel® Core™ i7/ i5/ i3 and Celeron® processor	Intel® Atom™ processor N270 1.6 GHz CPU	2nd Generation Intel® Core™ i5/ i3, Pentium® processor
	Chipset	Intel® ICH8M	Intel® HM65	Intel® 945GSE + ICH7M	Intel® H61
	RAM	Support one 204-pin DDR3 SO-DIMM slot (max. 4GB)		Support one 400 MHz or 533 MHz DDR2 SO-DIMM (2 GB max.)	Support two 204-pin DDR3 SO-DIMM slot (system max. 16GB) preinstalled with 4GB (2GB x 2)
	Ethernet	Realtek RTL8111E PCIe GbE controller supports ASF 2.0			
	SSD	CF Type II socket	N/A	CF Type II	CF Type II socket
	HDD	2.5" SATA 3Gb/s SSD bay	2.5" SATA 6Gb/s SSD bay	1 x 2.5" SATA HDD Bay	2.5" SATA 3Gb/s HDD bay
	Input / Output	1 x RS-232 (DB-9 connector) 1 x RS-232 (RJ-45 connector) 1 x RS-422/485 (4-pin box header) 2 x GbE LAN (RJ-45 connector) 4 x USB 2.0 1 x Mini USB 2.0 port on front panel 1 x Audio jack (line-out) 1 x VGA port (DB-15 connector) 1 x Micro SD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack	1 x RS-232 (DB-9 connector) 1 x RS-232 (RJ-45 connector) 1 x RS-422/485 (4-pin box header) 1 x GbE LAN (RJ-45 connector) 2 x USB 2.0 2 x USB 3.0 1 x Mini USB 2.0 port on front panel 1 x Audio jack (line-out) 1 x HDMI port 1 x Micro SD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack	1 x RS-232 COM port 1 x RS-232/422/485 COM port 1 x RJ-45 for GbE LAN 2 x USB 2.0 1 x Power switch 1 x Reset button 1 x Audio port (Line out) 1 x VGA 1 x Power jack 1 x External SATA 1 x 8-bit digital I/O, 4-bit input/4-bit output (optional)	2 x RS-232 (DB-9 connector) 1 x GbE LAN (RJ-45 connector) on left side 1 x RS-422/485 (RJ-45 connector) 3 x USB 2.0 (two on the bottom, one on the left) 2 x USB 3.0 1 x Mini USB port on front panel 1 x Micro SD card slot on front panel 1 x Line out, MIC on left side 1 x VGA port 1 x HDMI port 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x 9 ~ 36V DC jack
	Expansion Interface	1 x PCIe Mini slot for Wi-Fi 1 x PCIe Mini slot reserved supporting mSATA			1 x PCIe Mini slot for Wi-Fi, 1 x PCIe Mini slot reserved
Other Features	Audio	AMP 3W + 3W (internal speaker)		AMP 1.5 W + 1.5 W (internal speaker)	AMP 2W + 2W (internal speaker)
	Camera	1.3 megapixels with low light function			2 M pixels with low light function
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)			EM 125 KHz or Mifare 13.56 MHz card reader (optional)
	MSR Card Reader	MSR card reader (optional)			
	OSD Function	LCD on/off, brightness up/down, volume up/down, Hot Key			
	Ambient Light Sensor	Yes			
	Infrared Remote Controller	Yes		LCD on/off, brightness up/down, volume up/down	Yes
	Touch Screen	5-wire resistive type or projected capacitive type touch screen		Projected capacitive type flat touch screen/ Resistive type 5-wire flat touch screen	5-wire resistive type or projected capacitive type touch screen
	System Cooling	Fanless	Smart fan		N/A
Wireless	Wireless	1 x Wireless LAN 802.11 b/g/n 2T2R module (internal PCIe Mini card interface) (Optional, internal USB interface, Bluetooth V2.0+EDR)		1 x Wireless LAN 802.11 b/g/n module (internal PCIe Mini card interface)	1 x Wireless LAN 802.11 b/g/n module (internal PCIe Mini card interface) (optional internal USB interface, Bluetooth V2.0+EDR)
Physical	Construction Front Panel	PC + ABS Plastic		PC + ABS plastic front frame	PC + ABS Plastic
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100 mm x 100 mm		VESA 100 mm x 100 mm	Wall, Stand, Arm VESA 100mm x 100mm
	Color	Black			
	Dimensions (WxHxD) (mm)	310 x 265 x 52.6		400 x 267 x 54	363.2 x 305.1 x 58.8
	Weight (N/G)	3.2 kg / 5.5 kg	3.8 kg / 6.1 kg	3.8 kg	5.2 kg / 7.3 kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 50°C	-20°C ~ 50°C with SSD	-10°C ~ 50°C	-20°C ~ 50°C
	Storage Temperature (°C)	-20°C ~ 60°C			
	Humidity	10% to 95% (non-condensing)			
	IP Level	IP 64 compliant front panel			
	Safety&EMC	CE / FCC			
Power	Power Supply	60W power adapter Input: 100VAC~240VAC, 50/60 Hz Output: 19VDC	90W power adapter Input: 100VAC~240VAC, 50/60Hz Output: 19VDC	60W power adapter Input: 90VAC~264VAC, 50/60 Hz Output: 12VDC	90W power adapter Input:100 V AC ~ 240 V AC, 50 / 60Hz, Output: 19 V DC
	Power Requirement	9 ~ 36 VDC		12VDC	
	Power Consumption	19V@2.2A (Intel® ATOM™ D525 CPU with 800MHz 2GB DDR3 memory)	19V@2.68A (Intel® Core™ i5-2510E processor with 4GB DDR3 memory)	12V@4.25A (Intel® ATOM™ N270 CPU with 667MHz 2GB DDR2 memory)	19V@3.42A (Intel® Core™ i3-2100T CPU with 4GB 1333 Mhz DDR3 memory)

1 — IEI Mobile Solutions
2 — Automation Panel Solutions
3 — RISC-based Solutions
4 — PACSmate Medical Solutions
5 — Optional Peripherals

2-8 — AFOLUX GEN II-Intro-2013-V10

AFOLUX II   15"~21.5"" Selection Guide

New

Model		AFL2-W15B-H61	AFL2-17A-H61	AFL2-W19A-H61	AFL2-W21A-H61
LCD Specifications	Size	15.6" (16:9)	17" (4:3)	W18.9" (16:10)	21.5'' (16:9)
	Resolution	1366 (W) x 768 (H)	1280 (W) x 1024 (H)	1440 (W) X 900 (H)	1920(W) x 1080(H)
	Brightness (cd/m²)	300	350	250	250
	Contrast Ratio	500:1	1000:1	1000:1	1000 : 1
	LCD Color	16.7M	16.7M	16.7M	16.7M
	Pixel Pitch (mm)	0.252 (H) x 0.252 (V)	0.264 (H) x 0.264 (V)	0.2835 (H) x 0.2835 (V)	0.248mm x 0.248mm
	Viewing Angle (H-V)	170° / 160°	170° / 160°	170° / 160°	165° / 165°
	Backlight MTBF	50,000 hrs (LED backlight)	50,000 (LED backlight)	30,000 (LED backlight)	30000 (LED backlight)
System	CPU	2nd/3rd Generation of Intel®Core™ i5/i3, and Pentium® processors			
	Chipset	Intel® H61			
	RAM	Support two 204-pin DDR3 SO-DIMM slot (system Max. 16GB) preinstalled with 4GB (2GB x 2)			Support two 204-pin DDR3 SO-DIMM slots (System Max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supports ASF 2.0	Realtek RTL8111E PCIe GbE controller supports ASF 2.0		Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 and Wake on LAN (default: on)
	SSD	CF Type II socket	N/A		N/A
	HDD	2.5" SATA 3Gb/s HDD bay			
	CD-ROM	N/A	1 x Slim Type CD-ROM bay		CD-ROM 1 x Slim Type CD-ROM bay
	Input / Output	2 x RS-232 (DB-9 connector) 1 x GbE LAN (RJ-45 connector) on left side 1 x RS-422/485 (RJ-45 connector) 3 x USB 2.0 (two on the bottom, one on the left) 2 x USB 3.0 1 x Mini USB port on front panel 1 x Micro SD card slot on front panel 1 x Line out, MIC on left side 1 x VGA port 1 x HDMI port 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x 9 ~ 36V DC jack	2 x RS-232 (DB-9 connector) 1 x RS-422/485 (DB-9 connector) 2 x GbE LAN (one on the bottom, one on the left) 2 x USB 3.0 3 x USB 2.0 (two on the bottom, one on the left) 1 x Mini USB port on front panel 1 x Micro SD card slot on front panel	1 x Line-out, Mic (on the left) 1 x VGA port DB-15 connector) 1 x HDMI port 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x 9 ~ 36V DC input jack	2 x RS232 (DB-9 Connector) 1 x RS422/485 COM Port (DB-9 connector) 2 x GbE LAN (RJ-45 connector) 3 x USB 2.0 2 x USB 3.0 1 x HDMI on bottom side 1 x Line out/MIC on left side 1 x VGA port (DB-15 Connector) 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Clear CMOS button 1 x K-Type 1 x 9~36V DC jack
	Expansion Interface	1 x PCIe Mini slot for Wi-Fi, 1 x PCIe Mini slot reserved			1 x PCIe Mini for Wi-Fi Module 1 x PCIe Mini reserved suppor mSATA
Other Features	Audio	AMP 2W + 2W (internal speaker)			Amplifier 3W + 3W
	Camera	2 M pixels with low light function			
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)			
	MSR Card Reader	MSR card reader (optional)			
	TPM	Reserved by pin-header			
	OSD Function	LCD on/off, brightness up/down, volume up/down, Hot Key			
	Ambient Light Sensor	Yes			
	Infrared Remote Controller	Yes			
	Touch Screen	5-wire resistive type or projected capacitive type touch screen			
	LED Light Bar	N/A	Yes		Yes
	System Cooling	Light fanless (smart fan operates above default temperature setting)			
Wireless		1 x Wireless LAN 802.11 b/g/n module (internal PCIe Mini card interface) 1 x Bluetooth function (optional internal USB interface, Bluetooth V2.0+EDR)			
Physical	Construction Front Panel	PC + ABS Plastic			
	Mounting	Panel, Wall, Rack, Stand, Arm VESA 100mm x 100mm	Panel, Wall, Rack, Stand, Arm VESA 100mm x 100mm	Panel, Wall, Stand, Arm VESA 100mm x 100mm	Wall, Panel, Stand and VESA 100 mm x 100mm
	Color	Black			
	Dimensions (WxHxD)(mm)	399.4 x 271.2 x 58.8	418 x 378 x 65	488 x 361 x 65	540 x 362 x 65, without LED Light Bar 600 x 360 x 65 , withLED Light Bar
	Weight (N/G)	4.5 kg / 6.5 Kg	6.9 kg / 9.0 kg	7.3 kg / 10 Kg	6.9 Kg / 9 Kg (without LED Light Bar) 7.3 Kg / 9.4 Kg (with LED Light Bar)
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 50°C	-20°C ~ 40°C		-10°C ~ 50°C
	Storage Temperature (°C)	-20°C ~ 60°C			
	Humidity	10% to 95% (non-condensing)			
	IP Level	IP 64 compliant front panel			
	Safety&EMC	CE / FCC			
Power	Power Supply	90W power adapter Input:100 V AC ~ 240 V AC, 50 / 60Hz, Output: 19 V DC	120W power adapter Input:100 V AC ~ 240 V AC, 50 / 60Hz, Output: 19 V DC		
	Power Requirement	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC
	Power Consumption	19V@3.95A (Intel® Core™ i3-2120 CPU with 4GB 1333 Mhz DDR3 memory)	19V@5.3A (Intel® Core™ i7-2600S CPU with 4GB 1333 Mhz 4GB DDR3 memory)	19V@5.58A (Intel® Core™ i7-2600S CPU with 4GB 1333 Mhz 4GB DDR3 memory)	

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

AFL2-W07A-N26

Intel® Atom™ N2600 Dual Core Solution   **New**

AFL2-08A-N26

Intel® Atom™ N2600 Dual Core Solution   **New**

AFL2-W07A-N26

Features

- Flat-bezel LCD with LED backlight
- Intel® Atom™ N2600 dual core 1.6 GHz processor
- One 800 MHz 204-pin DDR3 SO-DIMM slot (system max. 2GB) pre-installed with 2GB
- 5-wire resistive type touch screen supported
- Wi-Fi 802.11b/g/n 2T2R high speed wireless
- EM or Mifare RFID reader
- IP64 compliant front panel
- Auto dimming control

Wireless 802.11 b/g/n | RFID Technology EM / Miface | Speakers | Microphone | Touch Screen | -20°C~40°C | IP64

Specifications

	Model	AFL2-W07A-N26	AFL2-08A-N26
LCD Specifications	Size	Wide 7"	8''
	Resolution	800 (W) x 480 (H)	800 (W) x 600 (H)
	Brightness (cd/m²)	400 cd/m²	250 cd/m²
	Contrast Ratio	500:1	500:1
	LCD Color	262K/16.2M	16.2 M
	Pixel Pitch (mm)	0.1905(H) x 0.1905(V)	0.2025(H) x 0.2025(V)
	Viewing Angle (H-V)	160°(H) / 160°(V)	140°(H) / 130°(V)
	Backlight MTBF	30000 hrs (LED backlight)	30000 hrs (LED backlight)
System	CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU	
	Chipset	Intel® NM10	
	RAM	Support One 800 MHz 204-pin DDR3 SO-DIMM slot (max. 2GB) pre-installed wiith 2GB	
	Ethernet	Realtek RTL8111E PCIe GbE controller support ASF2.0	
	SSD	PCIe mSATA	
	Input / Output	1 × RS-232 COM Port (DB-9) 1 × 422/485 COM Port (RJ-11) 1 × GbE LAN (RJ-45) 2 × USB2.0 2 × USB3.0 1 × Audio jack 1 × Display port	1 x Mini USB 2.0 port on front panel 1 x Micro SD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack
	Expansion Interface	1 x PCIe by 1 for Wi-Fi	
Other Features	Audio	AMP 0.8 W + 0.8 W	
	Microphone	Digital Microphone	
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)	
	MSR Card Reader	MSR card reader (optional)	
	OSD Function	LCD on/off, brightness up/down, volume up/down,hotkey	
	Ambient Light Sensor	Yes	
	Infrared Remote Controller	Yes	
	Touch Screen	5-wire resistive type	
	System Cooling	Fanless	
Wireless		1 x Wireless LAN 802.11b/g/n 2T2R module (internal PCIe Mini card interface)	1 x Wireless LAN 802.11b/g/n 2T2R module (internal PCIe Mini card interface) (Optional, internal USB interface, Bluetooth V2.0+EDR)
Physical	Construction Front Panel	PC + ABS plastic front frame	
	Mounting	Wall, Panel, Stand and VESA 75 mm x 75mm	
	Color	Black	
	Dimensions (WxHxD)(mm)	208 x 158.5 x 45.9	215 x 188 x 46
	Weight (N/G)	1.12 kg / 2.08 kg	1.43 kg / 2.2 kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 40°C	
	Storage Temperature (°C)	-20°C ~ 60°C	
	Humidity	10% to 95% (non-condensing)	
	IP Level	Front panel IP 64	
	Safety&EMC	CE / FCC	
Power	Power Supply	36W power adapter Input: 90VAC~264VAC, 50/60 Hz, Output: 12VDC	
	Power Requirement	9 ~ 36 VDC	
	Power Consumption	19V@1.1A (Intel® Atom™ N2600 CPU with 2GB DDR3 momory)	19V@1.1A (Intel® Atom™ N2600 CPU with 2GB DDR3 momory)

1 IEI Mobile Solutions

2 Automation Panel Solutions
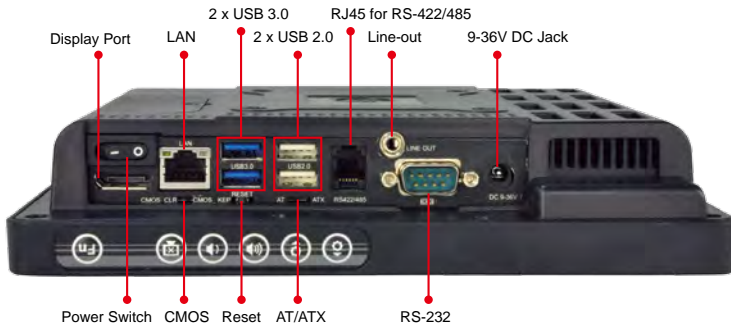
3 RISC-based Solutions

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5 Optional Peripherals

Rich I/O Interface

AFL2-W07A-N26
AFL2-08A-N26

Display Port
LAN
2 x USB 3.0
2 x USB 2.0
RJ45 for RS-422/485
Line-out
9-36V DC Jack

1 x Mini USB port
1 x Micro SD card slot

Power Switch   CMOS   Reset   AT/ATX   RS-232

Fn Fn

Backlight On/Off

Audio -

Audio +

Brightness -

Brightness +

Fn + RFID Enable/Disable

Fn + Audio Mute

Fn + Camera Enable/Disable

Fn + Front Side USB Enable/Disable

Fn + Power On / Off

Options

Item	AFL2-W07A-N26	AFL2-08A-N26
Panel Mounting Kit	AFL2PK-08A	
Wall Mounting Kit	AFLWK-12	
Rack Mounting Kit	AFL2RK-W07A	AFL2RK-08A
Stand	STAND-A08/STAND-B08/STAND-C12	
V-stand	VSTAND-A07	
Hybrid Card Reader	AFL2P-08AMSI-U-R10	
Magnetic stripe reader	AFL2P-08AMSR-U-R10	
Bluetooth Module Kit	AFL2-BT-KIT01-R11	
EM RFID Reader	AFL2-EM-RFID-KIT01-R10	
Mifare RFID Reader	AFL2-MF-RFID-KIT02-R10	
OS: Win XPE (CD-ROM)	AFL2-W07A-CV-XPE-R10	
OS: Linux (CD-ROM)	AFL2-W07A-CV-LNX-R10	
OS: Win 7 Embedded (DVD-ROM)	AFL2-W07A-CV-WES7P-R10 (for Projected Capacitive Touch) AFL2-W07A-CV-WES7E-R10 (for Resistive Touch)	

Packing List

Item	P/N	Q'ty	Description
Utility CD		1	drivers and user manual
One Key Recovery CD		1	
Power adapter		1	
Power cord	32702-000200-100-RS	1	European standard, 1830mm
Power transfer cord	32702-000300-100-RS	1	
RJ-11 to DB-9 COM port cable		1	
IR Remote Controller	7Z000-SLPCB001-RS	1	
Pen	43125-0002C0-00-RS	1	For Resistive Touch

Ordering Information

Part No.	Description
AFL2-W07A-N26/R/2G-R10	7" 350 cd/m² WVGA fanless panel PC with Intel® Atom™ cedarview N2600 dual core 1.6GHz, 802.11b/g/n wireless module, resistive touch screen, microphone, 2GB DDR3 RAM, R10
AFL2-08A-N26/R/2G-R10	8" 250 cd/m² SVGA fanless panel PC with Intel® Atom™ cedarview N2600 dual core 1.6GHz, 802.11b/g/n wireless module, resistive touch screen, microphone, 2GB DDR3 RAM, R10

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5 Optional Peripherals

AFL2-W07A Dimensions
(Unit: mm)
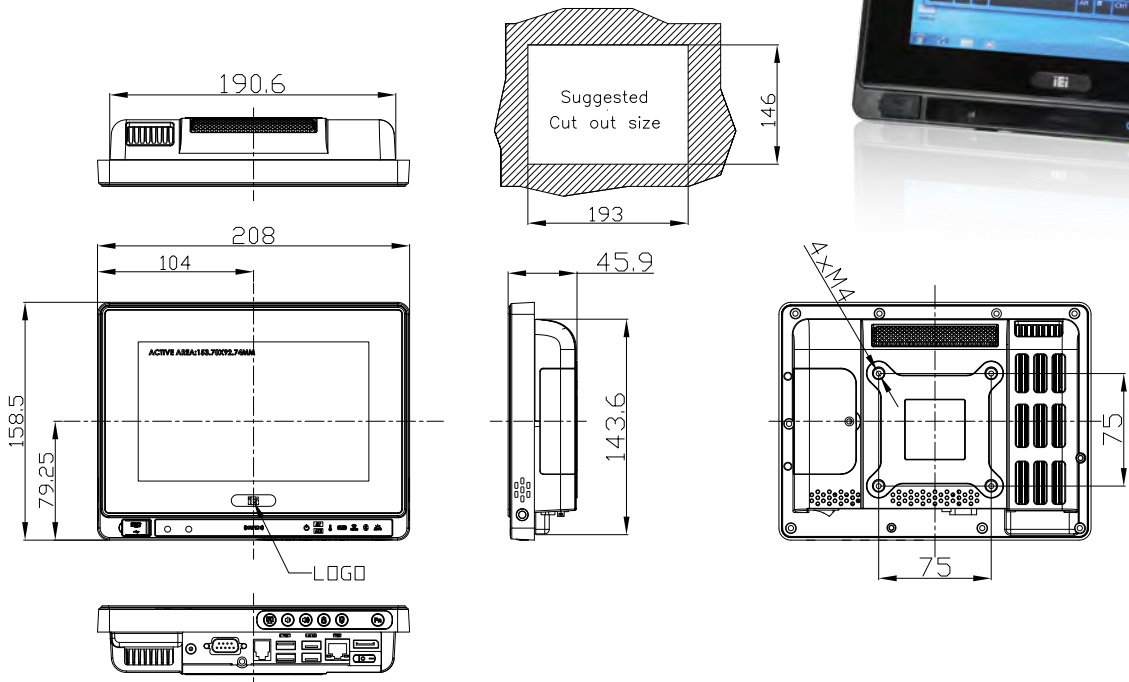
190.6

Suggested
Cut out size

146

193

208

104

45.9

4XM4

ACTIVE AREA:153.70X92.76MM

158.5

79.25

143.6

75

75

LOGO

AFL2-08A Dimensions
(Unit: mm)

198.2

Suggested
Cut out size

176

201

215

107.5

46

4XM4

ACTIVE AREA:162X122.8MM

188

94

173

75

75

LOGO

AFL2-W10A-N28
Intel® Atom™ N2800 Dual Core Solution **New**

AFL2-10A-N28
Intel® Atom™ N2800 Dual Core Solution **New**

AFL2-W10A-N28

Features

● Flat-bezel LCD with LED backlight
● Intel® Atom™ N2800 dual core 1.86 GHz processor
● One 1066 MHz 204-pin DDR3 SO-DIMM slot (system max. 4GB) pre-installed with 2GB
● 5-wire resistive type touch screen supported
● Wi-Fi 802.11b/g/n 2T2R high speed wireless
● EM or Mifare RFID reader
● Built-in 2M pixels webcam with AF, AE and AWB capabilities
● Built-in two 1.5W speakers and microphone
● IP 64 compliant front panel

| Wireless 802.11 b/g/n | RFID Technology EM / Mifare | Speakers | Microphone | Camera | Touch Screen | -20°C~45°C | IP64 |

Specifications

Model		AFL2-W10A-N28	AFL2-10A-N28
LCD Specifications	Size	Wide 10.2"	10.4"
	Resolution	1024 (W) x 600 (H)	800 (W) x 600 (H)
	Brightness (cd/m²)	400 cd/m²	400 cd/m²
	Contrast Ratio	400:1	700:1
	LCD Color	262K	262K/16.2M
	Pixel Pitch (mm)	0.2175 (H) x 0.2275 (V)	0.264 (H) x 0.264 (V)
	Viewing Angle (H-V)	140°(H) / 120°(V)	160°(H) / 140°(V)
	Backlight MTBF	30000 hrs (LED backlight)	30000 hrs (LED backlight)
System	CPU	Intel® Atom™ N2800 dual core 1.86 GHz CPU	
	Chipset	Intel® NM10	
	RAM	Support one 1066MHz 204-pin DDR3 SO-DIMM slot (max. 4GB) pre-installed wiith 2GB	
	Ethernet	Realtek RTL8111E PCIe GbE controller support ASF2.0	
	HDD	2.5" SATA 2.0 HDD bay	
	Input / Output	1 × RS-232 COM Port (DB-9) 1 × RS-232 COM Port (RJ-45) 1 × RS-422/485 COM Port (RJ-45) 1 × GbE LAN (RJ-45) 2 × USB 2.0 2 × USB 3.0 1 × Audio jack 1 × Display port	1 x Mini USB 2.0 port on front panel 1 x Micro SD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack
	Expansion Interface	1 x PCIe by 1 & USB 2.0 for Wi-Fi	
Other Features	Audio	AMP 1.5 W + 1.5 W	
	Camera	2M pixels with low light function, digital microphone	
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)	
	MSR Card Reader	MSR card reader (optional)	
	OSD Function	LCD on/off, brightness up/down, volume up/down, hotkey	
	Touch Screen	5-wire resistive type	
	System Cooling	Fanless	
Wireless		1 x Wireless LAN 802.11 b/g/n 2T2R module (internal PCIe Mini card interface) (Optional, internal USB interface, Bluetooth V2.0+EDR)	
Physical	Construction Front Panel	PC + ABS plastic front frame	
	Mounting	Wall, Rack, Stand and Arm VESA 75mm x 75mm	
	Color	Black	
	Dimensions (WxHxD) (mm)	280 x 198 x 51	282.5 x 242.7 x 51
	Weight (N/G)	2.5 kg / 4.02 kg	2.98 kg / 4.5 kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 45°C	
	Storage Temperature (°C)	-20°C ~ 60°C	
	Humidity	10% to 95% (non-condensing)	
	IP Level	IP 64 compliant front panel	
	Safety&EMC	CE / FCC	
Power	Power Supply	60W power adapter, Input: 90VAC~264VAC, 50/60 Hz, Output: 12VDC	
	Power Requirement	9 ~ 36 VDC	
	Power Consumption	19V@1.5A (Intel® Atom™ N2800 CPU with 2GB DDR3 memory)	19V@1.6A (Intel® Atom™ N2800 CPU with 2GB DDR3 memory)

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

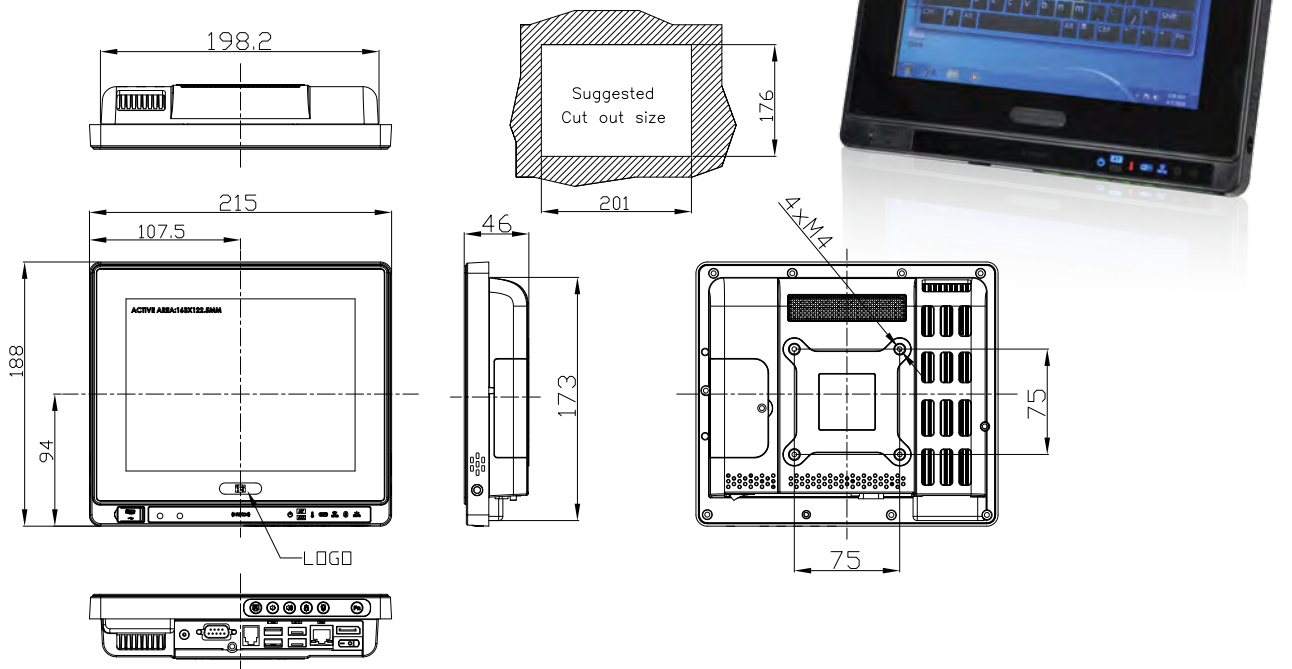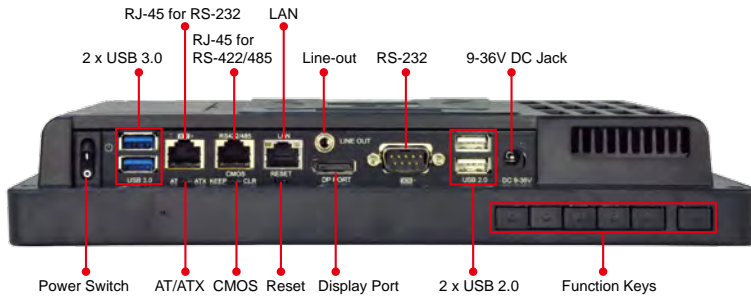**4** PACSmate Medical Solutions

5 Optional Peripherals

Rich I/O Interface

AFL2-W10A-N28
AFL2-10A-N28

1 x Mini USB port
1 x Micro SD card slot

RJ-45 for RS-232   LAN
RJ-45 for
2 x USB 3.0   RS-422/485   Line-out   RS-232   9-36V DC Jack

Power Switch   AT/ATX   CMOS   Reset   Display Port   2 x USB 2.0   Function Keys

Fn Fn
Backlight On/Off
Audio -
Audio +
Brightness -
Brightness +

Fn + RFID Enable/Disable
Fn + Audio Mute
Fn + Camera Enable/Disable
Fn + Front Side USB Enable/Disable
Fn + Power On / Off

Options

Item	AFL2-W10A-N28	AFL2-10A-N28
Panel Mounting Kit	AFL2PK-10A	
Wall Mounting Kit	AFLWK-12	
Rack Mounting Kit	AFL2RK-W10A	AFL2RK-10A
Stand	STAND-C12/STAND-B19	
V-stand	VSTAND-A10	
Hybrid Card Reader	AFL2P-12AMSI-U-R10	
Magnetic Stripe Reader	AFL2P-12AMSR-U-R10	
Bluetooth Module Kit	AFL2-BT-KIT01-R11	
EM RFID Reader	AFL2-EM-RFID-KIT01-R10	
Mifare RFID Reader	AFL2-MF-RFID-KIT02-R10	
OS: Win XPE (CD-ROM)	AFL2-W10A-CV-XPE-R10	
OS: Linux (CD-ROM)	AFL2-W10A-CV-LNX-R10	
OS: Win 7 Embedded (DVD-ROM)	AFL2-W10A-CV-WES7P-R10 (for Projected Capacitive Touch) AFL2-W10A-CV-WES7E-R10 (for Resistive Touch)	

Packing List

Item	P/N	Q'ty	Description
Utility CD		1	drivers and user manual
One Key Recovery CD		1	
Power adapter		1	
Power cord	32702-000200-100-RS	1	European standard, 1830mm
Power transfer cord	32702-000300-100-RS	1	

Ordering Information

Part Number	Description
AFL2-W10A-N28/R/2G-R10	10.2" 400cd/m² WSVGA fanless panel PC with Intel® Atom™ cedarview N2800 dual core 1.86GHz, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, 2GB DDR3 RAM, R10
AFL2-10A-N28/R/2G-R10	10.4" 400cd/m² SVGA fanless panel PC with Intel® Atom™ cedarview N2800 dual core 1.86GHz, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, 2GB DDR3 RAM, R10

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IEI Mobile Solutions

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Optional Peripherals

AFL2-W10A Dimensions
(Unit: mm)

261

177

suggested cut out size

280
140
198
99

Active Area=222.72*130.5

51
27.5
172.88

258
75
2*M3
75
75
4xM4

AFL2-10A Dimensions
(Unit: mm)

262

205

SUGGESTED CUT OUT SIZE

282.5
141.25
242.7
121.35

ACTIVE AREA=211.2*158.4

51
27.5
201.83

258.7
75
4xM4
75

1
IEI Mobile Solutions

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Optional Peripherals

AFL2-W10A-2013-V10
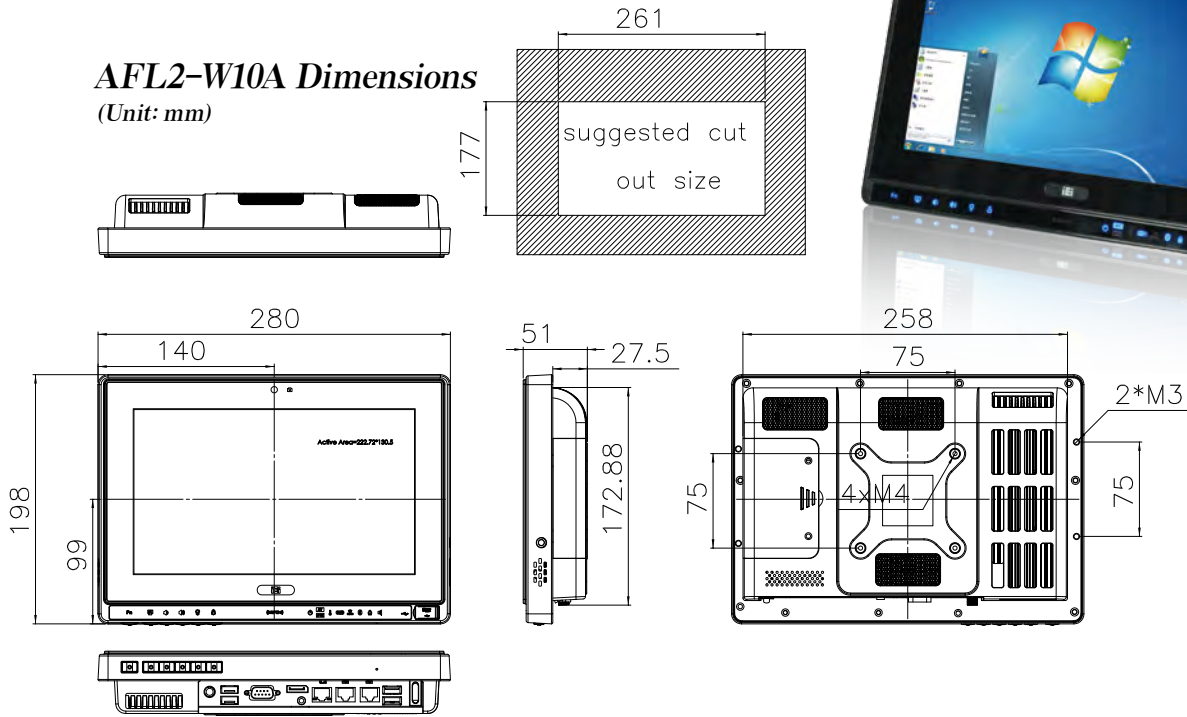2-15

AFL2-12A-HM65
Intel® 2nd Gen Core™ i7/i5/i3 Solution

AFL2-12A-D525
Intel® Atom™ D525 Dual Core Solution

Features

- 12.1" 600nits 1024 x 768 flat-bezel LCD with LED backlight
- Supports projected capacitive touchscreen or 5-wire resistive type touchscreen
- Built-in two 3W speakers and microphone
- GbE LAN for high speed network applications
- One 204-pin DDR3 SO-DIMM slot (system max. 4GB)
- Wi-Fi 802.11b/g/n 2T2R high speed wireless
- EM or Mifare RFID reader
- IP 64 compliant front panel
- Auto-dimming control
- Built-in 1.3 megapixels webcam with AF AE and AWB capabilities
- Wide range 9~36 VDC input

Wireless 802.11 b/g/n | EM / Mifare RFID Technology | Speakers | Microphone | Camera | Touch Screen | -20°C~50°C | IP64

Specifications

	Model	AFL2-12A-D525 Fanless		AFL2-12A-HM65	
LCD Specifications	Size	12.1"			
	Resolution	1024 (W) x 768 (H)			
	Brightness (cd/m²)	600			
	Contrast Ratio	700:1			
	LCD Color	16.2 M			
	Pixel Pitch (mm)	0.240 (H) x 0.240 (V)			
	Viewing Angle (H-V)	160° / 140°			
	Backlight MTBF	50000 hrs (LED backlight)			
System	CPU	Intel® Atom™ D525 1.8GHz dual core processor		2nd Generation Intel® Core™ i7/ i5/ i3 and Celeron® processor	
	Chipset	Intel® ICH8M		Intel® HM65	
	RAM	Support one 204-pin DDR3 SO-DIMM slot (Max. 4GB)			
	Ethernet	Realtek RTL8111E PCIe GbE controller supports ASF 2.0			
	SSD	CF Type II socket		N/A	
	HDD	2.5" SATA 3Gb/s SSD bay		2.5" SATA 6Gb/s SSD bay	
	Input / Output	1 x RS-232 (DB-9) 1 x RS-232 (RJ-45) 1 x RS-422/485 (4-pin box header) 2 x GbE LAN (RJ-45) 4 x USB 2.0 1 x Mini USB 2.0 port on front panel 1 x Audio jack (line-out)	1 x VGA port (DB-15) 1 x Micro SD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack	1 x RS-232 (DB-9) 1 x RS-232 (RJ-45) 1 x RS-422/485 (4-pin box header) 1 x GbE LAN (RJ-45) 2 x USB 2.0 2 x USB 3.0 1 x Mini USB 2.0 port on front panel 1 x Audio jack (line-out)	1 x HDMI port 1 x Micro SD card slot on front panel 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x DC input jack
	Expansion Interface	1 x PCIe Mini slot for Wi-Fi 1 x PCIe Mini slot reserved supporting mSATA			
Other Features	Audio	AMP 3W + 3W (internal speaker)			
	Camera	1.3 M pixels with low light function			
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)			
	MSR Card Reader	MSR card reader (optional)			
	OSD Function	LCD on/off, brightness up/down, volume up/down, Hot Key			
	Ambient Light Sensor	Yes			
	Infrared Remote Controller	Yes			
	Touch Screen	5-wire resistive type or projected capacitive type touch screen			
	System Cooling	Fanless		Smart fan	
Wireless		1 x Wireless LAN 802.11 b/g/n 2T2R module (internal PCIe Mini card interface) (Optional, internal USB interface, Bluetooth V2.0+EDR)			
Physical	Construction Front Panel	PC + ABS Plastic			
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100 mm x 100 mm			
	Color	Black			
	Dimensions (WxHxD)(mm)	310 x 265 x 52.6			
	Weight (N/G)	3.2 kg / 5.5 kg		3.8 kg / 6.1 kg	
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 50°C		-20°C ~ 50°C with SSD	
	Storage Temperature (°C)	-20°C ~ 60°C		-20°C ~ 60°C	
	Humidity	10% to 95% (non-condensing)			
	IP Level	IP 64 compliant front panel			
	Safety&EMC	CE / FCC			
Power	Power Supply	60W power adapter Input: 100VAC~240VAC, 50/60 Hz Output: 19VDC		90W power adapter Input: 100VAC~240VAC, 50/60Hz Output: 19VDC	
	Power Requirement	9 ~ 36 VDC			
	Power Consumption	19V@2.2A (Intel® ATOM™ D525 CPU with 800MHz 2GB DDR3 memory)		19V@2.68A (Intel® Core™ i5-2510E processor with 4GB DDR3 memory)	

Ordering Information

●AFL2-12A-D525

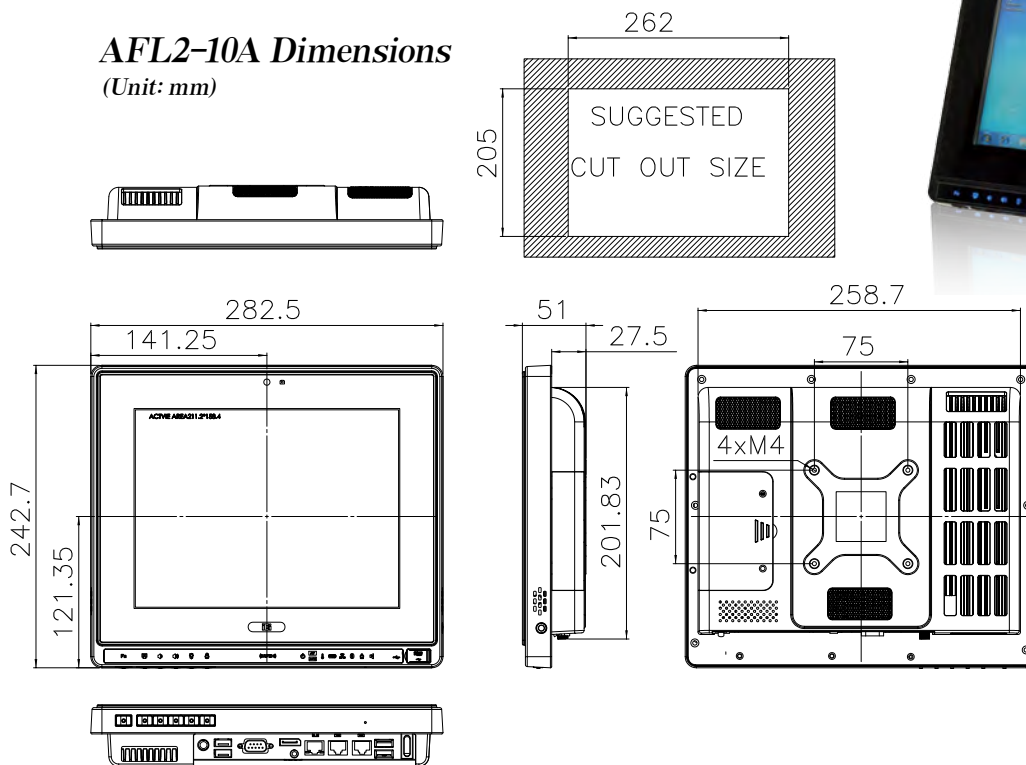| Part No.		Description
Resistive Touch Panel Screen	AFL2-12A-D525/R/1G-R12	12.1" 600cd/m² XGA fanless panel PC with Intel® Atom™ D525 dual core 1.8GHz, 802.11b/g/n wireless module, resistive touch screen, 1.3 M camera, microphone,1 GB DDR3 RAM, Dual GbE LAN, R12
Projective Capacitive Touch Screen	AFL2-12A-D525/PC/1G-R12	12.1" 600cd/m² XGA fanless panel PC with Intel® Atom™ D525 dual core 1.8GHz, 802.11b/g/n wireless module, projected capacitive touchscreen, 1.3 M camera, microphone,1 GB DDR3 RAM, Dual GbE LAN, R12

●AFL2-12A-HM65

Part No.		Description
Resistive Touch Screen	AFL2-12A-HM65/R-R11	12.1" 600cd/m² XGA panel PC, 802.11b/g/n wireless module, resistive touch screen, 1.3M camera, microphone, Single GbE LAN, R11
Projective Capacitive Touch Screen	AFL2-12A-HM65/PC-R11	12.1" 600cd/m² XGA panel PC, 802.11b/g/n wireless module, projected capacitive touchscreen, 1.3M camera, microphone, Single GbE LAN, R11
CPU Selection	CPU-MB-i7-2640M	2nd Generation Intel® Core™ i7 Processor [Mobile], PPGA-988, dual core 2.8GHz, 35W, iAMT
	CPU-MB-i5-2510E	2nd Generation Intel® Core™ i5 Processor [Mobile], PPGA-988, dual core 2.5GHz, 35W, iAMT
	CPU-MB-i3-2310M	2nd Generation Intel® Core™ i3 Processor [Mobile], PPGA-988, dual core 2.1GHz, 35W
	CPU-MB-CM-B810	Intel® Celeron® Mobile Processor, PPGA-988, dual core 1.6GHz, 35 W
	CPU-MB-CM-B710	Intel® Celeron® Mobile Processor, PPGA-988, single core 1.6GHz, 35 W
Memory Selection	DDR3-SO-1333-1GB	SO-DIMM DDR3 1333MHz 1GB
	DDR3-SO-1333-2GB	SO-DIMM DDR3 1333MHz 2GB
	DDR3-SO-1333-4GB	SO-DIMM DDR3 1333MHz 4GB

Options

Item	AFL2-12A-D525	AFL2-12A-HM65
Panel Mounting Kit	AFLPK-15	
Wall Mounting Kit	AFLWK-19/AFLWK-19B	
Rack Mounting Kit	AFL2RK-12	
Arm	ARM-11-RS	
Stand	STAND-A12/STAND-A19/STAND-B19/STAND-C12	
V-Stand	VSTAND-A12	
Hybrid Card Reader Kit	AFL2P-12AMSI-U-R10	
Bluetooth Module Kit	AFL2-BT-KIT01-R11	
Magnetic Stripe Reader Kit	AFL2P-12AMSR-U-R10	
EM RFID Reader	AFL2-EM-RFID-KIT01-R10	
Mifare RFID Reader	AFL2-MF-RFID-KIT02-R10	
OS: Win CE 6.0 (128MB CF Card)	AFL2CF-12-D525-CE060-128M-R10	AFL2-12A-HM65-CE060-R10*
OS: Win XPE (2GB CF Card)	AFL2CF-12-D525-XPE-2G-R10	AFL2-12A-HM65-XPE-R10*
OS: Win XPE (4GB CF Card)	AFL2CF-12-D525-XPE-4G-R10	AFL2-12A-HM65-XPE-R10*
OS: Linux (2GB CF Card)	AFL2CF-12-D525-LNX-2G-R10	AFL2-12A-HM65-LNX-R10*
OS: Win 7 Embedded (4GB CF Card)	AFL2CF-12-D525-WES7P-4G-R10 (for Projected Capacitive Touch) AFL2CF-12-D525-WES7E-4G-R10 (for Resistive Touch)	AFL2-12A-HM65-WES7P-R10* (for Projected Capacitive Touch) AFL2-12A-HM65-WES7E-R10* (for Resistive Touch)

*OS image with CD-ROM or DVD-ROM

Packing List

Item	P/N	Q'ty	Description
Utility CD		1	Drivers and user manual
One Key Recovery CD		1	
Power Adapter	63040-010065-010-RS (for AFL2-12A-D525) 63040-010090-030-RS (for AFL2-12A-HM65)	1	FSP065-RAB;90~264VAC input ; 65W ;19VDC output FSP090-D2BA1;90~264VAC input ; 90W ;19VDC output
Power Cord	32702-000401-100-RS	1	1500 mm, European Standard
Power Transfer Cord	32702-000300-100-RS	1	
M3 Screw Pack	44013-030041-RS	4	M3*4 for securing HDD
M4 Screw Pack	44403-040061-RS	4	M4*4 VESA screw
Touch Pen	43125-0002C0-00-RS	1	
RJ-45 to DB-9 COM Port Cable	32005-000200-200-RS	1	
IR Remote Controller	7Z000-SLPCB005-RS	1	
RS-422 Cable	32205-002400-100-RS	1	
Pen	43125-0002C0-00-RS	1	For Resistive Touch

Fully Integrated I/O

- DC Jack
- LAN
- 4 x USB 2.0
- Line-out
- Power Switch
- RS-422/485
- RS-232
- RS-232
- VGA
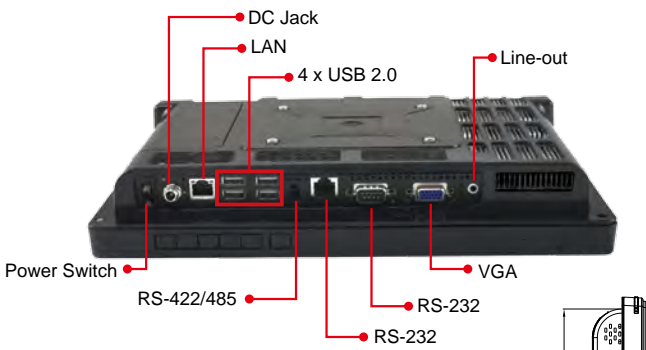
AFL2‒12A‒D525 Dimensions
(Unit: mm)

Suggested Cut out size

302.0
28.70
52.60
232.0
305.0
310.00
155.00
265.00
132.50
232.4
52.60
229.0

AFL2-12A-D525

Fully Integrated I/O

- DC Jack
- LAN
- 2 x USB 3.0
- 2 x USB 2.0
- Line-out
- Power Switch
- RS-422/485
- RS-232
- RS-232
- HDMI
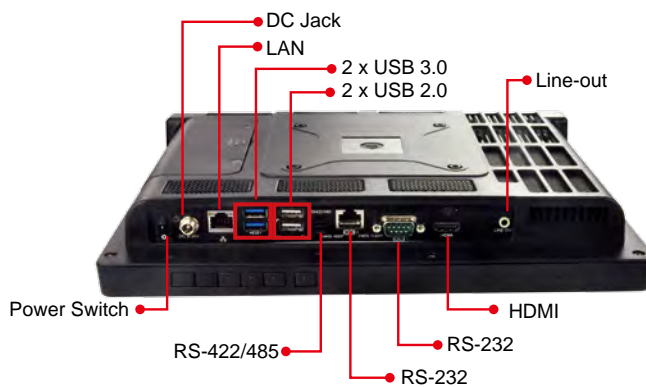
AFL2‒12A‒HM65 Dimensions
(Unit: mm)
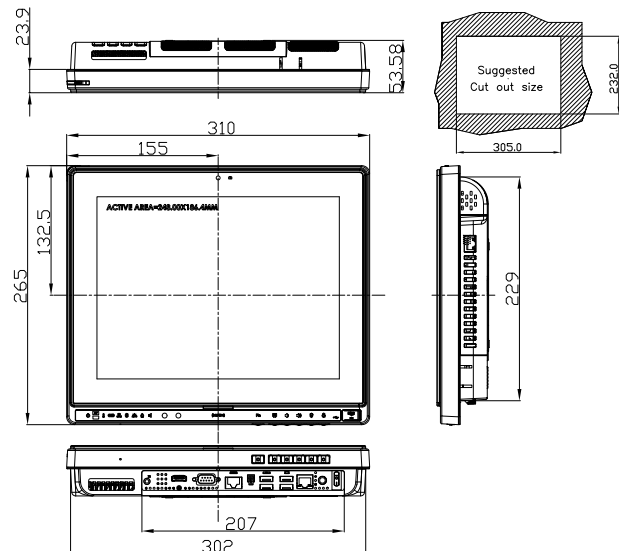
Suggested Cut out size

23.9
53.58
232.0
305.0
310
155
265
132.5
ACTIVE AREA=248.00X186.4MM
229
207
302

AFL2-12A-HM65

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

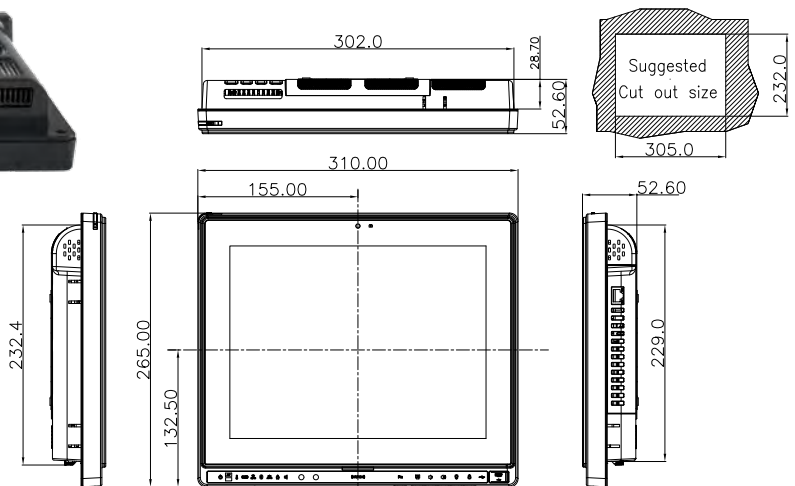2-18　　AFL2-12A-2013-V10

AFL2-15A-H61

Intel® Core™ i5/ i3 and Pentium® processor **New**

AFL2-W15B-H61

Intel® Core™ i5/ i3 and Pentium® processor **New**

Features

- Flat-bezel LCD with LED backlight
- Intel® Core™ i5/ i3 and Pentium® processor
- Two 204-pin DDR3 SO-DIMM slot (system max. 16GB) preinstalled with 4GB (2GB x 2)
- Projected capacitive touchscreen and 5-wire resistive type touchscreen supported
- Wi-Fi 802.11b/g/n 2T2R high speed wireless
- EM or Mifare RFID reader
- Built-in 2M pixels webcam with AF, AE and AWB capabilities
- Built-in two 2W speakers and microphone
- IP64 compliant front panel
- Auto dimming control
- Light fanless technology design
- K-type thermalcouple temperature sensor
- Wide range 9~36 VDC input

Specifications

AFL2-15A-H61

Wireless 802.11 b/g/n | RFID Technology EM / Mifare | Speakers | Microphone | Camera | Touch Screen | -20℃~50℃ | IP64

	Model	AFL2-15A-H61	AFL2-W15B-H61
LCD Specifications	Size	15" (4:3)	15.6″ (16:9)
	Resolution	1024 (W) x 768 (H)	1366 (W) x 768 (H)
	Brightness (cd/m²)	400	300
	Contrast Ratio	700:1	500:1
	LCD Color	262K/16.2M	16.7M
	Pixel Pitch (mm)	0.297 (H) x 0.297 (V)	0.252 (H) x 0.252 (V)
	Viewing Angle (H-V)	160° / 140°	170° / 160°
	Backlight MTBF	50,000 hrs (LED backlight)	50,000 hrs (LED backlight)
System	CPU	2nd/3rd Generation of Intel®Core™ i5/i3, and Pentium® processors	
	Chipset	Intel® H61	
	RAM	Support two 204-pin DDR3 SO-DIMM slot (max. 16GB) preinstalled with 4GB (2GB x 2)	
	Ethernet	Realtek RTL8111E PCIe GbE controller supports ASF 2.0	
	SSD	CF Type II socket	
	HDD	2.5" SATA 3Gb/s HDD bay	
	Input / Output	2 x RS-232 (DB-9 connector) 1 x GbE LAN (RJ-45 connector) on left side 1 x RS-422/485 (RJ-45 connector) 3 x USB 2.0 (two on the bottom, one on the left) 2 x USB 3.0 1 x Mini USB port on front panel 1 x Micro SD card slot on front panel 1 x Line out, MIC on left side	1 x VGA port 1 x HDMI port 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x 9 ~ 36V DC jack
	Expansion Interface	1 x PCIe Mini slot for Wi-Fi 1 x PCIe Mini slot reserved	
Other Features	Audio	AMP 2W + 2W (internal speaker)	
	Camera	2M pixels with low light function	
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)	
	MSR Card Reader	MSR card reader (optional)	
	TPM	Reserved by pin-header	
	OSD Function	LCD on/off, brightness up/down, volume up/down, Hot Key	
	Ambient Light Sensor	Yes	
	Infrared Remote Controller	Yes	
	Touch Screen	5-wire resistive type or projected capacitive type touch screen	
	LED Light Bar	N/A	
	System Cooling	Light fanless (smart fan operates above default temperature setting)	
Wireless		1 x Wireless LAN 802.11 b/g/n module (internal PCIe Mini card interface) (Optional, internal USB interface, Bluebooth V2.0+EDR)	
Physical	Construction Front Panel	PC + ABS Plastic	
	Mounting	Wall, Stand, Arm VESA 100mm x 100mm	Panel, Wall, Rack, Stand, Arm VESA 100mm x 100mm
	Color	Black	
	Dimensions (WxHxD)(mm)	363.2 x 305.1 x 58.8	399.4 x 271.2 x 58.8
	Weight (N/G)	5.2 kg / 7.3 kg	4.5 kg / 6.5 Kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 50°C	
	Storage Temperature (°C)	-20°C ~ 60°C	
	Humidity	10% to 95% (non-condensing)	
	IP Level	IP 64 compliant front panel	
	Safety&EMC	CE / FCC	
Power	Power Supply	90W power adapter Input:100 V AC ~ 240 V AC, 50 / 60Hz, Output: 19 V DC	
	Power Requirement	9 ~ 36 VDC	
	Power Consumption	19V@3.42A (Intel® Core™ i3-2100T CPU with 4GB 1333 Mhz DDR3 memory)	19V@3.95A (Intel® Core™ i3-2120 CPU with 4GB 1333 Mhz DDR3 memory)

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Options

Item	AFL2-15A-H61	AFL2-W15B-H61
Panel Mounting Kit	N/A	AFL2PK-W15B
Wall Mounting Kit	AFLWK-19/AFLWK-19B	
Rack Mounting Kit	N/A	AFL2RK-W15B
Arm	ARM-11-RS/ARM-31-RS	
Stand	STAND-A19/ STAND-B19/ STAND-C19/ STAND-210-R11	
Hybrid Card Reader	AFL2P-15AMSI-U-R10	AFL2P-W15BMSI-U-R10
Magnetic Stripe Reader	AFL2P-15AMSR-U-R10	AFL2P-W15BMSR-U-R10
Bluetooth Module Kit	AFL2-BT-KIT01-R11	
Trusted Platform Module (TPM)	TPM-IN01-R11	
EM RFID Reader	AFL2-EM-RFID-KIT01-R10	
Mifare RFID Reader	AFL2-MF-RFID-KIT02-R10	
OS: Win XPE (2GB CF Card)	AFL2CF-15A-H61-XPE-2G-R10	
OS: Win XPE (4GB CF Card)	AFL2CF-15A-H61-XPE-4G-R10	
OS: Linux (2GB CF Card)	AFL2CF-15A-H61-LNX-2G-R10	
OS: Win 7 Embedded (4GB CF Card)	AFL2CF-15A-H61-WES7P-4G-R10 (for Projected Capacitive Touch) AFL2CF-15A-H61-WES7E-4G-R10 (for Resistive Touch)	

Packing List

Item	P/N	Q'ty	Description
Utility CD		1	drivers and user manual
One Key Recovery CD		1	
Power Adapter	63040-010090-020-RS	1	FSP090-D2BA1; 90~264VAC input; 90W; 19VDC output
Power Cord	32702-000401-100-RS	1	European, 1500mm
Power Transfer Cord	32702-000300-100-RS	1	
RJ-45 to DB-9 COM Port Cable	32005-000200-200-RS	1	
IR Remote Controller	7Z000-SLPCB005-RS	1	
M3 Screw Pack	44013-030041-RS	4	M3 x 4 for securing HDD
M4 Screw Pack	44033-040061-RS	4	M4 x 4 for VESA screw
Temperature Sensor Cable	32133-004300-100-RS	1	
Pen	43125-0002C0-00-RS	1	For Resistive Touch

Ordering Information

AFL2-15A-H61

Part No.		Description
Core i5	AFL2-15A-H61-i5/R-R11	15" 400cd/m² XGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen,1.3M camera, microphone, R11
	AFL2-15A-H61-i5/PC-R11	15" 400cd/m² XGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen,1.3M camera, microphone, R11
Core i3	AFL2-15A-H61-i3/R-R11	15" 400cd/m² XGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen,1.3M camera, microphone, R11
	AFL2-15A-H61-i3/PC-R11	15" 400cd/m² XGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen,1.3M camera, microphone, R11
Pentium	AFL2-15A-H61-P/R-R11	15" 400cd/m² XGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen,1.3M camera, microphone, R11
	AFL2-15A-H61-P/PC-R11	15" 400cd/m² XGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen,1.3M camera, microphone, R11

AFL2-W15B-H61

Part No.		Description
Core i5	AFL2-W15B-H61-i5/R-R11	15.6" 300cd/m² HD panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 3M camera, microphone, R10
	AFL2-W15B-H61-i5/PC-R11	15.6" 300cd/m² HD panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen,3M camera, microphone, R10
Core i3	AFL2-W15B-H61-i3/R-R11	15.6" 300cd/m² HD panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 1.3M camera, microphone, R10
	AFL2-W15B-H61-i3/PC-R11	15.6" 300cd/m² HD panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen,3M camera, microphone, R10
Pentium	AFL2-W15B-H61-P/R-R11	15.6" 300cd/m² HD panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 3M camera, microphone, R10
	AFL2-W15B-H61-P/PC-R11	15.6" 300cd/m² HD panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 3M camera, microphone, R10

1
IEI Mobile Solutions

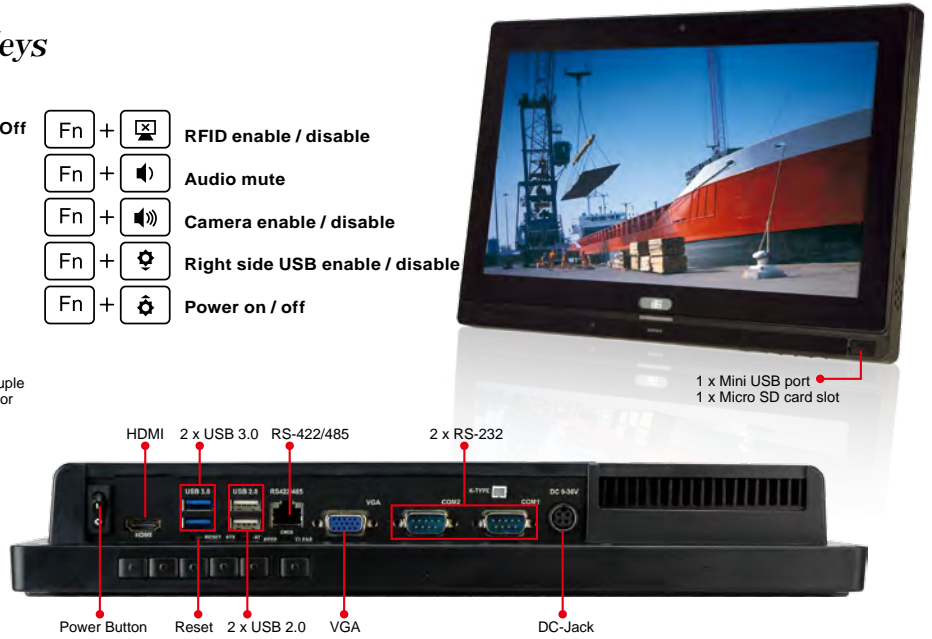**2**
Automation Panel Solutions
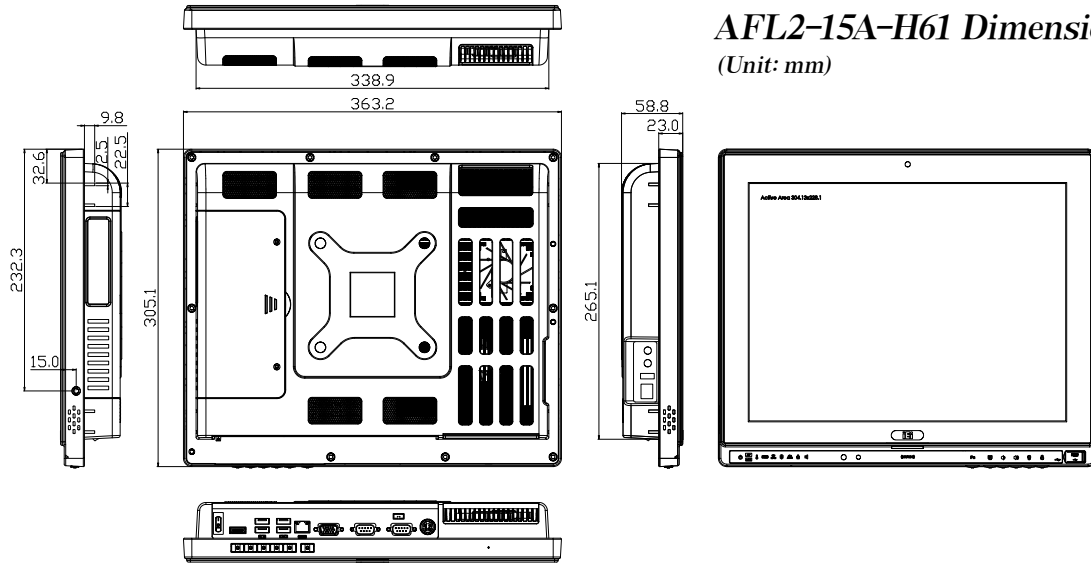
3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

2-20

AFL2-15A-2013-V10

Function Keys

Fn	Fn
Backlight On/Off	Fn + ⊠ RFID enable / disable
Audio -	Fn + Audio mute
Audio +	Fn + Camera enable / disable
Brightness -	Fn + Right side USB enable / disable
Brightness +	Fn + Power on / off

K-type thermalcouple temperature sensor

1 x GbE LAN
1 x USB 2.0
Mic, Line-out

1 x Mini USB port
1 x Micro SD card slot

HDMI   2 x USB 3.0   RS-422/485   2 x RS-232

Power Button   Reset   2 x USB 2.0   VGA   DC-Jack

AFL2−15A−H61 Dimensions
(Unit: mm)

AFL2−W15B−H61 Dimensions
(Unit: mm)

1
IEI Mobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions
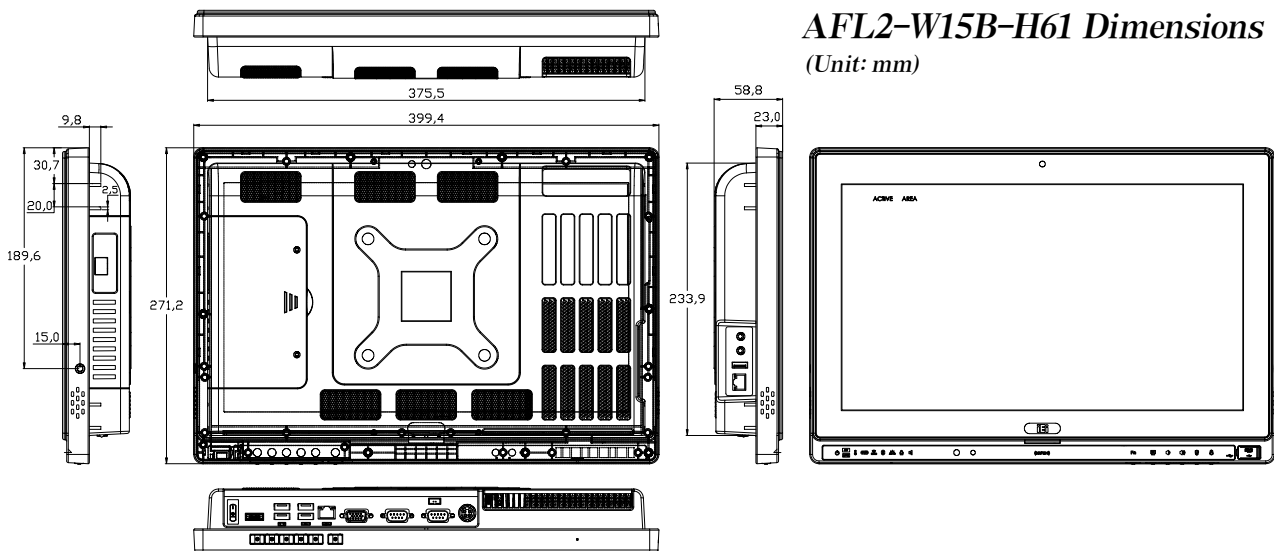
4
PACSmate Medical Solutions

5
Optional Peripherals

15.6" Wide Panel PC

AFL2-W15A-N270

Intel® Atom™ Solution

Features

- Flat-bezel LCD with LED backlight
- Intel® Atom™ processor N270 1.6 GHz processor
- one 400 MHz or 533 MHz DDR2 SO-DIMM (max. 2GB)
- Projected capacitive type flat touch screen/ Resistive type 5-wire flat touch screen supported
- Wi-Fi 802.11b/g/n supported
- Optional EM or Mifare RFID reader
- Built-in 1.3M pixels webcam
- Built-in two 1.5W speakers and microphone
- IP 64 compliant front panel

| Wireless 802.11 b/g/n | EM / Mifare RFID Technology | Speakers | Microphone | Camera | Touch Screen | -10°C~50°C | IP64 |

Specifications

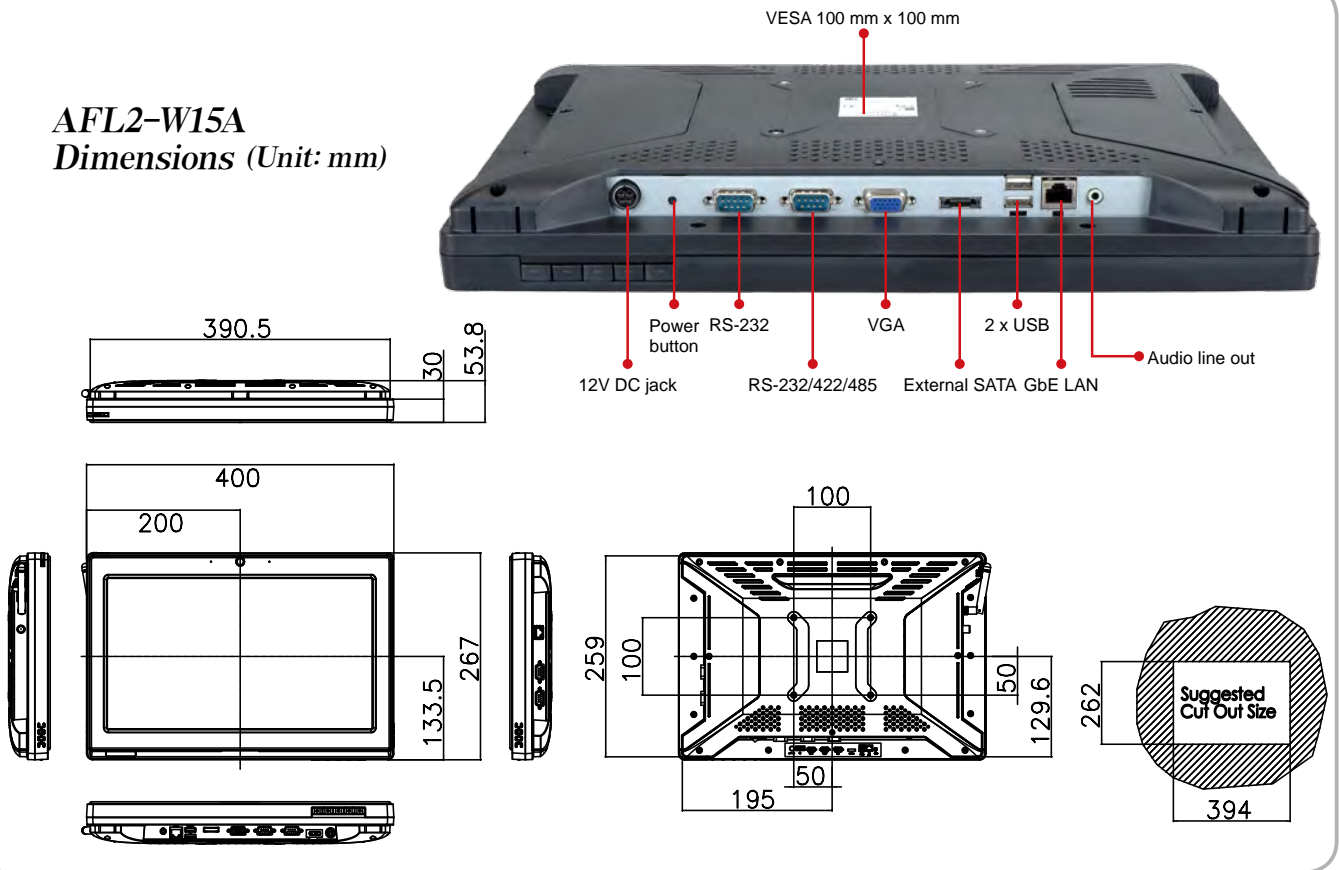| Model	AFL2-W15A-N270
LCD Specifications	
Size	Wide 15.6" TFT LCD
Resolution	1366 x 768
Brightness (cd/m²)	250 cd/m²
Contrast Ratio	500:1
LCD Color	16.2 M
Pixel Pitch (mm)	0.252 (H) x 0.252 (V)
Viewing Angle (H-V)	110° (H) / 85° (V)
Backlight MTBF	50000 hrs (LED backlight)
System	
CPU	Intel® Atom™ processor N270 1.6 GHz CPU
Chipset	Intel® 945GSE + ICH7M
RAM	Support one 400 MHz or 533 MHz DDR2 SO-DIMM (max. 2GB)
SSD	CF Type II
HDD	1 x 2.5" SATA HDD Bay
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Input / Output	1 x RS-232 COM port 1 x Audio port (Line out) 1 x RS-232/422/485 COM port 1 x VGA 1 x RJ-45 for GbE LAN 1 x Power jack 2 x USB 2.0 1 x External SATA 1 x Power switch 1 x 8-bit digital I/O, 4-bit input/4-bit output (optional) 1 x Reset button
Other Features	
Audio	AMP 1.5 W + 1.5 W (internal speaker)
Camera	1.3 M pixels with low light function
RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)
OSD Function	LCD on/off, brightness up/down, volume up/down
Ambient Light Sensor	Yes
Infrared Remote Controller	LCD on/off, brightness up/down, volume up/down
Touch Screen	Projected capacitive type flat touch screen/ Resistive type 5-wire flat touch screen
Wireless	1 x Wireless LAN 802.11 b/g/n module (internal PCIe Mini card interface)
Physical	
Construction Front Panel	PC + ABS plastic front frame
Mounting	VESA 100 mm x 100 mm
Color	Black C
Dimensions (WxHxD) (mm)	400 x 267 x 54
Weight (N/G)	3.8 kg
Environment	
Operating Temperature (°C) (Ambient with air flow)	-10°C ~ 50°C
Storage Temperature (°C)	-20°C ~ 60°C
Humidity	10% to 95% (non-condensing)
IP Level	IP 64 compliant front panel
Safety & EMI	CE / FCC
Power	
Power Supply	60W power adapter Input: 90VAC~264VAC, 50/60 Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	12V@4.25A (Intel® ATOM™ N270 CPU with 667MHz 2GB DDR2 memory)

AFL2-W15A Dimensions (Unit: mm)

VESA 100 mm x 100 mm

Power button — RS-232 — VGA — 2 x USB

12V DC jack — RS-232/422/485 — External SATA — GbE LAN — Audio line out

390.5 | 53.8 | 30

400 | 200 | 267 | 133.5

100 | 259 | 100 | 50 | 129.6 | 50 | 195

262 | Suggested Cut Out Size | 394

Optional Kit

Options		AFL2-W15A-N270
Panel Mounting Kit		AFL2PK-W15A-R10
Wall Mounting Kit		AFLWK-19 / AFLWK-19B
Arm		ARM-11-RS / ARM-31-RS
Stand		STAND-A19 / STAND-B19 / STAND-C19 / STAND-210-R11
EM RFID Reader		AFL2-EM-RFID-KIT02-R10
Mifare RFID Reader		AFL2-MF-RFID-KIT03-R10
OS	Win CE 6.0	AFL2CF-W15-N270-CE060-R10 (128 MB CF card)
	Win XPE	AFL2CF-W15-N270-XPE-R10 (1 GB CF card)
	Linux	AFL2CF-W15-N270-LNX-R10 (2 GB CF card)
	Win 7	AFL2CF-W15-N270-WES7E-R10 / AFL2CF-W15-N270-WES7P-R10 (4 GB CF card)
		AFL2SD-W15-N270-WES7E-R10 / AFL2SD-W15-N270-WES7P-R10 (4 GB SATA SSD module)
DC 12 V Input UPS		AUPS-B10-R10 (VESA 100, DC 12 V input, 12 V output 100 W UPS module with 3800 mAH)
DC 9~36 V Input UPS		AUPS-B20-R10 (VESA 100, DC 9~36 V input, 12 V output 100 W UPS module with 3800 mAH)

Packing List

Item	P/N	Q'ty	Specifications
Touch Pen	43125-0002C0-00-RS	1	
Power Adapter	63000-FSP060DBAB1554-RS (for Intel® N270 platform)	1	90-264 VAC input , 12 VDC output , 60W 90-264 VAC input , 12 VDC output , 84W
Power Cord	32000-000002-RS	1	1750 mm; European standard
User's Manual CD	7B000-000087-RS	1	
Screws	44013-030041-RS	4	
Remote Controller	7Z000-8T00320ICP05G-RS	1	

Touch Pen
Model No.:43125-0002C0-00-RS
Description:
1) With special material
2) Combined soft rubber with anti-oxidative plastic material
3) Durable and flexible
4) Particularly designed for AFOLUX GEN II touch Pen
   Length: 140mm

Ordering Information

Part No.		Description
Resistive Type Touch	AFL2-W15A-N270/R/1G-R12	15.6" 250cd/m² WXGA+ fanless panel PC with Intel® Atom™ N270 1.6 GHz, 802.11b/g/n wireless module, resistive touch screen, 1.3 M camera, microphone, 1GB DDR2 RAM, without expansion, R12
Projected Capacitive Type Touch	AFL2-W15A-N270/PC/1G-R12	15.6" 250cd/m² WXGA+ fanless panel PC with Intel® Atom™ N270 1.6 GHz, 802.11b/g/n wireless module, Projected capacitive touchscreen, 1.3 M camera, microphone, 1GB DDR2 RAM, without expansion, R12

AFL2-17A-H61
Intel® Core™ i5/ i3 and Pentium® processor **New**

AFL2-W19A-H61
Intel® Core™ i5/ i3 and Pentium® processor **New**

Optional CD-ROM available

AFL2-17A-H61

Features

- Programmable colorful LED light bar
- Intel® Core™ i5/ i3 and Pentium® processor
- Two 204-pin DDR3 SO-DIMM slot (system max. 16GB) preinstalled with 4GB (2GB x 2)
- Projected capacitive touchscreen and 5-wire resistive type touchscreen supported
- Wi-Fi 802.11b/g/n 2T2R high speed wireless
- EM or Mifare RFID reader
- Built-in 2M pixels webcam with AF, AE and AWB capabilities
- Built-in two 2W speakers and microphone
- IP64 compliant front panel
- Auto dimming control
- Light fanless design
- K-type thermalcouple temperature sensor
- Wide range 9~36 VDC input

| Wireless 802.11 b/g/n | RFID Technology EM / Miface | Speakers | Microphone | Camera | Touch Screen | -20°C~40°C | IP64 |

Specifications

Model		AFL2-17A-H61	AFL2-W19A-H61
LCD Specifications	Size	17" (4:3)	W18.9" (16:10)
	Resolution	1280 (W) x 1024 (H)	1440 (W) X 900 (H)
	Brightness (cd/m²)	350	250
	Contrast Ratio	1000:1	1000:1
	LCD Color	16.7M	16.7M
	Pixel Pitch (mm)	0.264 (H) x 0.264 (V)	0.2835 (H) x 0.2835 (V)
	Viewing Angle (H-V)	170° / 160°	170° / 160°
	Backlight MTBF	50,000 (LED backlight)	30,000 (LED backlight)
System	CPU	2nd/3rd Generation of Intel®Core™ i5/i3 and Pentium® processors	
	Chipset	Intel® H61	
	RAM	Support two 204-pin DDR3 SO-DIMM slot (max. 16GB) preinstalled with 4GB (2GB x 2)	
	Ethernet	Realtek RTL8111E PCIe GbE controller supports ASF 2.0	
	HDD	2.5" SATA 3Gb/s HDD bay	
	CD-ROM	1 x Slim Type CD-ROM bay	
	Input / Output	2 x RS-232 (DB-9 connector) 1 x RS-422/485 (DB-9 connector) 2 x GbE LAN (one on the bottom, one on the left) 2 x USB 3.0 3 x USB 2.0 (two on the bottom, one on the left) 1 x Mini USB port on front panel 1 x Micro SD card slot on front panel 1 x Line out (on the left)	1 x Mic (on the left) 1 x VGA port (DB-15 connector) 1 x HDMI port 1 x Power switch 1 x AT/ATX switch 1 x Reset button 1 x Clear CMOS button 1 x 9 ~ 36V DC input jack
	Expansion Interface	1 x PCIe Mini slot for Wi-Fi, 1 x PCIe Mini slot reserved	
Other Features	Audio	AMP 2W + 2W (internal speaker)	
	Camera	2 M pixels with low light function	
	RFID Reader	EM 125 KHz or Mifare 13.56 MHz card reader (optional)	
	MSR Card Reader	MSR card reader (optional)	
	TPM	Reserved by pin-header	
	OSD Function	LCD on/off, brightness up/down, volume up/down, Hot Key	
	Ambient Light Sensor	Yes	
	Infrared Remote Controller	Yes	
	Touch Screen	5-wire resistive type or projected capacitive type touch screen	
	LED Light Bar	Yes	
	System Cooling	Light fanless (smart fan operates above default temperature setting)	
Wireless		1 x Wireless LAN 802.11 b/g/n module (internal PCIe Mini card interface) 1 x Bluetooth function (optional internal USB interface, Bluetooth V2.0+EDR)	
Physical	Construction Front Panel	PC + ABS Plastic	
	Mounting	Panel, Wall, Rack, Stand, Arm VESA 100mm x 100mm	Panel, Wall, Stand, Arm VESA 100mm x 100mm
	Color	Black	
	Dimensions (WxHxD)(mm)	418 x 378 x 65	488 x 361 x 65
	Weight (N/G)	6.9 kg / 9.0 kg	7.3 kg / 10 Kg
Environment	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 40°C	
	Storage Temperature (°C)	-20°C ~ 60°C	
	Humidity	10% to 95% (non-condensing)	
	IP Level	IP 64 compliant front panel	
	Safety&EMC	CE / FCC	
Power	Power Supply	120W power adapter Input:100 V AC ~ 240 V AC, 50 / 60Hz, Output: 19 V DC	
	Power Requirement	9 ~ 36 VDC	
	Power Consumption	19V@5.3A (Intel® Core™ i7-2600S CPU with 4GB 1333 Mhz 4GB DDR3 memory)	19V@5.58A (Intel® Core™ i7-2600S CPU with 4GB 1333 Mhz 4GB DDR3 memory)

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Ordering Information

AFL2-17A-H61/AFL2-17AB-H61

Part No.			Description
Core i5	**Resistive Touch**	AFL2-17A-H61-i5/R-R11	17" 350cd/m² SXGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, R11
		AFL2-17AB-H61-i5/R-R11	17" 350cd/m² SXGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, without LED bar, R11
	Projected Capacitive Touch	AFL2-17A-H61-i5/PC-R11	17" 350cd/m² SXGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R11
		AFL2-17AB-H61-i5/PC-R11	17" 350cd/m² SXGA panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R11
Core i3	**Resistive Touch**	AFL2-17A-H61-i3/R-R11	17" 350cd/m² SXGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, R11
		AFL2-17AB-H61-i3/R-R11	17" 350cd/m² SXGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, without LED bar, R11
	Projected Capacitive Touch	AFL2-17A-H61-i3/PC-R11	17" 350cd/m² SXGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R11
		AFL2-17AB-H61-i3/PC-R11	17" 350cd/m² SXGA panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R11
Pentium	**Resistive Touch**	AFL2-17A-H61-P/R-R11	17" 350cd/m² SXGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, R11
		AFL2-17AB-H61-P/R-R11	17" 350cd/m² SXGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, without LED bar, R11
	Projected Capacitive Touch	AFL2-17A-H61-P/PC-R11	17" 350cd/m² SXGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R11
		AFL2-17AB-H61-P/PC-R11	17" 350cd/m² SXGA panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R11

Options

Item	AFL2-17A-H61	AFL2-W19A-H61
Panel Mounting Kit	AFL2RK-17A	AFL2PK-W19A
Wall Mounting Kit	AFLWK-19/AFLWK-19B	
Rack Mounting Kit	AFL2RK-17A	N/A
Arm	ARM-31-RS	
Stand	STAND-A19/STAND-B19/STAND-C19/STAND-210-R11/STAND-A26-R11	
Hybrid Card Reader	AFL2P-W19AMSI-U-R10	
Magnetic Stripe Reader	AFL2P-W19AMSR-U-R10	
Slim DVD Burner	73400-AD7700S01-RS	
Bluetooth Module Kit	AFL2-BT-KIT01-R11	
Trusted Platform Module (TPM)	TPM-IN01-R11	
EM RFID Reader	AFL2-EM-RFID-KIT01-R10	
Mifare RFID Reader	AFL2-MF-RFID-KIT01-R10	
OS: Win XPE (CD-ROM)	AFL2-17A-H61-XPE-R10	AFL2-W19A-H61-XPE-R10
OS: Linux (CD-ROM)	AFL2-17A-H61-LNX-R10	AFL2-W19A-H61-LNX-R10
OS: Win 7 Embedded (DVD-ROM)	AFL2-17A-H61-WES7P-R10 (for Projected Capacitive Touch) AFL2-17A-H61-WES7E-R10 (for Resistive Touch)	AFL2-W19A-H61-WES7P-R10 (for Projected Capacitive Touch) AFL2-W19A-H61-WES7E-R10 (for Resistive Touch)

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Ordering Information

AFL2-W19A-H61/AFL2-W19AB-H61

Part No.				Description
Core i5	Resistive Touch		AFL2-W19A-H61-i5/R-R11	18.9" 250cd/m² WXGA+ panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, R11
			AFL2-W19AB-H61-i5/R-R11	18.9" 250cd/m² WXGA+ panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, without LED bar, R11
	Projected Capacitive Touch		AFL2-W19A-H61-i5/PC-R11	18.9" 250cd/m² WXGA+ panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R11
			AFL2-W19AB-H61-i5/PC-R11	18.9" 250cd/m² WXGA+ panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R11
Core i3	Resistive Touch		AFL2-W19A-H61-i3/R-R11	18.9" 250cd/m² WXGA+ panel PC, Core i3 Dual Core 2xxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, R11
			AFL2-W19AB-H61-i3/R-R11	18.9" 250cd/m² WXGA+ panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, without LED bar, R11
	Projected Capacitive Touch		AFL2-W19A-H61-i3/PC-R11	18.9" 250cd/m² WXGA+ panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R11
			AFL2-W19AB-H61-i3/PC-R11	18.9" 250cd/m² WXGA+ panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R11
Pentium	Resistive Touch		AFL2-W19A-H61-P/R-R11	18.9" 250cd/m² WXGA+ panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, R11
			AFL2-W19AB-H61-P/R-R11	18.9" 250cd/m² WXGA+ panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, resistive touch screen, 2M camera, microphone, without LED bar, R11
	Projected Capacitive Touch		AFL2-W19A-H61-P/PC-R11	18.9" 250cd/m² WXGA+ panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R11
			AFL2-W19AB-H61-P/PC-R11	18.9" 250cd/m² WXGA+ panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R11

Packing List

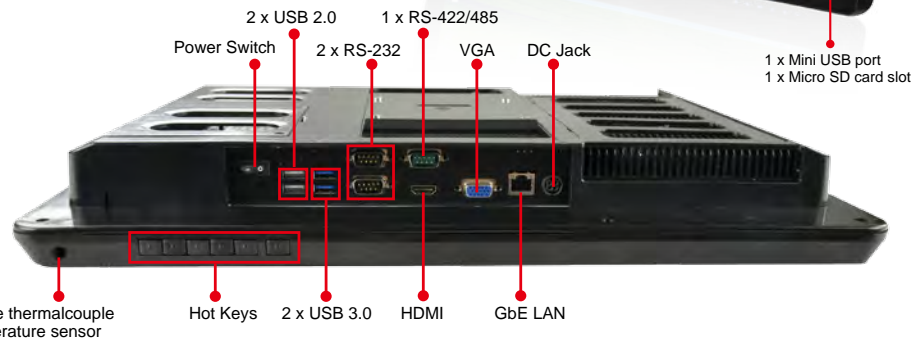| Item	P/N	Q'ty	Description
Utility CD		1	drivers and user manual
One Key Recovery CD		1	
Power Adapter	63000-FSP120AAB-RS	1	FSP120-AAB;90~264VAC input ; 120W ;19VAC output
Power Cord	32702-000401-100-RS	1	European, 1500mm
Power Transfer Cord	32000-089400-RS	1	
Infrared Remote Controller	7Z000-SLPCB005-RS	1	
M3 Screw Pack	44013-030041-RS	4	M3 x 4 for securing HDD
M4 Screw Pack	44033-040061-RS	4	M4 x 4 for VESA screw
I/O Bracket	41013-0290C2-00-RS	1	I/O Bracket
Temperature Sensor Cable	32133-004300-100-RS	1	
Pen	43125-0002C0-00-RS	1	For Resistive Touch

CD-RW/DVD-RW Driver Spec.

The drive is able to write CD-R/RW disks, DVD+R/RW disks and DVD-R/RW disks

| Drive Type	Internal Slim CD-RW/DVD Combo Drive	
Data Transfer Rate	Write: DVD+R/DVD+RW/DVD-R: 8X DVD-RW: 6X CD-R/CD-RW: 24X	Read: DVD-ROM: 8X CD-ROM: 24X
Interface	SATA	
Buffer Memory	2MB	

Function Keys

Fn	**Fn**			
⊠	**Backlight On/Off**	Fn + ⊠	**RFID enable / disable**	
🔊	**Audio -**	Fn + 🔊	**Audio mute**	
🔊	**Audio +**	Fn + 🔊	**Camera enable / disable**	
☼	**Brightness -**	Fn + ☼	**Right side USB enable / disable**	
☼	**Brightness +**	Fn + ☼	**Power on / off**	

2 x USB 2.0   1 x RS-422/485

Power Switch   2 x RS-232   VGA   DC Jack

1 x Mini USB port
1 x Micro SD card slot

Mic, Line-out

1 x USB 2.0

1 x GbE LAN

K-type thermalcouple temperature sensor   Hot Keys   2 x USB 3.0   HDMI   GbE LAN

AFL2-17A-H61 Dimensions
(Unit: mm)

418

ACTIVE AREA: 337.9 X 270.3 MM

182

378

65

63

26

386

100

16

100

320
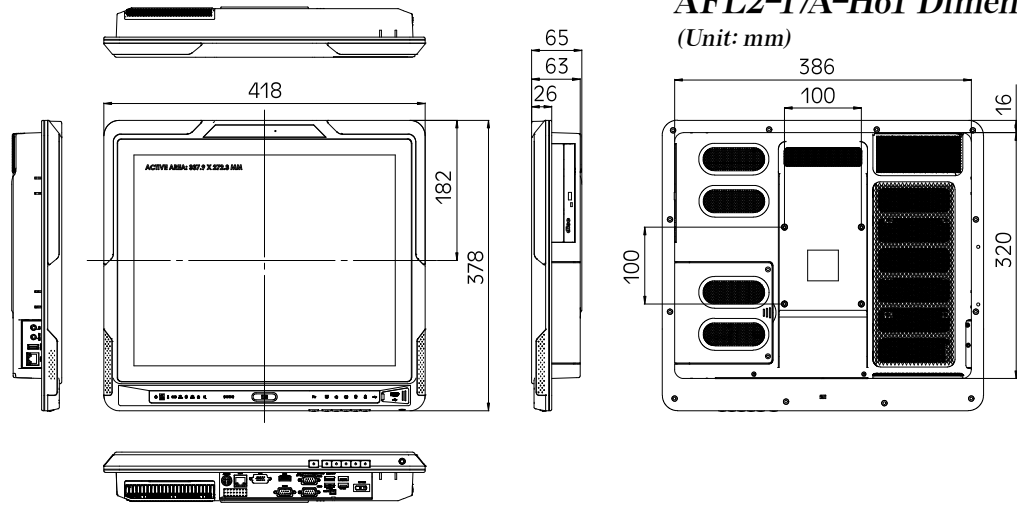
AFL2-W19A-H61 Dimensions
(Unit: mm)
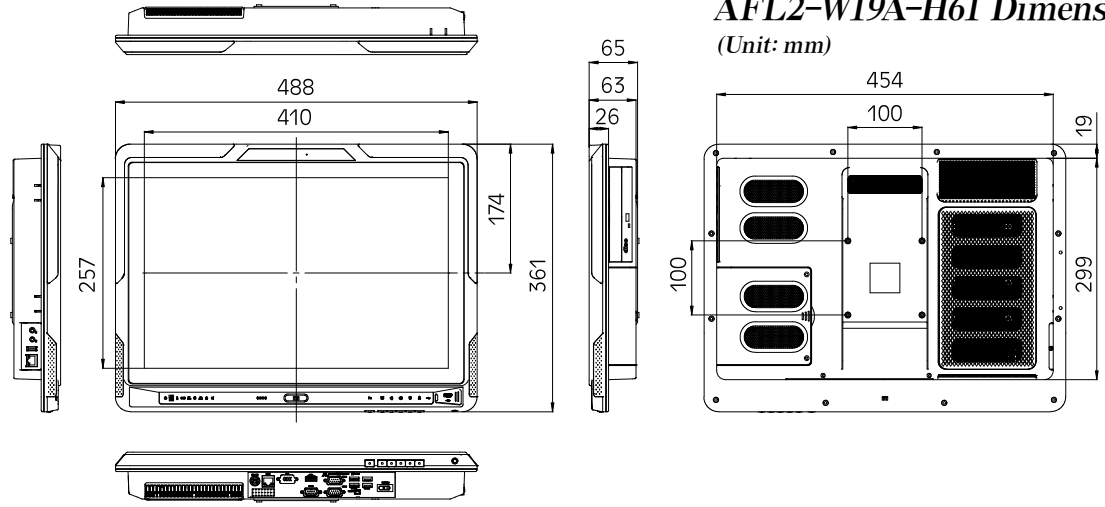
488

410

174

257

361

65

63

26

454

100

19

100

299

1	IEI Mobile Solutions
2	**Automation Panel Solutions**
3	RISC-based Solutions
4	PACSmate Medical Solutions
5	Optional Peripherals

AFL2-W21A-H61

Intel® Core™ i5/ i3, and Pentium® Processor **New**

Features

- Programmable colorful LED light bar
- Intel® Core™ i5/ i3, and Pentium® processor
- Two 204-pin DDR3 SO-DIMM slot (system max. 16GB) preinstalled with 4GB (2GB x 2)
- Projected capacitive touchscreen supported
- Wi-Fi 802.11b/g/n 2T2R high speed wireless
- EM or Mifare RFID reader
- Built-in 2M pixels webcam with AF, AE and AWB capabilities
- Built-in two 3W speakers and microphone
- IP64 compliant front panel
- Auto dimming control
- Light fanless design
- K-type thermalcouple temperature sensor
- Wide range 9~36 VDC input

Wireless 802.11 b/g/n | RFID Technology | Speakers | Microphone | Camera | Touch Screen | -10°C~50°C | IP64

Specifications

Model		AFL2-W21A-H61
LCD	LCD Display	21.5'' (16:9)
	Max Resolution	1920(W) x 1080(H)
	Brightness (cd/m2)	250
	Contrast Ratio	1000 : 1
	LCD Color	16.7M
	Pixel Pitch (mm)	0.24825mm x 0.24825mm
	Viewing Angle (H-V)	170° / 160°
	Backlight MTBF (Hrs)	30000 (LED backlight)
Touch	Touch Screen	Projected capacitive type with USB interface
	Touch Controller	EETI EXC7200 & EXC5404
System	CPU	2nd Generation of Intel®Core™ i5/i3, and Pentium® processors
	Chipset	Intel® H61
	Graphics Controller	Integrated Intel® HD Graphics
	RAM	Support two 204-pin DDR3 SO-DIMM slot (max. 16GB) preinstalled with 4GB (2GB x 2)
	Storage	1 x 2.5' SATA 3Gb/s HDD Bay
	Optical Drive	1 x Slim Type CD-ROM bay
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Wireless Connectivity	IEEE 802.11b/g/n 2T2R module (WIFI-RT5392-SB-R10)
	Audio Codec	Realtek ALC892 HD audio codec
	Audio	Amplifier 3W + 3W
	Webcam & Microphone	2M pixel camera with low light function / Digital Microphone
	I/O Ports	2 x RS232 (DB9 Connector) / 1 x RS422/485 COM Port (DB9 connector) / 2 x GbE LAN (RJ-45 connector) / 3 x USB 2.0 / 2 x USB 3.0 / 1 x HDMI / 1 x Line out/MIC / 1 x VGA port (DB-15 Connector) / 1 x Power switch / 1 x Reset button / 1 x AT/ATX switch / 1 x Clear CMOS button / 1 x K-Type / 1 x 9~36V DC jack / 1 x Line out / 1 x Mic
	Expansion Interface	1 x PCIe Mini for Wi-Fi Module / 1 x PCIe Mini reserved supporing mSATA
	Cooling System	Light Fanless

Other Features	EM and Mifare RFID	Optional: EM 125 KHz or Mifare 13.56 MHz card reader
	LED Light Bar	Programmable R/G/B colorful LED Light bar (SMBus Control)
	Function Key	6 x function keys: Fn / Key1 Backlight On/Off / Key2 Audio - / Key3 Audio + / Key4 Brightness - / Key5 Brightness+ / Combinations: Fn+Key1 RFID Enable/Disable / Fn+Key2 Audio Mute / Fn+Key3 Camera Enable/Disable / Fn+Key5 Power ON/OFF
	Infrared	IR receiver 38KHz
	Light Sensor	Ambient light sensor for panel brightness adjustment
	TPM	Reserved by pinheader
OS Support	OS Support	Windows Embedded Standard 7 / Windows XP Embedded, / Debian 6.0 Backports
Physical	Construction Material	PC + ABS plastic for front cover and rear cover
	Mounting	Wall, Stand and VESA 100 mm x 100mm
	Enclosure Color	Sliver + Black
	Dimension (mm)	546.85 (W) x 345.82 (H) x 70.35 (D), with LED Light Bar / 528.8 (W) x 337.1 (H) x 70.35 (D), without LED Light Bar
	Weight (Net/Gross)	8.27 Kg / 11.27 Kg (with LED Light Bar) / 8.07 Kg / 11.07 Kg (without LED Light Bar)
Enviornment	Operating Temperature (with air flow)	-10°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C
	Humidity	10% to 95% (non-condensing)
	IP Level	Front bezel IP 64
	Safety and EMC	CE & FCC
Power	Power Adapter	19VDC Power Input Adapter
	Power Input	9 ~ 36V DC-IN

AFL2−W21A−H61 Dimensions
(Unit: mm)

Ordering Information

CPU	Model	Description
Core i5	AFL2-W21A-H61-i5/PC-R10	21.5" 250cd/m² FHD panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R10
	AFL2-W21AB-H61-i5/PC-R10	21.5" 250cd/m² FHD panel PC, Core i5 Dual Core 2xxxT CPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R10
Core i3	AFL2-W21A-H61-i3/PC-R10	21.5" 250cd/m² FHD panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R10
	AFL2-W21AB-H61-i3/PC-R10	21.5" 250cd/m² FHD panel PC, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R10
Pentium	AFL2-W21A-H61-P/PC-R10	21.5" 250cd/m² FHD panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, R10
	AFL2-W21AB-H61-P/PC-R10	21.5" 250cd/m² FHD panel PC, Pentium Dual Core G6xxT CPU (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11b/g/n wireless module, projected capacitive touchscreen, 2M camera, microphone, without LED bar, R10

Packing List

Item	P/N	Q'ty	Description
Utility CD		1	drivers and user manual
One Key Recovery CD		1	
Power Adapter	63000-FSP120AAB-RS	1	FSP120-AAB;90~264VAC input ; 120W ;19VAC output
Power Cord	32702-000401-100-RS	1	European, 1500mm
Power Transfer Cord	32000-089400-RS	1	
Infrared Remote Controller	7Z000-SLPCB005-RS	1	
M3 Screw Pack	44013-030041-RS	4	M3 x 4 for securing HDD
M4 Screw Pack	44033-040061-RS	4	M4 x 4 for VESA screw
I/O Bracket	41013-0290C2-00-RS	1	I/O Bracket
Temperature Sensor Cable	32133-004300-100-RS	1	
Pen	43125-0002C0-00-RS	1	For Resistive Touch

Options

資料待補

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

AFL2-W21-2013-V10

2-29

AFOLUX Panel PC

- **5.7"~19" multi-functional all-in-one Panel PCs**
- **Streamlined plastic housing**
- **Water and dust resistance IP64 front panel protection**
- **Industrial grade operating temperature**

Affordable Luxury for You~

AFOLUX is designed to provide versatile, cost-effective solutions to meet the growing demand emerging from semi-industrial computing markets. From clinical to factory environments, restaurants to schools, and entertainment to surveillance devices, AFOLUX is your ultimate choice to fulfill a wide spectrum of applications.

AFOLUX PPC Diverse Platform and Panel Size

	5.7"	W7"	8.0"	8.4"	W10.2"	10.4"	12.1"
AMD LX800	AFL-057A-LX	AFL-07A-LX	AFL-08AH-LX			AFL-10A-LX	AFL-12A-LX
Intel® Atom™ N270/Z510/Z530/ E620	AFL-057A-Z510 AFL-057A-Z530	AFL-07A-N270	AFL-F08A-N270 AFL-08B-N270	AFL-08AH-N270	AFL-W10A-N270	AFL-10A-N270	AFL-12A-N270

	15"	W15.6"	17"	19"	W19"
Intel® Atom™ N270	AFL-15A-N270		AFL-17D-N270		AFL-W19A-N270
Intel® GM45		AFL-W15A-GM45	AFL-17D-GM45		
Intel® HM55	AFL-15i-HM55		AFL-17i-HM55	AFL-19i-HM55	

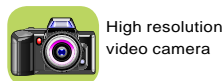# AFOLUX PPC MAIN FEATURES

A. IP 64 Water and Dust Proof Protection

The AFOLUX front panel is IP64 compliant which protects the screen against damage from liquid or dust. Extend the lifetime of your products!

B. Variety Multimedia Functions

Low Light Camera, Microphone and Speaker

High resolution video camera

Sensitive Microphone

Built-in stereo speakers

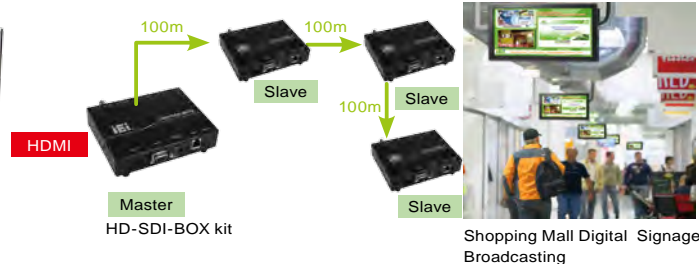| Models	Camera	Microphone	Speakers
AFL-15i/17i/19i-HM55	--	--	Amplified
AFL-F08A/08B/W10A-N270 AFL-408A/412A	300K pixels with low light	Digital microphone	Amplified 1.5W + 1.5W
AFL-W15A/17D/W19A AFL-W15A/17D/W19A	300K pixels with low light	Digital microphone	Amplified 3W + 3W
AFL-057A/07A/08AH/10A/12A-LX AFL-12BS/12BX/15A-LXPOS	--	--	Amplified 1.5W + 1.5W
AFL-07A/08AH/10A/12A/15A-N270 AFL-408B-W410A-N270 AFL-057A-Z510/Z530	--	--	Amplified 1.5W + 1.5W

HD Hardware Decoder and HDMI Output

Integrated Radeon HD3200 graphic core supports UVD– VC-1, MPEG2, and H.264/AVC full HD decoder. Through HDMI output to HD-SDI-BOX-kit, HD content can be transmitted up to 100 meters for a long distance digital signage application.

Models	HD Hardware Decoder	HDMI output
AFL-15i/17i/19i-HM55	--	V
AFL-W15A/17D/W19A/W19B-GM45	--	V
AFL-057A-Z510/Z530	V	--

AFL-W15A-L325 with S780E/T + SB710	
Graphic Core	Radeon 3200
DirectX Support	DX10
Video Decode	UVD-VC-1, MPEG2, H.264/AVC Full HD Decode
HDMI/DVI	1080p

100m   100m

Slave

100m   Slave

HDMI

Master
HD-SDI-BOX kit

Slave

Shopping Mall Digital Signage Broadcasting

C. LED Backlight Panel Equipped

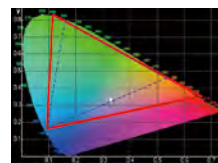**LED Backlight**

Enhancement of image quality on LCD screen
- Wider color gamut
- More even screen illumination
- Longer display life
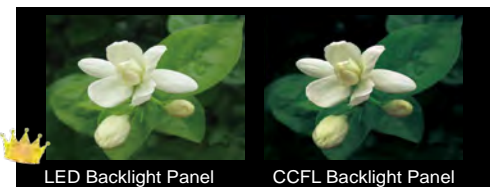- Low temperature operation and greater power efficiency

Color Gamut Comparison

—— LED
- - - - Normal CCFL

Thus LED backlight makes the image color shown on the LCD screen look nature and vivid.
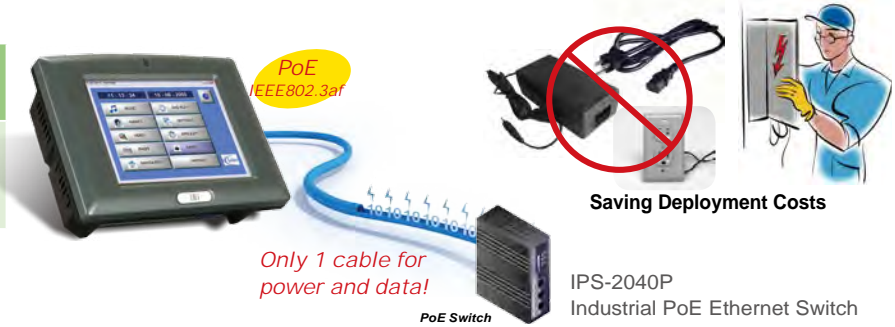
Vivid and High Contrast Image

LED Backlight Panel   CCFL Backlight Panel

Panel Size	5.7"	W7"	8.0"	8.4"	10.4"	12.1"
Brightness	400 nits	500 nits	250 nits	450 nits	400 nits	500 nits
Models	AFL-057A-LX AFL-057A-Z510 AFL-057A-Z530	AFL-07A-LX AFL-07A-N270	AFL-F08A-N270 AFL-08B-N270	AFL-08AH-LX AFL-08AH-N270	AFL-10A-LX AFL-10A-N270	AFL-12A-LX AFL-12A-N270

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

D. Power over Ethernet Enabled

No need for electricians to install conduit, electrical wiring, and outlets throughout the enterprise.

Panel Size	5.7"
Solution Models	AFL-057A-Z510 AFL-057A-Z530

PoE
IEEE802.3af

Saving Deployment Costs

Only 1 cable for power and data!

IPS-2040P
Industrial PoE Ethernet Switch

PoE Switch

E. Wireless Capabilities

Local-based Communication	**Peripheral Communication**	**Long-range Mobile Communication**
Easy to deploy, no network cables is needed. Reduce your setup cost and lead time.	It is easy to operate and connect input devices and peripherals when the Panel PC is mounted to a rack or a kiosk.	High mobility without any hot spot limitation.

Wi Fi
Internet

Bluetooth

Real-Time Data Communication
Cloud Server

HSUPA
Cellular Network

802.11b/g
Streaming music
Streaming video
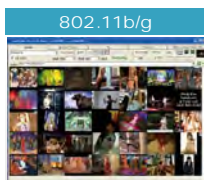
802.11n
No spaces in between items:
VoIP/Gaming/NAS

	Wi-Fi	**Bluetooth** (optional)
AFL-15i/17i/19i-HM55	IEEE 802.11 b/g/n	Bluetooth V2.1+EDR
AFL-W15A/17D/W19A/W19B-GM45	IEEE 802.11 b/g/n	Bluetooth V2.0
AFL-07A/08AH/F08A/08B/W10A-N270 AFL-408A/408B-N270	IEEE 802.11 b/g/n	Bluetooth V2.0
AFL-W15A/17D/W19A/W19B-N270 AFL-10A/12A/15A-N270 AFL-W410A/412A/415A-N270 AFL-15A/17A/19A-915	IEEE 802.11 b/g/n	Bluetooth V2.0
AFL-057A-Z510/Z530 AFL-057A/07A/08AH-LX	IEEE 802.11 b/g	Bluetooth V2.0
AFL-10A/12A-LX	IEEE 802.11 b/g	Bluetooth V2.0

F. Auto Dimming and OSD Remote Control

Built-in Ambient Light Sensor

- Power Consumption Saving
- Comfortable Viewing Brightness
- Extend Product Lifetime

Ambient Light Sensor

Day: Higher Ambient Luminance

Night: Lower Ambient Luminance

OSD Remote Control

Brightness and volume control wherever the system is located.

System On/Off
Volume Up/Down
LCD On/Off
Ambient Light Sensor On/Off
Brightness Up/Down

Models	Hardware OSD Control	OSD Remote Control	Ambient Light Sensor
AFL-15i/17i/19i-HM55	5-Key Keypad	V	V
AFL-F08A-N270	6-Key Keypad	V	
AFL-W15A/W19A	7-Key Keypad	V	V
AFL-15C/17C/19C-965	5-Key Keypad	--	--
AFL-408A/408B/W410A/412A/415A-N270	--	V	V
AFL-17D/W19B	5-Key Keypad	--	--

G. Multiple and Expandable Storage

	CF card	SATA Slim SSD	2.5" SSD	Hard Disk	Optical Disk
Cost	High	High	High	Medium	Low
Data Transfer Rate	Read-40MB/sec. Write-20MB/sec.	Read-90MB/sec. Write-60MB/sec.	Read-230MB/sec. Write-160MB/sec.	Read-110MB/sec. Write-110MB/sec.	Read-32.4MB/sec. Write-10MB/sec.
Capacity	128MB~16GB	1GB~16GB	8GB~128GB	80GB~1TB	680MB~50GB
Application	Operating System, Application Program	Operating System, Application Program	Operating System, Application Program	Operating Data, Media Data	Media Data, Backup Data…

Models	CF Card	SATA Slim SSD	2.5" Storage Bay	Slim Type ODD
AFL2-W15A-N270/L325	V	V	V	--
AFL-15i/17i/19i-HM55	--	V	V	--
AFL-17D/W19B/317A/517A	V	V	V	V
AFL-W15A/W19A	V	V	V	--
AFL-057A-Z510/Z530 AFL-07A/08AH/F08A/08B/ W10A-N270 AFL-408A/408B/W410A-N270 AFL-057A/07A/08AH/10A-LX	V	--	--	--
AFL-10A/12A/15A-N270 AFL-412A	V	V	V	--
AFL-12A-LX	V	--	V (IDE Interface)	--

1 IEI Mobile Solutions

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5 Optional Peripherals

H. Optional Magnetic Stripe Card / Smart Card Reader

(1) Magnetic Stripe Reader

Magnetic Card

Magnetic Card Reader

(2) Hybrid Card Reader

• **Magnetic Card**
• **IC Card**
• **iButton**

Smart Card Reader

iButton
The iButton can be used to store cash for small transactions or as an electronic asset tag to store and track information such as valuable capital equipment.

Magnetic Card Reader

Convenient cable location

Back mounting holes designed for the bracket kit

P/N	AFLP-12BMSR-U / AFLP-17AMSR-U	AFLP-12BMSI-U / AFLP-17AMSI-U
General	90 mm Magnetic Stripe Reader Programming: By Software Download Program Card Standard: ANSI , ISO , ABA Track Read: ISO 1,2,3 (IATA,ABA,THRIFT/ MINTS), JISII100-1000mm/sec	(1) Magnetic Card: ISO 7811, AAMVA, DMV, JIS II (2) Smart Card: ISO 7816, EMV (3) Dallas iButton
Electrical	Voltage:DC+5V, +/-5% Reading Indicator:Beeper	Voltage: DC+5V,+/-5% Reading Indicator:Beeper
Environment	Operating Temperature: 0℃ to 40℃ Relative Humidity: 20% to 85 % (Non-condensing)	Operating Temperature: -10℃ to 55℃ Relative Humidity: 10% to 90 % (Non-condensing)
Physical	Cable: Straight 2.5ft Weight: Approx.61g	Cable: Straight 2.5ft Weight: Approx.60g
Interface	USB	USB

I. OSD Control Software
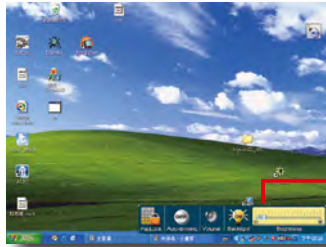
IEI patented system software utility allows users to adjust system settings through the software interface in Windows environment instead of pressing the membrane keypad below the front panel.

Volume adjustment

PadLock Auto-dimming Volume Backlight Brightness

Ambient light sensor   **Brightness adjustment**

J. Selectable AT/ATX Power Mode

AT Power Mode

Applications
● ATM
● Self-service kiosk
● Plant environment monitoring system
● Factory automation platform
● Manufacturing shop flow

Advantages
● Easy to turn on/off with wall/ panel mounting
● Automatic start when power connected

With the AT mode selected, the power is controlled by a central power unit rather than a power switch. The AFOLUX PPCs turns on automatically when the power is connected.

ATX Power Mode

Applications
● Security surveillance
● Advertising terminal

Advantages
● Power management
● Remote control via network advantage

With the ATX mode selected, the AFL series panel PC goes in a standby mode when it is turned off. The panel PC can be easily turned on via network or a power switch in standby mode. Remote power control is perfect for advertising applications since the broadcasting time for each panel PC can be set individually and controlled remotely.

Convenient Power Mode Setting
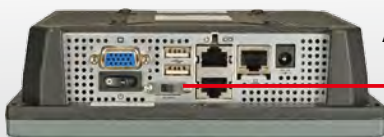
AT/ATX switch on the rear panel

AT/ATX

AT/ATX switch is located at the bottom right on the aluminum chassis

AT⟷ATX

AFOLUX 5.7"~8.4" Selection Guide

PoE
IEEE802.3af

16:9
Wide Screen

Flat
Bezel

LCD Size		5.7"		Wide 7"		8.0"		8.4"	
Model		AFL-057A-LX	AFL-057A-Z510 AFL-057A-Z530	AFL-07A-LX	AFL-07A-N270	AFL-08B-N270	AFL-F08A-N270	AFL-08AH-LX	AFL-08AH-N270
Display	LCD Size	5.7"		Wide 7"		8.0"		8.4 "	
	Max Resolution (WxH)	640 x 480		800 x 480		800 x 600		800 x 600	
	Brightness (cd/m²)	400		400		250		450	
	Contrast Ratio	300:1		400:1		400:1		600:1	
	LCD Color	262K		262K		262K		262K	
	Pixel Pitch (mm) (HxV)	0.06 (H) x 0.18 (V)		0.0635 (H) x 0.1905 (V)		0.2025 (H) x 0.2025 (V)		0.213 (H) x 0.213 (V)	
	Viewing Angle (H/V)	140º/100º		140º/110º		140º/ 130º		160º/140º	
	Backlight MTBF (hrs)	50000 (LED backlight panel)		50000 (LED backlight panel)		30000 (LED backlight panel)		50000 (LED backlight panel)	
Motherboard	CPU	AMD Geode LX800 500MHz Processor	Intel® Atom™ Z530 1.6GHz Processor Intel® Atom™ Z510 1.1GHz Processor	AMD Geode LX800 500MHz Processor	Intel® Atom™ Processor N270 1.6GHz CPU	Intel® Atom™ Processor N270 1.6GHz CPU		AMD Geode LX800 500MHz Processor	Intel® Atom™ Processor N270 1.6GHz CPU
	Chipset	AMD Geode LX800 + AMD CS5536	Intel® US15W	AMD Geode LX800 + AMD CS5536	Intel® 945GSE + ICH7M	Intel® 945GSE + ICH7M		AMD Geode LX800 + AMD CS5536	Intel® 945GSE + ICH7M
	RAM	One 200-pin DDR SO-DIMM (max. 1GB)	One 200-pins DDR2 SO-DIMM (max. 2GB)	One 200-pin DDR SO-DIMM (max. 1GB)	One 200-pins DDR2 SO-DIMM (max. 1GB)	One 200-pin DDR2 SO-DIMM (max. 2GB)		One 200-pin DDR SO-DIMM socket, (max. 1GB)	One 200-pins DDR2 SO-DIMM (max. 2GB)
I/O Ports and Switches		1 x RS-232 COM Port (RJ-45) 1 x RS-232/422/485 COM Port (RJ-45) 1 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x VGA Port 1 x Power Jack	1 x RS-232/422/485 COM Port 1 x RJ-45 for GbE supports PoE 802.3af, PoE/PD 1 x USB 2.0 1 x Reset Button 1 x Power Input with Lock 1 x Reset Button	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out)	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x External SATA	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x External SATA		1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out)	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x External SATA
SSD		CF Type II							
Wireless Connection	Wi-Fi	IEEE 802.11 b/g (internal USB)	IEEE 802.11 b/g (internal Mini PCI)	IEEE 802.11 b/g (internal Mini PCI)	IEEE 802.11 b/g/n (internal PCIe Mini card)	IEEE 802.11 b/g/n (internal PCIe Mini card)		IEEE 802.11 b/g (internal Mini PCI)	IEEE 802.11 b/g/n (internal PCIe Mini card)
Audio/Video Device	Camera Module	--		--		300K pixels	2 megapixel with Low Light Function	--	
	Microphone	--		--		yes		--	
Physical	Dimensions (WxHxD) (mm)	180 x 135 x 55		226 x 140 x 41		234 x 177 x 43		234 x 134 x 42	
	Net Gross Weight	0.8 Kg		0.8 Kg		0.8 Kg	1.8 Kg	0.8 Kg	
System Cooling		Fanless							
Environment	Operation Temperature	0°C~50°C	-20°C~60°C	0°C~50°C	-10°C~50°C	-10°C~50°C		0°C~50°C	-10°C~50°C
	Storage Temperature	-20°C~60°C							
Power Requirement		12 VDC	5 VDC	12 VDC	12 VDC	12 VDC		12 VDC	12 VDC

AFOLUX Wide 10.2"~12.1" Selection Guide

16:9 Wide Screen

LCD Size		Wide 10.2"	10.4"		12.1"	
Model		AFL-W10A-N270	AFL-10A-LX	AFL-10A-N270	AFL-12BX(S)-LXPOS	AFL-12A-N270
Display	LCD Size	Wide 10.2"	10.4"		12.1"	
	Max Resolution (WxH)	1024 x 600	800 x 600		1024 x 768 or 800 x 600	1024 x 768
	Brightness (cd/m²)	400	400		500 or 450	500
	Contrast Ratio	400:1	600:1		700:1	600:1
	LCD Color	262K	262K		262K	262K
	Pixel Pitch (mm) (HxV)	0.2175 (H) x 0.2175 (V)	0.264 (H) x 0.264 (V)		0.240 (H) x 0.240 (V)	
	Viewing Angle (H/V)	140º/ 110º	160º/140º		160º/160º or 160º/140º	160º/160º
	Backlight MTBF (hrs)	40000	50000 (LED backlight panel)		50000 (LED backlight panel)	
Motherboard	CPU	Intel® Atom™ Processor N270 1.6GHz CPU	AMD Geode LX800 500MHz Processor	Intel® Atom™ Processor N270 1.6GHz CPU	AMD Geode LX800 500MHz Processor	Intel® Atom™ Processor N270 1.6GHz CPU
	Chipset	Intel® 945GSE + ICH7M	AMD Geode LX800 + AMD CS5536	Intel® 945GSE + ICH7M	AMD Geode LX800 + AMD CS5536	Intel® 945GSE + ICH7M
	RAM	One 200-pins DDR2 SO-DIMM (max. 2GB)	One 200-pin DDR SO-DIMM (max. 1GB)	One 200-pins DDR2 SO-DIMM (max. 2GB)	One 200-pin DDR SO-DIMM (max. 1GB)	One 200-pins DDR2 SO-DIMM (max. 2GB)
I/O Ports and Switches		1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x External SATA	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out)	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x External SATA	2 x RS-232 COM Port (pin 9 with RI, 5V or 12V switch selectable 1 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x RJ-12 for Cash Drawer (12V)	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x External SATA
Drive Bay	HDD	--	--		1 x 2.5" IDE HDD bay	1 x 2.5" SATA HDD bay
	SSD	CF Type II				
Wireless Connection	Wi-Fi	IEEE 802.11 b/g/n (internal PCIe Mini card)	IEEE 802.11 b/g (internal Mini PCI)	IEEE 802.11 b/g/n (internal PCIe Mini card)	IEEE 802.11 b/g (internal Mini PCI)	IEEE 802.11 b/g/n (internal PCIe Mini card)
Audio/Video Device	Camera Module	300K pixels	--		--	
	Microphone	Yes	--		--	
Physical	Dimensions (WxHxD) (mm)	280 x 186 x 49	276 x 222 x 51		304 x 246 x 56	304 x 246 x 50
	Net Gross Weight	1.4 Kg	1.4 Kg		1.8 Kg	
System Cooling		Fanless				
Environment	Operation Temperature	-10°C~50°C	0°C~50°C	-10°C~50°C	0°C~50°C	0°C~40°C with SATA HDD -10°C~50°C with CF card or SATA SSD
	Storage Temperature	-20°C~60°C	-20°C~60°C		-20°C~60°C	
Power Requirement		12 VDC				

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

AFOLUX 15" ~Wide 15.6" Selection Guide

Intel® Core™ i7/i5/i3

16:9 Wide Screen

LCD Size		15"			Wide 15.6"	
	Model	**AFL-15A(E)-N270**	**AFL-15D(E)-N270**	**AFL-15i(E)-HM55**	**AFL-W15A-N270**	**AFL-W15A-GM45**
Display	LCD Size	15"			15.6"	
	Max Resolution (WxH)	1024 x 768			1366 x 768	
	Brightness (cd/m²)	350 or 250			250	
	Contrast Ratio	700:1 or 600:1			500:1	
	LCD Color	262K				
	Pixel Pitch (mm) (HxV)	0.297 (H) x 0.297 (V)				
	Viewing Angle (H/V)	140º/125º or 160º/160º			110º/85º	
	Backlight MTBF (hrs)	50000 or 40000			50000	
Motherboard	CPU	Intel® Atom™ Processor N270 1.6GHz CPU	Intel® Atom™ Processor N270 1.6GHz CPU	Intel® Celeron® M P4500 CPU	Intel® Atom™ Processor N270 1.6GHz CPU	Intel® Celeron® M 575 2.0GHz CPU Intel® Core™2 Duo P8400 2.26GHz Intel® Core™2 Duo T9400 2.53GHz
				Intel® Core™ i7/i5/i3	Intel® 945GSE + ICH7M	Intel® GM45 + ICH9M
	Chipset	Intel® 945GSE + ICH7M	Intel® 945GSE + ICH7M	Intel® HM55	Intel® 945GSE + ICH7M	Intel® GM45 + ICH9M
	RAM	One 200-pins DDR2 SO-DIMM (max. 2GB)	One 200-pins DDR2 SO-DIMM (max. 2GB)	Two 204-pins DDR3 SO-DIMM (max. 8GB)	One 200-pins DDR2 SO-DIMM (max. 2GB)	Two 200-pins DDR2 SO-DIMM (max. 4GB)
I/O Ports and Switches		1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15)		1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15) 1 x HDMI Port	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15)	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15) 1 x HDMI Port
Drive Bay	HDD	1 x 2.5" IDE HDD bay		1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay or Optional HSUPA module	
	SSD	CF Type II		SATA SSD	CF Type II	
	CD-ROM	--	1 x Slim type ODD bay	--	--	--
Wireless Connection	Wi-Fi	IEEE 802.11 b/g/n (internal Mini PCI)		IEEE 802.11 b/g/n (internal PCIe Mini card)		
Audio/Video Device	Camera Module	--	--	--	300K pixels	
	Microphone	--	--	--	Yes	
Physical	Dimensions (WxHxD) (mm)	394 x 309 x 61	394 x 309 x 71	394 x 309 x 66	400 x 273 x 63	400 x 273 x 63
	Net Gross Weight	3.2 Kg	3.5 Kg	5.8 Kg	3.3 Kg	3.3 Kg
System Cooling		Fanless	Fanless	Active with fan	Fanless	Active with fan
Environment	Operation Temperature	0°C~40°C with SATA HDD -10°C~45°C with CF card or SATA SSD		0°C~50°C	0°C~40°C with SATA HDD -10°C~50°C with CF card or SATA SSD	
	Storage Temperature	-20°C~60°C		-20°C~60°C	-20°C~60°C	
Power Requirement		12 VDC				

1
IEI Mobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

AFOLUX 17"~19" Selection Guide

Intel® Core™ i7/i5/i3

16:9 Wide Screen

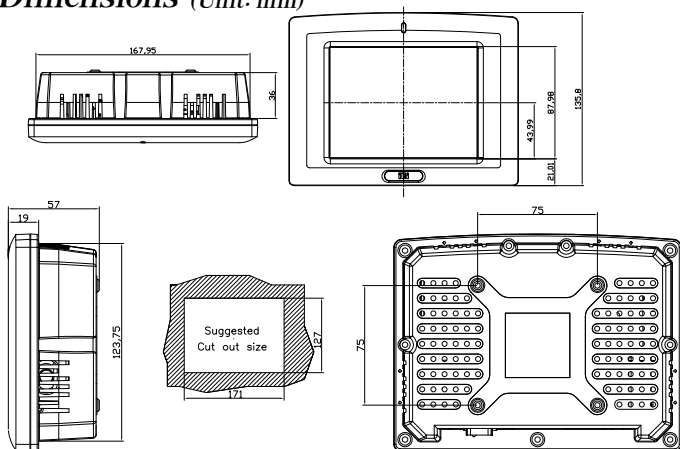| LCD Size		17"			19"	Wide 19"
Model		**AFL-17D-N270**	**AFL-17D-GM45**	**AFL-17i-HM55**	**AFL-19i-HM55**	**AFL-W19A-N270**
Display	LCD Size	17"			19"	
	Max Resolution (WxH)	1280 x 1024				1440 x 900
	Brightness (cd/m²)	300		380	450	300
	Contrast Ratio	800:1			1000:1	1000:1
	LCD Color	16.7M				16.2M
	Pixel Pitch (mm) (HxV)	0.264(H) x 0.264(V)			0.294 (H) x 0.294 (V)	0.285 (H) x 0.285 (V)
	Viewing Angle (H/V)	160º/160º			178º/178º	170º/160º
	Backlight MTBF (hrs)	50000				
Motherboard	CPU	Intel® Atom™ Processor N270 1.6GHz CPU	Intel® Celeron® M 575 2.0GHz / Intel® Core™2 Duo P8400 2.26GHz CPU / Intel® Core™2 Duo T9400 2.53GHz CPU	Intel® Celeron® M P4500 CPU" / Intel® Core™ i7/i5/i3	Intel® Celeron® M P4500 CPU / Intel® Core™ i7/i5/i3	Intel® Atom™ Processor N270 1.6GHz CPU
	Chipset	Intel® 945GSE + ICH7M	Intel® GM45 + ICH9M	Intel® HM55	Intel® HM55	Intel® 945GSE + ICH7M
	RAM	One 200-pin DDR2 SO-DIMM (max. 2GB)	Two 200-pin DDR2 SO-DIMM (max. 4GB)	Two 204-pin DDR3 SO-DIMM (max. 8GB)	Two 204-pin DDR3 SO-DIMM (max. 8GB)	One 200-pin DDR2 SO-DIMM (max. 2GB)
I/O Ports and Switches		1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15)	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 6 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15) 1 x HDMI Port	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15) 1 x HDMI Port	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15) 1 x HDMI Port	1 x RS-232 COM Port (DB-9) 1 x RS-232/422/485 COM Port (DB-9) 2 x RJ-45 for GbE LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out) 1 x VGA (DB-15)
Drive Bay	HDD	1 x 2.5" SATA HDD bay				
	SSD	CF Type II		SATA SSD	SATA SSD	CF Type II
	CD-ROM	1 x Slim type ODD bay		--	--	--
Wireless Connection	WiFi	IEEE 802.11 b/g/n (internal PCIe Mini card)				
Audio/Video Device	Camera Module	300K pixels		--	--	300K pixels
	Microphone	Yes		--	--	Yes
Physical	Dimensions (WxHxD) (mm)	410 x 349 x 83		428 x 350 x 71	470 x 383 x 72	475 x 259 x 65
	Net Gross Weight	6.2 Kg		6.0 Kg	6.2 Kg	5.8 Kg
System Cooling		Fanless	Active with fan	Active with fan	Active with fan	Fanless
Environment	Operation Temperature	0°C~40°C with SATA HDD -10°C~50°C with CF card or SATA SSD		0°C~50°C	0°C~50°C	0°C~40°C with SATA HDD -10°C~50°C with CF card or SATA SSD
	Storage Temperature	-20°C~60°C				
Power Requirement		12 VDC				

1 IEI Mobile Solutions
2 Automation Panel Solutions
3 RISC-based Solutions
4 PACSmate Medical Solutions
5 Optional Peripherals

5.7" VGA AFOLUX PPC

AFL-057A-LX
AMD Geode™ LX 800 500MHz Processor

AFL-057A-Z510/Z530
5.7" Power over Ethernet (PoE) All-in-One Panel PC

PoE IEEE802.3af

IPS-2042TX Industrial Lite-managed PoE Switch

Features

- 5.7" PoE compliant Panel PC with resistive touchscreen
- IEEE802.3af Power Over Ethernet (PoE) compliant
- Intel® Atom™ processor Z510P/Z530P up to 1.6 GHz
- Lower power consumption and fanless operation
- One CompactFlash® slot
- Wide operating temperature capability: -20ºC to 60ºC (AFL-057A-ZXX)
- IEI One Key Recovery solution for rapid OS backup and recovery (over 4 GB storage capacity recommended)
- IP64 compliant front panel

PoE | -20ºC~60ºC Wide Temp | IP64 | Fanless | One Key Recovery

Specifications

Model	AFL-057A-LX	AFL-057A-Z510/Z530
LCD Size	5.7"	
Max Resolution	640 (W) x 480 (H)	
Brightness (cd/m²)	400	
Contrast Ratio	300:1	
LCD Color	262K	
Pixel Pitch (mm)	0.06 (W) x 0.18 (H)	
Viewing Angle (H-V)	140º / 100º	
Backlight MTBF	50,000 hrs (LED Backlight)	
SBC Model	AFLMB-LX2-800	AFLMB-US15W
CPU	AMD Geode™ LX 800 (500Mhz)	Intel® Atom™ Processor Z530P 1.6 GHz Intel® Atom™ Processor Z510P 1.1 GHz
Chipset	AMD LX800 + AMD CS5536	Intel® SCH: US15W
RAM	Supports one 333MHz or 400MHz DDR SO-DIMM (Max.1GB)	Supports one 533MHz or 400MHz DDR SO-DIMM (Max.2GB)
I/O Ports	1 x RJ-45 for RS-232 COM port 1 x RJ-45 for RS-232/422/485 COM port 2 x USB 2.0 1 x RJ-45 for 10/100Mbps LAN 1 x VGA port 1 x Power switch 1 x Reset button 1 x Power jack	1 x RS-232/422/485 COM port 1 x RJ-45 for GbE supports IEEE 802.3af, PoE/PD 1 x USB 2.0 1 x Reset button 1 x 5V DC power input
SSD	CF Type II	
PoE Function	--	Require IEEE 802.3af 12.95W power input Power Device PD (Power-input)
Watchdog Timer	Software programmable supports 1~255 sec. system reset	
Audio	AMP 1.5W + 1.5W (internal speaker)	
Wireless Connection	1 x Wireless LAN 802.11 b/g Module (internal USB interface)	--
Construction Front Panel	ABS + PC Plastic front frame /Aluminum die-casting body	
LED Function	1 x LED on front panel for power on/off	
Mounting	Panel, Wall, Rack, Stand or Arm mounting VESA 75mm x 75mm	Panel, Wall, Stand and Arm VESA 75mm x 75mm
Front Panel Color	Gray 7539U	
Dimension (WxHxD) (mm)	180 x 135 x 55	
Operation Temperature (°C)	0°C~50°C	-20°C~60°C
Storage Temperayure (°C)	-20°C ~ 60°C	
N/G Weight	0.8 Kg	
IP Level	Front Frame IP64	
Safety & EMC	CE / FCC	
Touch Screen	4-Wire Resistive Type (touch controller IC is on board)	
Power Adapter	P/N: 63000-FSP036RAB608-RS	P/N: 63000-FSP025DGAA1705-RS (optional)
	36W Power Adapter Input: 90VAC~264VAC, 50/60Hz	25W Power Adapter Input: 90VAC~264VAC, 50/60Hz
	Output: 12VDC	Output: 5VDC
Power Requirement	12VDC	5V DC-IN Power input or receives PoE Power from RJ45 Connector
Power Consumption	15W	12W

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

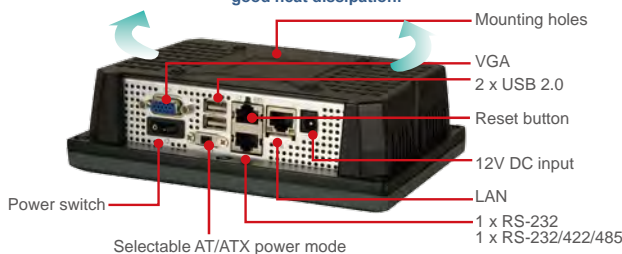# PoE Panel PC Eliminates Need for AC Outlets

The IEI AFL-057A is IEEE 802.3af compliant. The IEEE 802.3af PoE standard ensures that 12.95W of DC power is provided to each connected device. PoE Technology describes a system that safely transfers electrical power, along with data, to remote devices over a standard category 5e cable in an Ethernet network.
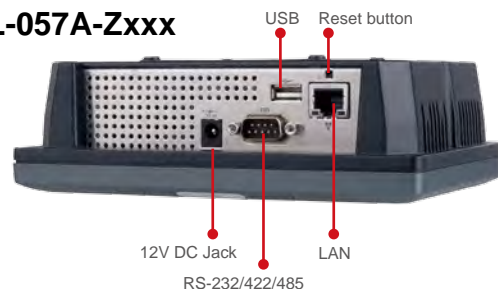
DC Power In

Intranet

PoE Switch

100100111000

Voice over IP phones

IP-based cameras

Wireless LAN access points

Power
Data

PoE IEEE802.3af

AFL-057A
Dimensions (Unit: mm)

167.95
36
87.98
135.8
43.99
21.01

57
19
123.75
127
75
75
171

Suggested Cut out size

AFL-057A-LX Aluminum die-casting rear cover with good heat dissipation!

Mounting holes
VGA
2 x USB 2.0
Reset button
12V DC input
LAN
1 x RS-232
1 x RS-232/422/485

Power switch

Selectable AT/ATX power mode

AFL-057A-Zxxx

USB   Reset button

12V DC Jack   LAN

RS-232/422/485

Ordering Information

Part Number	Description
AFL-057A-LX/R/256M-R21	5.7" VGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, wireless module, touch screen and 256MB DDR RAM, R21, RoHS
AFL-057A-LX/R/512M-R21	5.7" VGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, wireless module, touch screen and 512MB DDR RAM, R21, RoHS
AFL-057A-Z530/ R/1G-R11	5.7" 400 cd/m² VGA fanless panel PC with Intel® Atom™ Z530 1.6 GHz, PoE IEEE 802.3 af, touch screen,1 GB DDR2 553 MHz, RoHS
AFL-057A-Z510/ R/1G-R11	5.7" 400 cd/m² VGA fanless panel PC with Intel® Atom™ Z510 1.1 GHz, PoE IEEE 802.3 af, touch screen ,1GB DDR2 553 MHz, RoHS

Options

	Item	AFL-057A-LX	AFL-057A-Zxxx
IQ Mount	Panel Mount Kit	AFLPK-12	
	Wall Mount Kit	AFLWK-12	
	Rack Mount Kit	AFLRK-057	
	ARM	ARM-11-RS / ARM-31-RS	
	Stand	STAND-A08 / STAND-C12 / STAND-100-RS	
	VSTAND	VSTAND-A07	
OS	Win XPE (1GB CF card)	AFLCF-057-LX-XPE-R10	AFLCF-057-US15W-XPE-R10
	Win 7 Embedded (2GB CF card)	N/A	AFLCF-057-US15W-WES7E-R10
	Win CE 5.0 (128MB CF card)	AFLCF-057-LX-CE5-R10	N/A
	Win CE 6.0 (128MB CF card)	AFLCF-057-LX-CE6-R10	AFLCF-057-US15W-CE6-R10
	Linux (2GB CF card)	AFLCF-057-US15W-LNX-R10	N/A
Industrial PoE Switch (4 ports P.S.E)		N/A	IPS-2042TX
Card Reader	Hybrid Card Reader	AFLP-08AMSI-U	AFLP-08AMSI-U
	Magnetic Stripe Reader	AFLP-08AMSR-U	AFLP-08AMSR-U
Power Adapter	DC to DC converter module	IDD-930160-KIT	N/A
	DC 12V Input UPS	AUPS-A10-R1- (7.4V 3800mAH)	N/A
	DC 9~36V Input UPS	AUPS-A10-R1- (7.4V 3800mAH)	N/A
	25W Pwer Adapter for AFL-057A-Zxxx	N/A	63000-FSP025DGAA1705-RS
Bluetooth	Bluetooth V2.0+EDR	AFL-BT-KIT03-R10	N/A

IPS-2042TX
Industrial 6-port Lite-Managed PoE Ethernet Switch

• World's fastest Redundant Ethernet Ring : O-Ring (Recovery time < 10 ms over 250 units of connection)
• Multiple Redundant Ethernet technology RSTP/STP, O-Ring supported
• SNMP v1 supports secured network management
• Web-based configuration and Windows utility (Open-Vision)
• Triple redundant DC power inputs via terminal block and power jack
• Event notification through Syslog, Email, and SNMP trap
• Two 100Base-FX fiber ports support long distance connections
• 4 ports support P.S.E based on IEEE 802.3af standard up to 25 watts per port
• Wide operating temperature range from -40°C to 70°C

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adpater	63000-FSP036RAB608-RS	1	90~264V AC; 12V DC; 36W (for AFL-057A-LX)
Power Cord	32000-000002-RS	1	1750mm (EU or US, depending on the shipment country) (for AFL-057A-LX)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

7" Wide Screen WVGA AFOLUX PPC

AFL-07A-LX	AMD Geode™ LX 800 500 MHz Processor
AFL-07A-N270	Intel® Atom™ N270 1.6GHz Processor
AFL-W07A-N26	Intel® Atom™ N2600 1.6GHz Processor **New**

9V ~ 28V Wide DC Power Input

The compact fanless AFL-W07A-N26 model with widescreen high-brightness panel is ideal for setup in a place where space and light is limited. This makes it an ideal choice for mobile and transportation PC applications.

16:9 Wide Screen

Features

- 7" widescreen WVGA LED backlight TFT LCD with resistive touch screen
- 9V~28V wide range DC power input (for Intel® N2600 platform)
- Compact design with plastic housing
- Fanless cooling system
- Selectable AT/ATX power mode
- System memory up to 2 GB SDRAM
- Built-in 802.11b/g/n Wireless LAN
- Built-in speakers
- One compactFlash® slot
- IP64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (suggest with over 4GB storage capacity)

Wireless 802.11 b/g/n | DDR3 | Speakers | Dual Display | mSATA | Touch Screen | IP64 | One Key Recovery

Specifications

Model	AFL-07A-LX / AFL-07A-LX24V	AFL-07A-N270	AFL-W07A-N26
LCD Size	7"		
Max Resolution	800 x 480		
Brightness (cd/m²)	500		
Contrast Ratio	400:1		
LCD Color	262K		
Pixel Pitch (mm)	0.0635 (H) x 0.1905 (V)		
Viewing Angle (H-V)	140º / 110º		
Backlight MTBF	50000 hrs (LED Backlight)		
SBC Model	AFLMB-LX-800	AFLMB-945GSE-N270-R10	AFLMB-CV-N2600-R10
CPU	AMD Geode™ LX 800 (500Mhz)	Intel® Atom™ processor N270 1.6GHz CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU
Chipset	AMD LX800 + AMD CS5536	Intel® 945GSE + ICH7M	Intel® NM10
RAM	Supports one 333MHz or 400MHz DDR SO-DIMM (1GB Max.)	Supports one 400MHz or 533MHz DDR2 SO-DIMM (2GB Max.)	One 800 MHz 204-pin DDR3 SO-DIMM slot (max. 2G) pre-installed wiith 2GB
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Jack (Line-out)	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for GbE 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x External SATA 1 x Audio Jack (Line-out)	1 x 9-28V Lockable DC Jack 1 x RJ45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 2 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out
SSD	CF Type II		mSATA
Watchdog Timer	Software programmable supports 1~255 sec. system reset		
Audio	AMP 1.5W + 1.5W (internal speaker)		AMP 2W + 2W (internal speaker)
Wireless Connection	1 x Wireless LAN 802.11 b/g Module (internal Mini PCI interface)	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)	1 x Wireless LAN 802.11 b/g/n 2T2R Module (internal PCIe Mini card interface)
Construction Front Panel	ABS + PC Plastic front frame		
LED Function	1 x LED on front panel for power on/off		
Mounting	Panel, Wall, Rack, Stand or Arm mounting VESA 75mm x 75mm		
Front Panel Color	Gray 7539U		
Dimensions (WxHxD) (mm)	226 x 140 x 41		
Operation Temperature (°C)	0~50°C	-10°C ~50°C	-10°C~50°C
Storage Temperayure (°C)	-20°C ~ 60°C		
N/G Weight	0.6 Kg		
IP Level	Front Frame IP64		
Safety & EMC	CE / FCC		
Touch Screen	4-wire Resistive Type (touch controller IC is on board)		
Power Adapter	P/N: 63000-FSP036RAB608-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC		P/N: 63000-FSP036RAB610-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC/ 18~30VDC	12VDC	9-28V DC
Power Consumption	20W	23W	23W

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Fully Integrated I/O

AFL-07A-LX
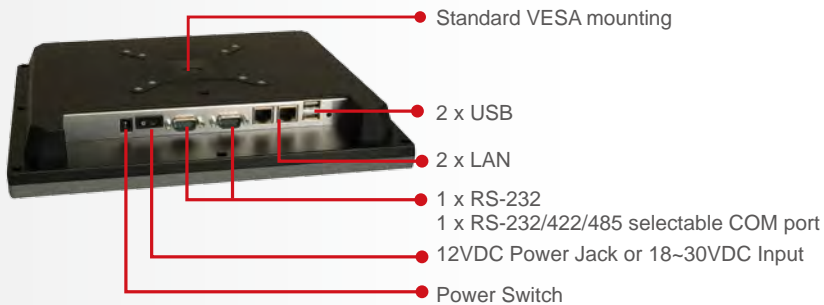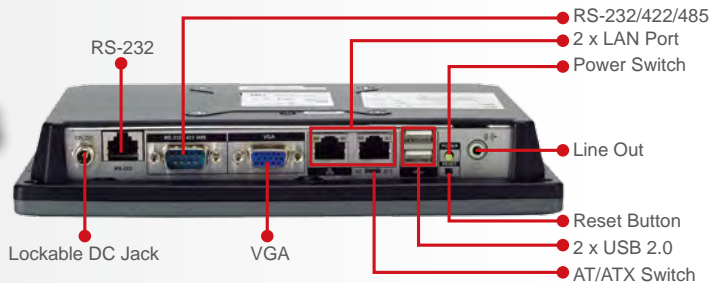
- Standard VESA mounting
- 2 x USB
- 2 x LAN
- 1 x RS-232
- 1 x RS-232/422/485 selectable COM port
- 12VDC Power Jack or 18~30VDC Input
- Power Switch

AFL-07A-N270

- Standard VESA mounting
- 2 x USB
- 2 x LAN
- 1 x RS-232
- 1 x RS-232/422/485 selectable COM port
- Power Switch
- 12VDC Power Jack
- Audio (Line-out)

AFL-W07A-N26

- RS-232
- RS-232/422/485
- 2 x LAN Port
- Power Switch
- Line Out
- Reset Button
- 2 x USB 2.0
- AT/ATX Switch
- Lockable DC Jack
- VGA
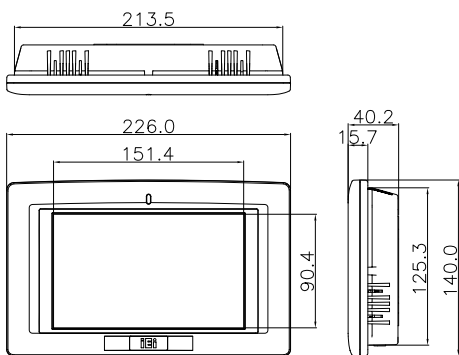
AFL-07A/AFL-W07A
Dimensions (Unit: mm)

213.5
226.0
151.4
90.4
40.2
15.7
125.3
140.0
45°
210.5
66.5
124.4

Suggested Cut out size
215.55
127.27

(Optional Stand Kit)

1 IEI Mobile Solutions
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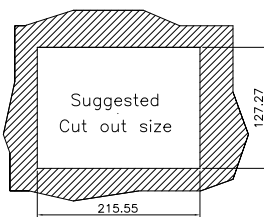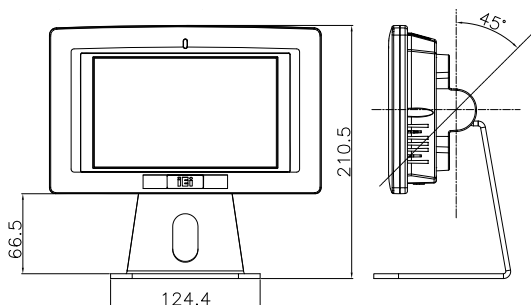
Ordering Information

Part Number	Description
AFL-07A-LX/R/256-R22	7" 500 cd/m², WVGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g Wireless Module, Touch screen and 256MB DDR RAM, R22
AFL-07A-LX/R/512-R22	7" 500 cd/m², WVGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g Wireless Module, Touch screen and 512MB DDR RAM, R22
AFL-07A-N270/R/1G-R23	7" 500 cd/m² WVGA fanless panel PC with Intel® Atom™ N270 1.6GHz, 802.11b/g/n wireless module, touch screen ,1GB DDR2 533, R23
AFL-W07A-N26/R/2G-R10	7" 500cd/m², WVGA fanless panel PC with Intel® Atom™ cedarview N2600 dual core 1.6GHz, 802.11b/g/n wireless module, touch screen, 2GB DDR3, R10

Options

Model	AFL-07A-LX	AFL-07A-N270	AFL-W07A-N26
Panel Mounting Kit	AFLPK-12		
Wall Mounting Kit	AFLWK-12		
Rack Mounting Kit	AFLRK-07		
Arm	ARM-11-RS / ARM-31-RS		
Stand	STAND-A08 / STAND-100-RS		
VSTAND	VSTAND-A07		
9~30VDC to 12VDC Converter Module	IDD-930160-KIT		
OS: Win CE 5.0 (128 MB CF card)	AFLCF-07-LX-CE-R21	N/A	N/A
OS: Win CE 6.0 (128 MB CF card)	AFLCF-07-LX-CE060-R21	AFLCF-07-N270-CE060-R21	AFL-W07-N26-CE060-R10*
OS: Win XPE (1 GB CF card)	AFLCF-07-LX-XPE-R21	AFLCF-07-N270-XPE-R21	AFL-W07-N26-LNX-R10*
OS: LINUX (2 GB CF card)	AFLCF-07-LX-LNX-R21	AFLCF-07-N270-LNX-R21	AFL-W07-N26-WES7E-R10*
OS: Win 7 Embedded (2 GB CF card)	N/A	AFLCF-07-N270-WES7E-R21	AFL-W07-N26-XPE-R10*
Hybrid Card Reader	AFLP-08AMSI-U		
Magnetic Stripe Reader	AFLP-08AMSR-U		
DC 12V Input UPS	AUPS-A10-R10 (7.4V 3800mAH)		
DC 9~36V Input UPS	AUPS-A20-R10 (7.4V 3800mAH)		
Bluetooth V2.0+EDR	AFL-BT-KIT02-R10		

*OS image with CD-ROM

ISMM Support Functions

	Voltage	Fan	Smart Fan	Temperature	WDT	Cash Drawer
AFL-07A-LX	V			V	V	
AFL-07A-N270	V			V	V	
AFL-W07A-N26	V			V	V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adpater	63000-FSP036RAB608-RS 63000-FSP036RAB610-RS (for AFL-07A-N26)	1	90~264V AC; 12V DC; 36W
Power Cord	32000-000002-RS	1	1750mm; European Standard (EU or US, depending on the shipment country)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

1 IEI Mobile Solutions

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4 PACSmate Medical Solutions

5 Optional Peripherals

8.4" SVGA AFOLUX Panel PC

AFL-08AH-LX	AMD Geode™ LX 800 500 MHz Processor
AFL-08AH-N270	Intel® Atom™ N270 1.6GHz Processor
AFL-08A-N26	Intel® Atom™ N2600 1.60 GHz Processor *New*

Features

- 8.4" TFT LED Backlight LCD with resistive touch screen
- 9V~28V wide range DC power input (for Intel® N2600 platform)
- Fanless cooling system
- Selectable AT/ATX power mode
- System memory up to 2GB SDRAM
- Built-in 802.11b/g/n Wireless LAN
- Built-in speakers
- One CompactFlash® slot
- IP64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Suggest over 4GB storage capacity)

Fanless | **Wireless 802.11 b/g** | **Speakers** | **F3 One Key Recovery** iEi symantec.

Specifications

Model	AFL-08AH-LX	AFL-08AH-N270	AFL-08A-N26
LCD Size	8.4"		
Max Resolution	800 x 600		
Brightness (cd/m²)	450		
Contrast Ratio	600:1		
LCD Color	262K		
Pixel Pitch (mm)	0.213 (H) x 0.213 (V)		
Viewing Angle (H-V)	160º / 140º		
Backlight MTBF	50000 hrs (LED Backlight)		
SBC Model	AFLMB-LX-800	AFLMB-945GSE-N270-R10	
CPU	AMD Geode™ LX 800 (500MHz)	Intel® Atom™ process N270 1.6GHz CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU
Chipset	AMD LX 800 + AMD CS5536	Intel® 945GSE + ICH7M	Intel® NM10
RAM	Supports one 400MHz or 533MHz DDR SO-DIMM (Max.1GB)	Supports one 400MHz or 533MHz DDR2 SO-DIMM (Max. 2GB)	One 800 MHz 204-pin DDR3 SO-DIMM slot (Max. 2GB)pre-installed wiith 2GB
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for GbE 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x External SATA 1 x Audio Port 1 x Power Jack	1 x 9-28V Lockable DC Jack 1 x RJ45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 2 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out
SSD	CF Type II		
Watchdog Timer	Software programmable supports 1~255 sec. system reset		
Audio	AMP 1.5W + 1.5W (internal speaker)		AMP 2W + 2W (internal speaker)
Wireless Connection	1 x Wireless LAN 802.11 b/g Module (internal Mini PCI interface)	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)	1 x Wireless LAN 802.11 b/g/n 2T2R Module (internal PCIe Mini card interface)
Construction Front Panel	ABS + PC Plastic front frame		
LED Function	1 x Power on/off LED on front panel		
Mounting	Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm		
Front Panel Color	Gray 7539U		
Dimensions (WxHxD) (mm)	234 x 184 x 42		
Operation Temperature (°C)	0°C ~ 50°C	-10°C ~50°C	-10°C ~50°C
Storage Temperayure (°C)	-20°C ~ 60°C		
N/G Weight	0.8 Kg		
IP Level	Front Frame IP64		
Safety & EMC	CE / FCC		
Touch Screen	4-Wire Resistive Type (touch controller IC is on board)		
Power Adapter	P/N: 63000-FSP036RAB608-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC		P/N: 63000-FSP036RAB610-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC	12VDC	9-28V DC
Power Consumption	20W	29W	29W

1 IEI Mobile Solutions

2 Automation Panel Solutions

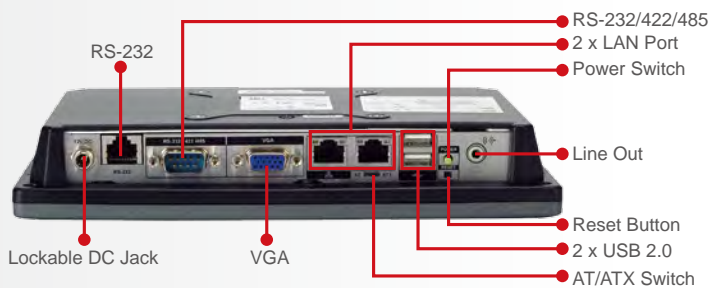**3** RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Fully Integrated I/O

AFL-08AH-LX

- Standard VESA mounting
- 2 x USB
- 2 x LAN
- 1 x RS-232
  1 x RS-232/422/485 selectable COM port
- 12VDC Power jack or 18~30VDC input
- Power switch

AFL-08AH-N270

- Standard VESA mounting
- 2 x USB
- 2 x LAN
- 1 x RS-232
  1 x RS-232/422/485 selectable COM port
- Power switch
- 12VDC power jack
- Audio (Line-out)

AFL-08A-N26

- RS-232
- RS-232/422/485
- 2 x LAN Port
- Power Switch
- Line Out
- Lockable DC Jack
- VGA
- Reset Button
- 2 x USB 2.0
- AT/ATX Switch
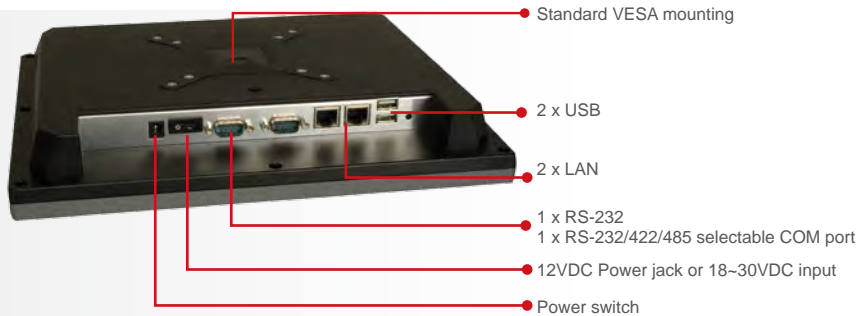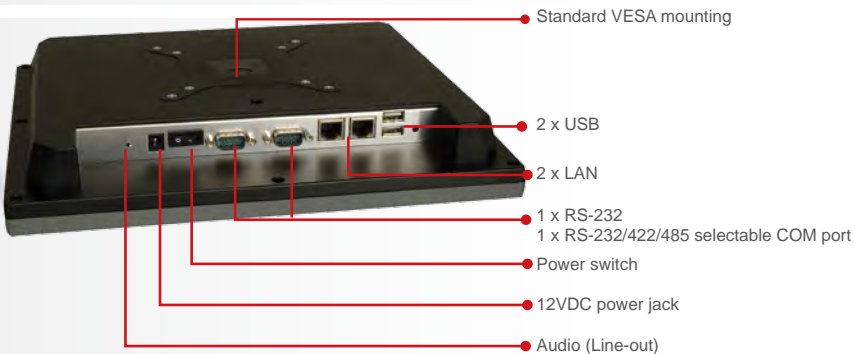
AFL-08AH/AFL-08A
Dimensions *(Unit: mm)*

219.8

233.9
170.4
127.8

41.1
17.0
171.8
183.9

Suggested
Cut out size
174.76
222.76

205.2
45°
21.4
124.4

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

AFL-08A-2013-V10   2-45

Ordering Information

Part Number	Description
AFL-08AH-LX/R/256-R22	8.4" 450 cd/m², SVGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g Wireless Module, Touch screen and 256MB DDR RAM, R22
AFL-08AH-LX/R/512-R22	8.4" 450 cd/m², SVGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g Wireless Module, Touch screen and 512MB DDR RAM, R22
AFL-08AH-N270/R/1G-R23	8.4" 450 cd/m², SVGA fanless panel PC with Intel® Atom™ N270 1.6GHz,802.11b/g/n wireless module, touch screen , 1GB DDR2 533MHz, R23
AFL-08A-N26/R/2G-R10	8.4" 450cd/m², SVGA fanless panel PC with Intel® Atom™ cedarview N2600 dual core 1.6GHz, 802.11b/g/n wireless module, touch screen, 2GB DDR3, R10

Options

Model	AFL-08AH-LX	AFL-08AH-N270	AFL-08A-N26
Panel Mounting Kit		AFLPK-12	
Wall Mounting Kit		AFLWK-12	
Rack Mounting Kit		AFLRK-08	
Arm		ARM-11-RS / ARM-31-RS	
Stand		STAND-A08 / STAND-100-RS	
VSTAND		VSTAND-A10	
9~30VDC to 12VDC Converter Module		IDD-930160-KIT	
OS: Win CE 5.0 (128 MB CF card)	AFLCF-08-LX-CE-R21	--	
OS: Win CE 6.0 (128 MB CF card)	AFLCF-08-LX-CE060-R21	AFLCF-08-N270-CE060-R21	AFL-08-N26-CE060-R10
OS: Win XPE (1 GB CF card)	AFLCF-08-LX-XPE-R21	AFLCF-08-N270-XPE-R21	AFL-08-N26-LNX-R10
OS: LINUX (2 GB CF card)	AFLCF-08-LX-LNX-R21	AFLCF-08-N270-LNX-R21	AFL-08-N26-WES7E-R10
OS: Win 7 Embedded (2GB CF card)	--	AFLCF-08-N270-WES7E-R21	AFL-08-N26-XPE-R10
Hybrid Card Reader		AFLP-08AMSI-U	
Magnetic Stripe Reader		AFLP-08AMSR-U	
DC 12V Input UPS		AUPS-A10-R10 (7.4V 3800mAH)	
DC 9~36V Input UPS		AUPS-A20-R10 (7.4V 3800mAH)	
Bluetooth V2.0+EDR	AFL-BT-KIT02-R10	AFL-BT-KIT01-R10	AFL-BT-KIT02-R10

*OS image with CD-ROM

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	DIO	WDT	Cash Drawer
AFL-08AH-LX	V			V		V	
AFL-08AH-N270	V			V		V	
AFL-08AH-N26	V			V		V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adpater	63000-FSP036RAB608-RS 63000-FSP036RAB610-RS (for AFL-08A-N26)	1	90~264V AC; 12V DC; 36W
Power Cord	32000-000002-RS	1	1750mm; European Standard (EU or US, depending on the shipment country)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

AFL-F08A 8" Flat-bezel Panel PC

The new 8" panel is a full-flat surface touchscreen PC. The AFL-F08A includes all necessary input/output interfaces to control any subsystem or automation hardware in your office, business, or home. The new stylish design is easily integrated into any environment. The front panel is IP64 compliant. An optional projected capacitive touchscreen provides a multi-touch interactive user experience.

Features:

- 8.0" LED TFT LCD with stylish flat-bezel touchscreen
- Optional projected capacitive touchscreen supports multi-touch
- Fanless system with Intel® Atom™ Processor N270 (512K Cache, 1.60 GHz, 533 MHz FSB)
- Hot keys controlled by cap-sensor in the front panel
- Optional color change kit matches the style of any decoration
- Wireless Wi-Fi LAN 802.11 b/g/n
- Built-in 2 megapixel CMOS camera with low-light capability
- Two 1.5W speakers and micophone for multimedia applications
- IP64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (suggest with over 4GB storage capacity)

Multi-touch | WiFi CERTIFIED | intel Intelligent Systems Alliance | Windows 7 | One Key Recovery IEI symantec.

Full-flat Surface Touchscreen

The AFL-F08A flat-bezel design covers the entire front frame (bezel) of standard LCD to make the screen and bezel appear to blend together. The seamless flat-bezel touchscreen system offers a stylish and easy to clean surface.

Flat-bezel Advantages:

- **Better visual effects**
- **No edge effect**
- **Sleek and stylish**
- **Easy to clean**

With Bezel
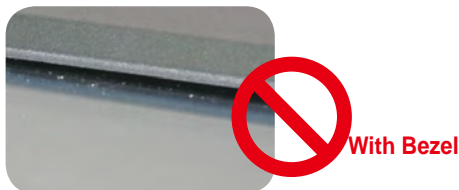
Applications:

OFFICE   **LIVING ROOM**   **YACHTING**

KITCHEN   **AUTOMATION**   **MUSEUM**
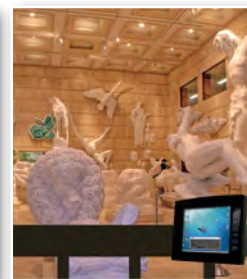
1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

■ 5-wire Resistive Touch Sensor

Convenient hot key menu controlled by cap-sensor

Activated by a stylus, a finger or gloved hand

● Operational Theory

There are two major parts of resistive touch panel: ITO film and ITO glass. Two conductive layers are separated and isolated by the dot spacers scattered evenly on the ITO glass. Only when the proper activation force is applied onto the ITO film, these two conductive layers are contacted and the analog signal (the voltage) will be sent out to the touch panel controller then transferred into a digital signal for system processing.

ITO medbrane   Film   Spacer

Electrode

ITO medbrane   Glass or Film   Electrode
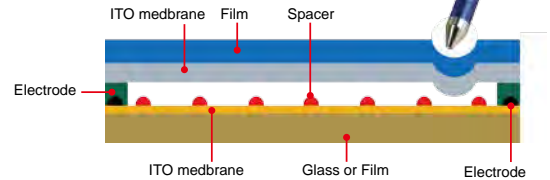
Touch Window Architecture

The AFL-F08A utilizes touch window technology which consists of a decorative film overlay mounted in front of the touch panel to achieve the true-flat surface of a flat-bezel touch system.

Resistive Touch Panel + **Film** = **Touch Window**

■ Projected Capacitive Touch Sensor

Activated by a finger or gloved hand

● Operational Theory

Projected capacitive touch is based on principle of embedding an array of micro-fine sensing wires within a multi-layer laminated screen behind a protective front surface, ensuring that the sensing medium is well-protected from accidental damage.

● Windows® 7 with Multi-touch Capability

The AFL-F08A comes with the true multi-touch Microsoft Windows 7 operating system. Windows 7 features improved touch and gesture support. With Windows 7, handwriting recognition is faster, more accurate and with more language support.

Projected Field

Front Glass

X-Y Wire Array

Capacitance forms between The finger and an electrode In the sensor grid.

Hard Coat Film Rear
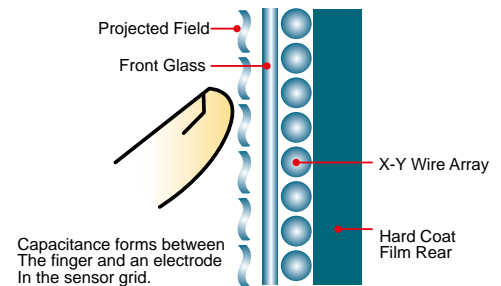
● 7H Anti-scratch Surface (Projected capacitive type touch screen)

Projected Capacitive touch technology utilizes a durable glass front surface. 7H hardness is stronger than the conventional touch panel and therefore is able to protect the screen from damage.

Typical Panel	Fingernail	Knife	Steel	Quartz	Beryl	Diamond
2H	3H	5H	6H	7H	8H	10H

MOH's Hardness Rating
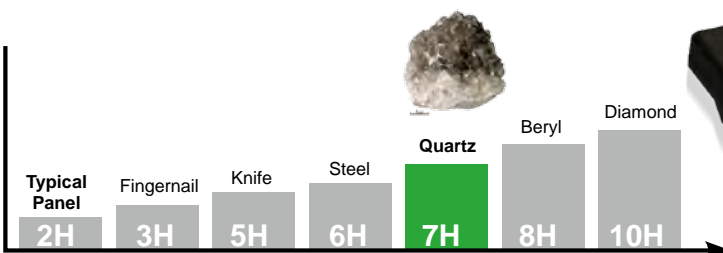
Picture Frame In-Wall Mount

This optional kit includes a decorative front plate and wall mount enclosure to securely house the AFL-F08A panel PC. The enclosure includes knockouts for power and I/O interface cables.
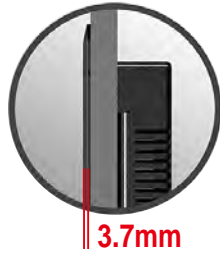
3.7mm

Decorative front plate

In-Wall Enclosure
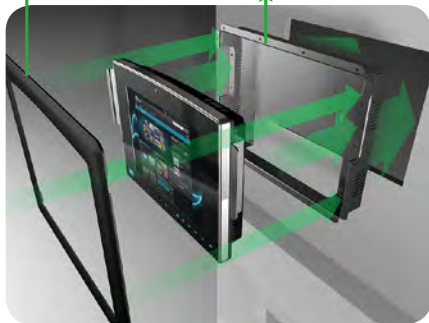
● **Optional Decorative Kit:**

DIM.
300mm x 230mm x 3.7mm

(Optional)

+ =
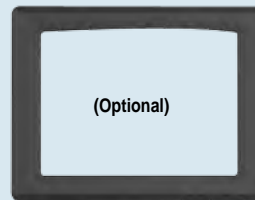
Restaurant Interactive Multi-touch Table

Applications

The AFL-F08A interactive system can be mounted in tables from which your customers can order, track and pay for their meal. The terminals can also be used to play digital games while waiting for the food to be served.

At the Table	POS/Front of Restaurant	Back Office

Ethernet **Ethernet**

USB/COM **Ethernet** **Ethernet**

Royalty Card

Thermal Printer **Card Reader** **DVR** **CCD Camera** **Remote Surveillance**

Casino Customer Relationship Management

Applications

The user friendly all-in-one system helps casino managers and dealers to identify players and to calculate and record winnings. It is easy to connect to peripherals such as card readers and ticket reader/printers. Convenient and reliable communication with system management servers can be achieved through LAN or wireless LAN connection.

Giga LAN

USB

Player Identification

Player Card

● Credit check
● Settlement of accounts

Management Server

COM

Coupon/Cash-out Ticket Printing

COUPON
$90 OFF

1
IEI Mobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

Hot Keys Controlled by Cap-Sensor

Brightness Control

Volume Control

Hot Keys Lock

LCD On/Off

Versatile I/O Ports

12V DC Jack
Power Switch
RS-232/422/485

Audio Line-out

Reset Button

External SATA   RS-232   LAN Port 2xUSB2.0

AFL-F08A Dimensions *(Unit: mm)*

234
24.8
17.7
177
20
119.9
20
75
75
69.5
26.5
20
26.5
20
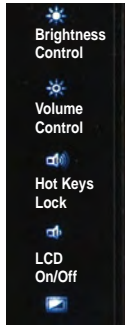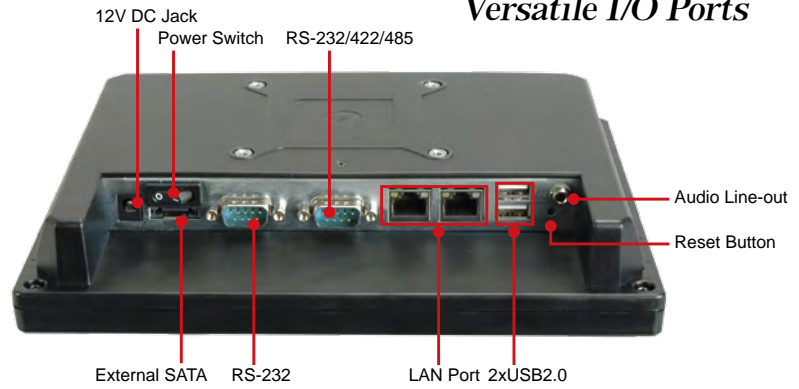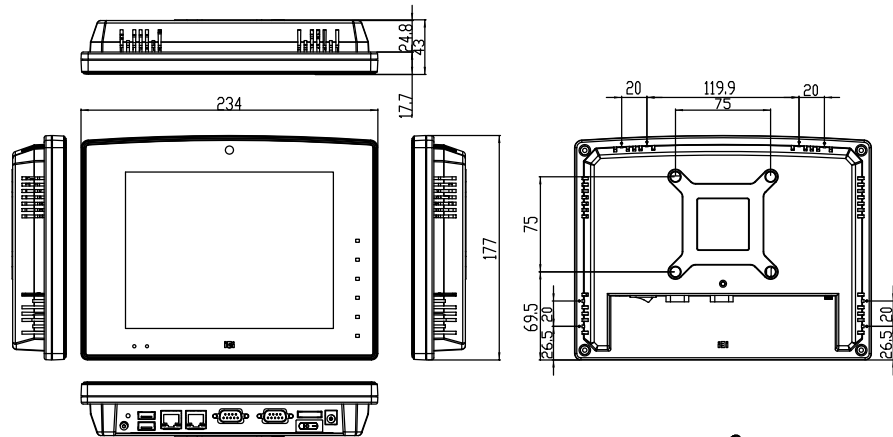
Decoration Kit Dimensions *(Unit: mm)*

298
237.41
20.1
9.25
230.27
115.13
173.27
240
33.37
180.4
132
145.1
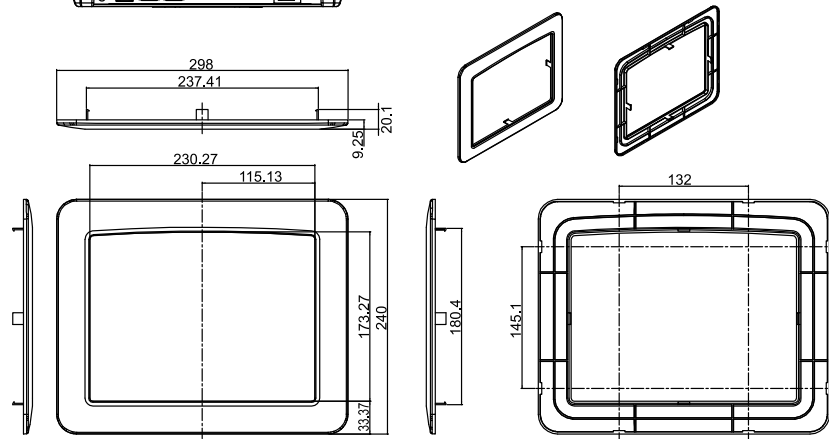
In-Wall Cage Dimensions *(Unit: mm)*
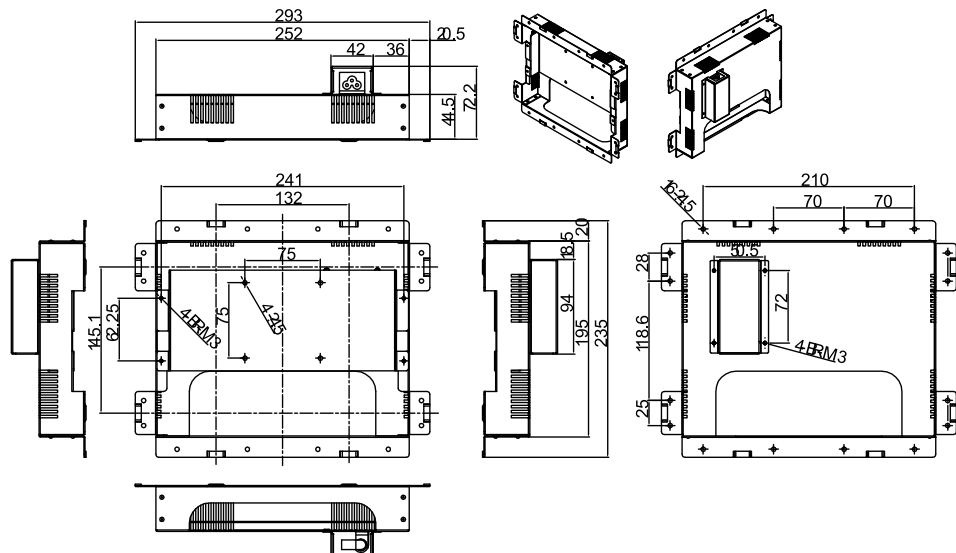
293
252
42
36
20.5
44.5
72.2
241
132
75
145.1
62.25
4R M3
75
4R M3
210
70
70
16.45
50.5
28
72
118.6
94
18.5
20
195
235
25
4R M3

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

2-50

AFL-F08A-2013-V10

Specifications

Model	AFL-F08A-N270
LCD Size	8"
Max Resolution	800 x 600
Brightness (cd/m²)	250
Contrast Ratio	500:1
LCD Color	262K
Pixel Pitch (mm)	0.2025 (H) x 0.2025 (V)
Viewing Angle (H-V)	140° / 130°
Backlight MTBF	30000 hrs (LED Backlight)
SBC Model	AFLMB-945GSE-N270-R10
CPU	Intel® Atom™ Processor N270 (512K Cache, 1.60 GHz, 533 MHz FSB)
Chipset	Intel® 945GSE + ICH7M
RAM	Supports one 400MHz or 533MHz DDR2 SO-DIMM (Max. 2GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for GbE 2 x USB 2.0 1 x Reset Button 1 x Audio Port (line-out) 1 x 12V DC Power Jack 1 x External SATA
SSD	CF Type II
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 1.5W + 1.5W (internal speakers)
Wireless Connection	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini interface)
Camera	2 megapixel with Low Light Function and digital microphone
Front Panel Construction	ABS + PC Plastic front frame
Membrane Keypad	LCD on/off, Brightness up/down, Volume up/down by cap-sensor
Mounting	In-Wall, Panel, Wall, Stand and Arm VESA 75mm x 75mm
Front Panel Color	Black
Dimensions (WxHxD) (mm)	234 x 177 x 43
Operation Temperature (°C)	-10°C ~ 50°C
Storage Temperature (°C)	-20°C ~ 60°C
N/G Weight	1.8Kg
IP Level	IP64 compliant front panel
Safety & EMC	CE / FCC
Touch Screen	5 (touch controller IC is on board) or projected capacitive type touch screen
Power Adapter	63000-FSP036RAB608-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	32W

Ordering Information

	Part Number	Description
Resistive Touch Panel	AFL-F08A-N270/R/1G-R24	8.0" 250cd/m² SVGA fanless panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n Wi-Fi, touch screen, 2 megapixel camera, R24, microphone
Projected Capacitive Multi-Touch Panel	AFL-F08A-N270/PC/1G-R24	8.0" 250cd/m² SVGA fanless panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n Wi-Fi, projected capacitive multi-touch panel screen, 2 megapixel camera, R24, microphone

Options

Item	AFL-F08A-N270/R (Resistive type touch)	AFL-F08A-N270/PC (PCT type touch)
Panel Mounting Kit	AFLPK-12	
Wall Mounting Kit	AFLWK-12	
Rack Mounting Kit	AFLRK-08	
Arm	ARM-11-RS / ARM-31-RS	
Stand	STAND-A08 / STAND-100-RS / STAND-C12	
VSTAND	VSTAND-A10	
9~30VDC to 12VDC converter module	IDD-930160-KIT	
OS: Win CE 6.0 (128 MB CF card)	AFLCF-F08-N270-CE060-R24	
OS: Win XPE (1 GB CF card)	AFLCF-F08-N270-XPE-R24	
OS: LINUX (2 GB CF card)	AFLCF-F08-N270-LNX-R24	
OS: Win 7 Embedded (2 GB CF card)	AFLCF-F08-N270-WES7E-R24	AFLCF-F08-N270-WES7P-R24
Hybrid Card Reader	AFLP-08AMSI-U	
Magnetic Stripe Reader	AFLP-08AMSR-U	
DC 12V Input UPS	AUPS-A10-R10 (7.4V 3800mAH)	
DC 9~36V Input UPS	AUPS-A20-R10 (7.4V 3800mAH)	
In-wall Cage	AFLIWC-F08A-R10	
Bluetooth V2.0+EDR	AFL-BT-KIT02-R10	

Note: Multi-touch function is only supported on Windows 7 on PCT type touch.

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adapter	63000-FSP036RAB608-RS	1	90~264V AC; 12V DC; 36W
Power Cord	32000-000002-RS	1	1750mm; European Standard (EU or US, depending on the shipment country)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

8" SVGA AFOLUX PPC

AFL-08B-N270

Intel® Atom™ Processor N270 1.60 GHz

Camera with Low Light Capability
Digital Microphone

LED Backlight FC C€ (((CCC))) (UL)

Features

- 8" LED backlight LCD panel with resistive type touch screen
- Built-in 2megapixel camera with low light capability
- Built-in digital microphone
- Selectable AT/ATX power mode via internal switch
- Fanless cooling system
- System memory up to 2 GB SDRAM
- Built-in 802.11b/g/n Wireless LAN
- Built-in two 1.5 W speakers
- One CompactFlash® slot
- IP64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Suggest over 4GB storage capacity)

Fanless **Wireless 802.11 b/g** **Speakers** **Microphone** **Camera** **One Key Recovery** iEi ◊ symantec.

Specifications

Model	AFL-08B-N270
LCD Size	8"
Max Resolution	800 x 600
Brightness (cd/m²)	250
Contrast Ratio	400 : 1
LCD Color	262K
Pixel Pitch (mm)	0.2025 (H) x 0.2025 (V)
Viewing Angle (H-V)	140º / 130º
Backlight MTBF	30000 hrs (LED backlight)
SBC Model	AFLMB-945GSE-N270-R10
CPU	Intel® Atom™ Processor N270 (512K L2 Cache, 1.60 GHz, 533 MHz FSB)
Chipset	Intel® 945GSE + ICH7M
RAM	Supports one 400MHz or 533MHz DDR2 SO-DIMM (Max. 2GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for GbE 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x External SATA 1 x Audio Port 1 x Power Jack
SSD	CF Type II
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 1.5W + 1.5W (internal speakers)
Camera Module	2megapixel camera with digital microphone
Wireless Connection	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)
Construction Front Panel	ABS + PC Plastic front frame
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm
Front Panel Color	Gray 7539U
Dimensions (WxHxD) (mm)	234 x 177 x 43
Operation Temperature (°C)	-10°C ~50°C
Storage Temperayure (°C)	-20°C ~60°C
N/G Weight	0.8 Kg
IP Level	Front Frame IP64
Safety & EMC	CE / FCC
Touch Screen	5-wire resistive type (touch controller IC is on board)
Power Adapter	P/N: 63000-FSP036RAB608-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	25W

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Fully Integrated I/O

- Power Switch
- Standard VESA Mounting
- Reset Button
- 2 x USBs
- 2 x LAN
- RS-232/422/485
- RS-232
- External SATA
- +12V DC Power Jack
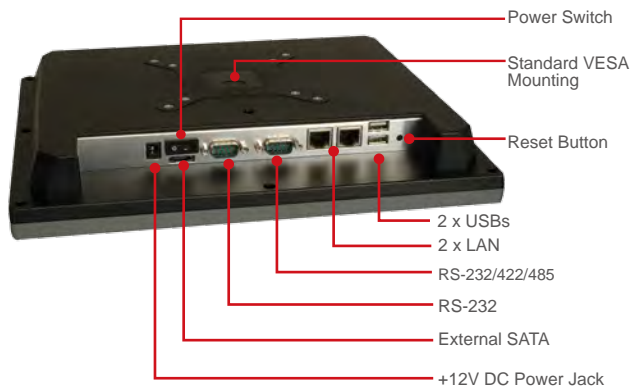
LED-backlight PPC Delivers Vivid Images

The AFL-08B-N270 is the first panel PC with its compact size to incorporate a LED backlight - making viewing and editing photos a lot better than previous CCFL illumination models.

LED backlighting PPC displays clear and vivid pictures!

Enhancement of image quality on LCD screen
- Wider color gamut
- More even screen illumination
- Longer display life
- Low temperature operation and greater power efficiency

Color Gamut Comparison
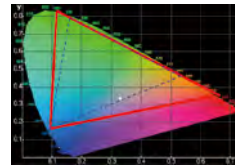
— LED
----- Normal CCFL

The LED backlight makes the image color shown on the LCD screen look nature and vivid.
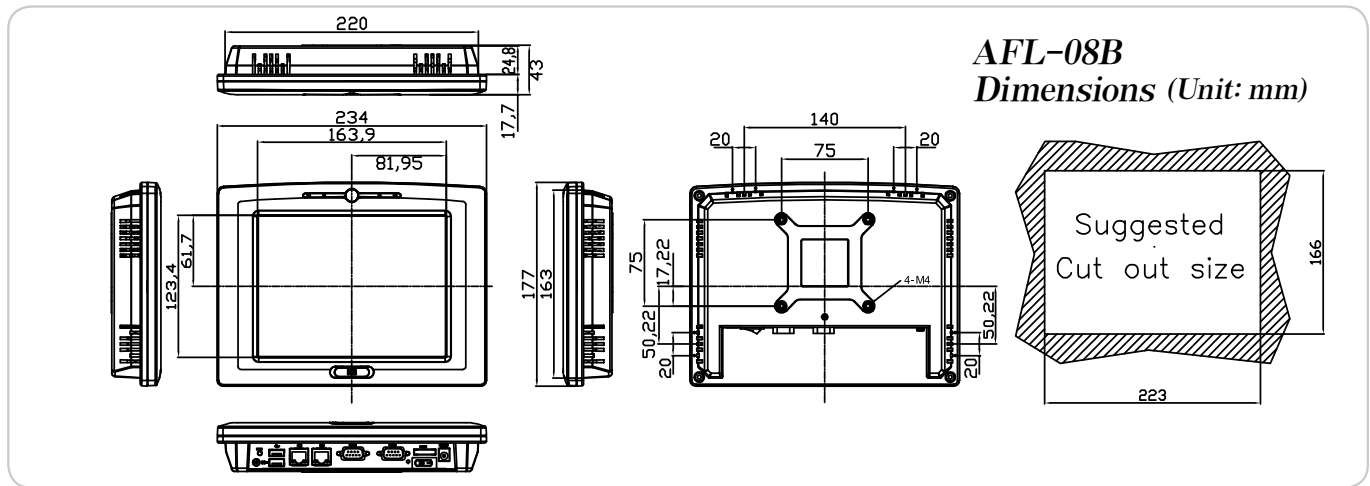
AFL-08B Dimensions (Unit: mm)

Ordering Information

Part Number	Description
AFL-08B-N270/R/1G-R23	8" 250 cd/m², SVGA fanless panel PC with Intel® Atom™ N270 1.6GHz,802.11b/g/n wireless module, touch screen, 2megapixel camera with digital microphone, 1GB DDR2 533MHz, R23

Options

Item	P/N
Panel Mounting Kit	AFLPK-12
Wall Mounting Kit	AFLWK-12
Rack Mounting Kit	AFLRK-08
Arm	ARM-11-RS / ARM-31-RS
Stand	STAND-A08 / STAND-100-RS
VSTAND	VSTAND-A10
9~30VDC to 12VDC converter module	IDD-930160-KIT
OS: Win CE 6.0 (128 MB CF card)	AFLCF-08-N270-CE060-R23
OS: Win XPE (1 GB CF card)	AFLCF-08-N270-XPE-R23
OS: LINUX (2 GB CF card)	AFLCF-08-N270-LNX-R23
OS: Win 7 Embedded (2GB CF card)	AFLCF-08-N270-WES7E-R23
Hybrid Card Reader	AFLP-08BMSI-U
Magnetic Stripe Reader	AFLP-08BMSR-U
DC 12V Input UPS	AUPS-A10-R10 (7.4V 3800mAH)
DC 9~36V Input UPS	AUPS-A20-R10 (7.4V 3800mAH)
Bluetooth V2.0+EDR	AFL-BT-KIT02-R10

Note: Win CE application without digital microphone function

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	WDT	Cash Drawer
AFL-08B-N270	V			V	V	

Packing List

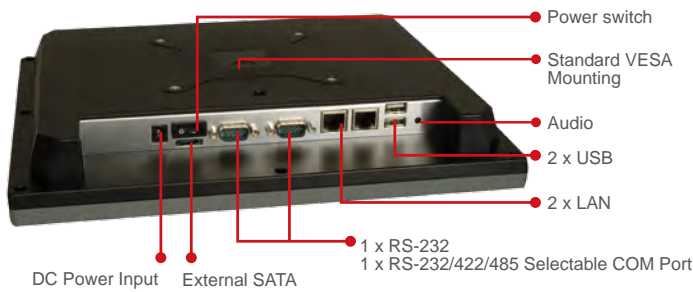| Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adpater	63000-FSP036RAB608-RS	1	90~264V AC; 12V DC; 36W
Power Cord	32000-000002-RS	1	1750mm (EU or US, depending on the shipment country)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

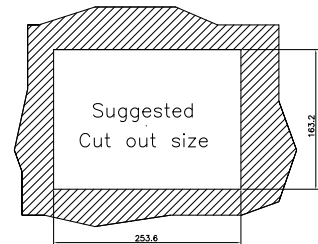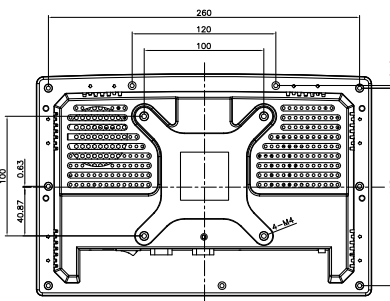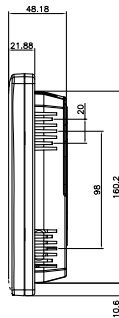AFL-08B-2013-V10   2-53

Wide 10.2" WSVGA AFOLUX PPC

AFL-W10A-N270

Intel® Atom™ Processor N270 1.60 GHz

Camera with Low Light Function

Digital Microphone

New Wide Screen

Features

- Wide 10.2" TFT LCD with resistive touch screen
- Fanless cooling system
- Built-in 2megapixel camera with digital microphone module
- Selectable AT/ATX power mode through the switch inside the chassis
- System memory up to 2 GB SDRAM
- Built-in 802.11b/g/n wireless LAN
- Built-in two 1.5 W speakers
- One CompactFlash® slot
- IP 64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Suggest over 4GB storage capacity)

Fanless | Wireless 802.11 b/g | Speakers | One Key Recovery iEi symantec.

Specifications

Model	AFL-W10A-N270
LCD Size	Wide 10.2"
Max Resolution	1024 x 600
Brightness (cd/m²)	400
Contrast Ratio	400: 1
LCD Color	262K
Pixel Pitch (mm)	0.2175 mm (H) x 0.2175 mm (V)
Viewing Angle (H-V)	140° / 120°
Backlight MTBF	40000 hrs
SBC Model	AFLMB-945GSE-N270-R10
CPU	Intel® Atom™ processor N270 1.6GHz CPU
Chipset	Intel® 945GSE + ICH7M
RAM	Supports one 400 MHz or 533MHz DDR2 SO-DIMM (Max. 2GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for GbE 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x External SATA 1 x Audio Port 1 x Power Jack
SSD	CF Type II
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 1.5W + 1.5W (internal speakers)
Camera Module	2megapixel with digital microphone
Wireless Connection	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)
Construction Front Panel	ABS + PC Plastic front frame
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm
Front Panel Color	Gray 7539U
Dimensions (WxHxD) (mm)	280 x 186 x 49
Operation Temperature (ºC)	-10ºC ~50ºC
Storage Temperayure (ºC)	-20ºC ~ 60ºC
N/G Weight	1.4 Kg
IP Level	Front Frame IP64
Safety & EMC	CE / FCC
Touch Screen	5-wire resistive type (touch controller IC is on board)
Power Adapter	P/N: 63000-FSP036RAB608-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	28W

Fully Integrated I/O

Power switch

Standard VESA Mounting

Audio

2 x USB

2 x LAN

1 x RS-232
1 x RS-232/422/485 Selectable COM Port

DC Power Input   External SATA

Building Automation/Access Control System

Door Security

RS-232/422/485

Power Management

Bluetooth WiFi
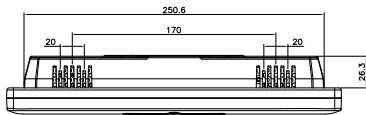
AFL-W10A
Dimensions (Unit: mm)

Suggested
Cut out size
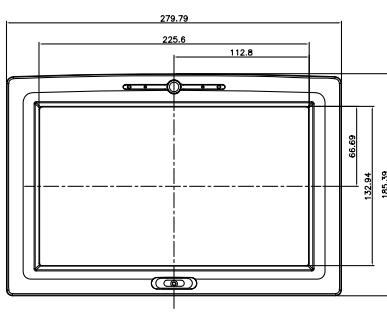
Ordering Information

Part Number	Description
AFL-W10A-N270/R/1G-R32	10.2" 400 cd/m², WSVGA fanless panel PC with Intel® Atom™ N270 1.6GHz, 802.11b/g/n wireless module, touch screen, 2megapixel camera with digital microphone, 1GB DDR2 533, R32

Options

Model	AFL-W10A-N270	
Panel Mounting Kit	AFLPK-12	
Wall Mounting Kit	AFLWK-19	
Rack Mounting Kit	AFLRK-W10	
Arm	ARM-11-RS / ARM-31-RS	
Stand	STAND-A12 / STAND-100-RS	
VSTAND	VSTAND-A10	
9~30VDC to 12VDC Converter Module	IDD-930160-KIT	
OS	Win CE 6.0 (128 MB CF card)	AFLCF-W10-N270-CE060-R32
	Win XPE (1 GB CF card)	AFLCF-W10-N270-XPE-R32
	LINUX (2 GB CF card)	AFLCF-W10-N270-LNX-R32
	Win 7 Embedded (2GB CF card)	AFLCF-W10-N270-WES7E-R32
Hybrid Card Reader	AFLP-10AMSI-U	
Magnetic Stripe Reader	AFLP-10AMSR-U	
DC 12V Input UPS	AUPS-B10-R10 (7.4V 3800mAH)	
DC 9~36V Input UPS	AUPS-B20-R10 (7.4V 3800mAH)	
Bluetooth V2.0+EDR	AFL-BT-KIT02-R10	

Note: Win CE application without digital microphone function

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	DIO	WDT	Beep	Cash Drawer
AFL-W10A-N270	V			V		V		

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3; 5mm
Power Adpater	63000-FSP036RAB608-RS	1	90~264V AC; 12V DC; 36W
Power Cord	32000-000002-RS	1	1750mm; European Standard (EU or US, depending on the shipment country)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

10.4" SVGA AFOLUX Panel PC

AFL-10A-LX	AMD Geode™ LX 800 500 MHz Processor
AFL-10A-N270	Intel® Atom™ N270 1.6GHz Processor
AFL-10A-N26	Intel® Atom™ N2600 1.60 GHz Processor **New**

Advanced Features

(1) PCIe mini card slot compatible with mSATA and PCIe mini device

IEI patented PCIe mini interface provides PCIe x 1 and USB signals such as PCIe mini SSD and wireless LAN card for full-size or half-size devices!

(2) Enhanced 2T2R MIMO Technology

Preinstalled 2.4GHz 802.11b/g/n WiFi module supports 2Tx/2Rx 2-stream MIMO to enable data rates up to 300Mbps for a 40MHz channel!

Fanless | Wireless 802.11 b/g | Speakers | One Key Recovery iEi symantec.

Specifications

Model	AFL-10A-LX	AFL-10A-N270	AFL-10A-N26
LCD Size	10.4"		
Max Resolution	800 x 600		
Brightness (cd/m²)	400		
Contrast Ratio	700:1		
LCD Color	262K		
Pixel Pitch (mm)	0.264 (H) x 0.264 (V)		
Viewing Angle (H-V)	160° / 140°		
Backlight MTBF	50000 hrs (LED Backlight)		
SBC Model	AFLMB-LX-800	AFLMB-945GSE-N270-R10	AFLMB-CV-N2600-R10
CPU	AMD Geode™ LX 800 (500MHz)	Intel® Atom™ processor N270 1.6GHz CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU
Chipset	AMD LX 800 + AMD CS5536	Intel® 945GSE + ICH7M	Intel® NM10
RAM	Supports one 333MHz or 400MHz DDR2 SO-DIMM (Max.1GB)	Supports one 400MHz or 533MHz DDR2 SO-DIM (Max. 2GB)	One 800 MHz 204-pin DDR3 SO-DIMM slot (Max. 2GB)pre-installed wiith 2GB
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Port	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x External SATA 1 x Audio Port 1 x Power Jack	1 x 9-28V Lockable DC Jack 1 x RJ45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 2 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out
SSD	CF Type II		
Watchdog Timer	Software programmable supports 1~255 sec. system reset		
Audio	AMP 1.5W + 1.5W (internal speakers)		AMP 2W + 2W (internal speaker)
Wireless Connection	1 x Wireless LAN 802.11 b/g Module (internal Mini PCI interface)	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)	1 x Wireless LAN 802.11 b/g/n 2T2R Module (internal PCIe Mini card interface)
Construction Front Panel	ABS + PC Plastic front frame		
LED Function	1 x Power on/off LED on front panel		
Mounting	Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm / 100mm x 100mm		
Front Panel Color	Gray 7539U		
Dimensions (WxHxD) (mm)	276 x 222 x 51		
Operation Temperature (°C)	0°C ~ 50°C	-10°C ~50°C	-10°C~50°C
Storage Temperayure (°C)	-20°C ~ 60°C		
N/G Weight	1.4 Kg		
IP Level	Front Frame IP64		
Safety & EMC	CE / FCC		
Touch Screen	5-wire resistive type (touch controller IC is on board)		
Power Adapter	P/N: 63000-FSP036RAB608-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP036RAB608-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63040-010060-040-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12V DC	12V DC	9-28V DC
Power Consumption	25W	28W	28W

Fully Integrated I/O

AFL-10A-LX

- Standard VESA mounting
- 2 x USB
- 2 x LAN
- 1 x RS-232, 1 x RS-232/422/485 selectable COM port
- Power switch
- 12VDC power jack/ 18V~30VDC power jack

AFL-10A-N270

- Standard VESA mounting
- 2 x USB
- 2 x LAN
- 1 x RS-232 1 x RS-232/422/485 selectable COM port
- Audio
- Power switch
- DC power input

AFL-10A-N26

- RS-232
- RS-232/422/485
- 2 x LAN Port
- Power Switch
- Line Out
- Lockable DC Jack
- VGA
- Reset Button
- 2 x USB 2.0
- AT/ATX Switch

AFL-10A
Dimensions (Unit: mm)

252.84
150
20.01
20.01
26.5

276
214.1
107.05
51
24.5
28
80.14
16.3
222
133
198.84
29.3
10.98

Suggested Cut out size
201.84
74.9
255.84

5°
15°
301.9
199.8

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

2-57

AFL-10A-2013-V10

Ordering Information

Part Number	Description
AFL-10A-LX/R/256-R22	10.4" 400 cd/m², SVGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g wireless module,Touch screen and 256MB DDR RAM, R22
AFL-10A-LX/R/512-R22	10.4" 400 cd/m², SVGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g wireless module,Touch screen and 512MB DDR RAM, R22
AFL-10A-N270/R/1G-R23	10.4" 400cd/m² SVGA fanless panel PC with Intel® Atom™ N270 1.6GHz, 802.11b/g/n wireless module, touch screen,1GB DDR2 533,R23
AFL-10A-N26/R/2G-R10	10.4" 400cd/m² SVGA fanless panel PC with Intel® Atom™ cedarview N2600 dual core 1.6GHz, 802.11b/g/n wireless module, touch screen, 2GB DDR3, R10

Note: AFL-10A-LX24V model is without power adapter

Options

Model	AFL-10A-LX	AFL-10A-N270	AFL-10A-N26
Panel Mounting Kit		AFLPK-12	
Wall Mounting Kit		AFLWK-12	
Rack Mounting Kit		AFLRK-10	
Arm		ARM-11-RS / ARM-31-RS	
Stand		STAND-A12 / STAND-100-RS	
VSTAND		VSTAND-A10	
9~30VDC to 12VDC Converter Module		IDD-930160-KIT	
OS: Win CE 5.0 (128 MB CF card)	AFLCF-10-LX-CE-R21	--	
OS: Win CE 6.0 (128 MB CF card)	AFLCF-10-LX-CE060-R21	AFLCF-10-N270-CE060-R21	AFL-10-N26-CE060-R10*
OS: Win XPE (1 GB CF card)	AFLCF-10-LX-XPE-R21	AFLCF-10-N270-XPE-R21	AFL-10-N26-LNX-R10*
OS: LINUX (2 GB CF card)	AFLCF-10-LX-LNX-R21	AFLCF-10-N270-LNX-R21	AFL-10-N26-WES7E-R10*
OS: Win 7 Embedded (2GB CF card)	--	AFLCF-10-N270-WES7E-R21	AFL-10-N26-XPE-R10*
Hybrid Card Reader		AFLP-10AMSI-U	
Magnetic Stripe Reader		AFLP-10AMSR-U	
DC 12V Input UPS		AUPS-A10-R10 (7.4V 3800mAH)	
DC 9~36V Input UPS		AUPS-A20-R10 (7.4V 3800mAH)	
Bluetooth V2.0+EDR		AFL-BT-KIT02-R10	

*OS image with CD-ROM

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	DIO	WDT	Cash Drawer
AFL-10A-LX	V			V		V	
AFL-10A-N270	V			V		V	
AFL-10A-N26	V			V		V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3; 5mm
Power Adpater	63000-FSP036RAB608-RS 63040-010060-040-RS (for AFL-10A-N26)	1	90~264V AC; 12V DC; 36W
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

12.1" XGA AFOLUX Panel PC

AFL-12A-LX	AMD Geode™ LX 800 500 MHz Processor
AFL-12A-N270	Intel® Atom™ N270 1.6GHz Processor
AFL-12A-N26	Intel® Atom™ N2600 1.6GHz Processor *New*

Features

- 12.1" TFT LED backlight LCD with resistive touch screen
- Fanless cooling system
- 9V~28V wide range DC power input (for Intel® N2600 platform)
- Selectable AT/ATX power mode through the switch inside the chassis
- One CompactFlash® slot
- IP 64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Suggest over 4GB storage capacity)

Fanless | Wireless 802.11 b/g | Speakers | One Key Recovery iEi symantec.

Specifications

Model	AFL-12A-LX	AFL-12A-N270	AFL-12A-N26
LCD Size	12.1"		
Max Resolution	1024 x 768		
Brightness (cd/m²)	500		
Contrast Ratio	700 : 1		
LCD Color	262K		
Pixel Pitch (mm)	0.240 (H) x 0.240 (V)		
Viewing Angle (H-V)	160° / 160°		
Backlight MTBF	50000 (LED Backlight)		
SBC Model	AFLMB-LX-800	AFLMB-945GSE-N270-R10	AFLMB-CV-N2600-R10
CPU	AMD Geode™ LX 800 (500MHz)	Intel® Atom™ processor N270 1.6GHz CPU	Intel® Atom™ N2600 dual core 1.6 GHz CPU
Chipset	AMD LX 800 + AMD CS5536	Intel® 945GSE + ICH7M	Intel® NM10
RAM	Supports one 333MHz or 400MHz DDR SO-DIMM (Max. 1GB)	Supports one 400MHz or 533MHz DDR2 SO-DIMM (Max. 2GB)	One 800 MHz 204-pin DDR3 SO-DIMM slot (Max. 2GB)pre-installed wiith 2GB
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Power Jack 1 x Audio Port	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x External SATA 1 x Audio Port 1 x Power Jack	1 x 9-28V Lockable DC Jack 1 x RJ45 for RS-232 1 x RS-232/422/485 1 x VGA 2 x GbE LAN 4 x USB 2.0 1 x Power switch 1 x Reset button 1 x AT/ATX switch 1 x Line out
SSD	CF Type II		
Watchdog Timer	Software programmable supports 1~255 sec. system reset		
Audio	AMP 1.5W + 1.5W (internal speaker)		AMP 2W + 2W (internal speaker)
Wireless Connection	1 x Wireless LAN 802.11 b/g Module (internal Mini PCI interface)	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)	
Drive Bay	1 x 2.5" IDE HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD & 1 x mSATA SSD
Construction Front Panel	ABS + PC Plastic front frame		
LED Function	1 x Power on/off LED on front panel		
Mounting	Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm / 100mm x 100mm		
Front Panel Color	Gray 7539U		
Dimensions (WxHxD) (mm)	304 x 246 x 50		
Operation Temperature (°C)	0°C ~ 50°C	0°C ~40°C with SATA HDD -10°C ~50°C with CF Card or SATA interface 2.5" SSD HDD	-10°C~50°C
Storage Temperayure (°C)	-20°C ~ 60°C		
N/G Weight	1.8 Kg		
IP Level	Front Frame IP64		
Safety & EMC	CE / FCC		
Touch Screen	5-wire resistive type (touch controller IC is on board)		
Power Adapter	P/N: 63000-FSP036RAB608-RS 36W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP050DBAB1405-RS 50W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63040-010060-040-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC	12VDC	9-28V DC
Power Consumption	29W	32W	

1

IEI Mobile Solutions

2

Automation Panel Solutions
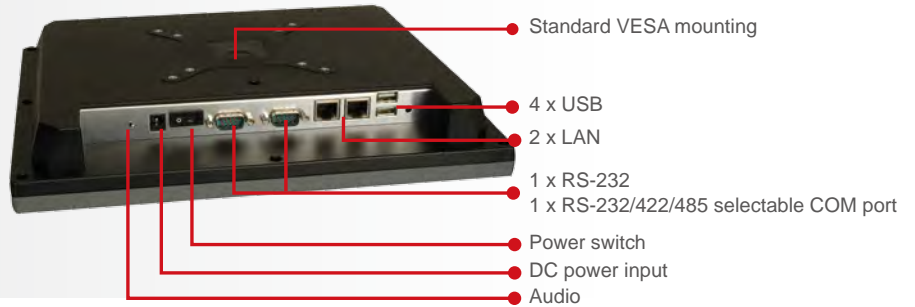
3

RISC-based Solutions

4

PACSmate Medical Solutions

5

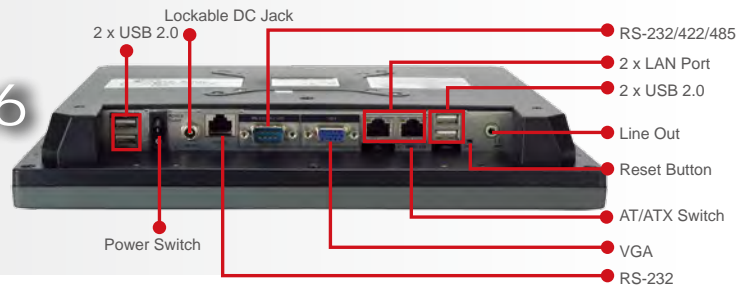Optional Peripherals

Fully Integrated I/O

AFL-12A-LX

- Standard VESA mounting
- 2 x USB
- 2 x LAN
- 1 x RS-232
- 1 x RS-232/422/485 selectable COM port
- Power switch
- DC power input or 18~30VDC input

AFL-12A-N270

- Standard VESA mounting
- 4 x USB
- 2 x LAN
- 1 x RS-232
- 1 x RS-232/422/485 selectable COM port
- Power switch
- DC power input
- Audio

AFL-12A-N26

- Lockable DC Jack
- 2 x USB 2.0
- RS-232/422/485
- 2 x LAN Port
- 2 x USB 2.0
- Line Out
- Reset Button
- AT/ATX Switch
- VGA
- RS-232
- Power Switch

AFL-12A Dimensions (Unit: mm)

AFL-12B Dimensions (Unit: mm)
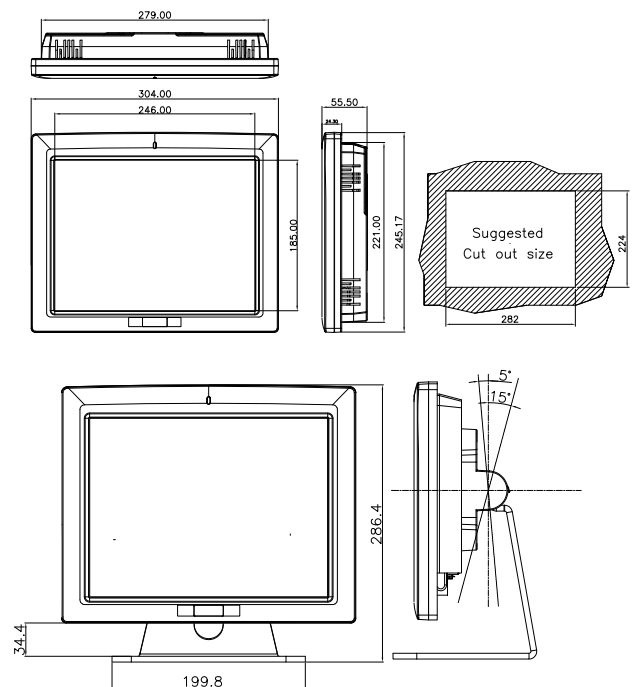
Ordering Information

Part Number	Description
AFL-12A-LX/R/256-R22	12.1" 500 cd/m², XGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g wireless module, touch screen and 256MB DDR RAM, R22
AFL-12A-LX/R/512-R22	12.1" 500 cd/m², XGA fanless panel PC with AMD LX-800 CPU, AT/ATX mode, 802.11b/g wireless module, touch screen and 512MB DDR RAM, R22
AFL-12A-N270/R/1G-R23	12.1" 500 cd/m², XGA fanless panel PC with Intel® Atom™ N270 1.6GHz, 802.11b/g/n wireless module, capitalize touch screen, 1GB DDR2 533MHz, R23
AFL-12A-N26/R/2G-R10	12.1" 500cd/m², XGA fanless panel PC with Intel® Atom™ cedarview N2600 dual core 1.6GHz, 802.11b/g/n wireless module, touch screen, 2GB DDR3, R10

Options

Model	AFL-12A-LX	AFL-12A-N270	AFL-12A-N26
Panel Mounting Kit	AFLPK-12		
Wall Mounting Kit	AFLWK-12		
Rack Mounting Kit	AFLRK-12		
Arm	ARM-11-RS / ARM-31-RS		
Stand	STAND-A12 / STAND-POS12 / STAND-100-RS		STAND-A12 / STAND-100-RS
VSTAND	VSTAND-A12		
9~30VDC to 12VDC Converter Module	IDD-930160-KIT		
OS: Win CE 5.0 (128 MB CF card)	AFLCF-12-LX-CE-R21	--	AFL-12-N26-CE060-R10
OS: Win CE 6.0 (128 MB CF card)	AFLCF-12-LX-CE060-R21	AFLCF-12-N270-CE060-R21	AFL-12-N26-LNX-R10
OS: Win XPE (1 GB CF card)	AFLCF-12-LX-XPE-R21	AFLCF-12-N270-XPE-R21	AFL-12-N26-WES7E-R10
OS: LINUX (2 GB CF card)	AFLCF-12-LX-LNX-R21	AFLCF-12-N270-LNX-R21	AFL-12-N26-XPE-R10
OS: Win 7 Embedded (2GB CF card)	--	AFLCF-12-N270-WES7E-R21	--
Hybrid Card Reader	AFLP-12AMSI-U		
Magnetic Stripe Reader	AFLP-12AMSR-U		
DC 12V Input UPS	AUPS-A10-R10 (7.4V 3800mAH)		
DC 9~36V Input UPS	AUPS-A20-R10 (7.4V 3800mAH)		
Bluetooth V2.0+EDR	AFL-BT-KIT02-R10	AFL-BT-KIT03-R10	AFL-BT-KIT01-R10

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	DIO	WDT	Cash Drawer
AFL-12A-LX	V			V		V	
AFL-12A-N270	V			V		V	
AFL-12A-N26	V			V		V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3; 5mm
Power Adpater	63000-FSP036RAB608-RS 63000-FSP050DBAB1405-RS 63040-010060-040-RS	1	90~264V AC; 12V DC; 36W (for LX) 90~264V AC; 12V DC; 50W (for LXPOS, N270) 90~264V AC; 12V DC; 60W (for N2600)
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

15" XGA AFOLUX Panel PC

AFL-15A(E)-N270

Intel® Atom™ N270 1.6GHz Processor

Features

- 15" TFT LCD with resistive touch screen
- System memory up to 2 GB RAM
- Built-in 802.11b/g (or 802.11 b/g/n) wireless LAN
- Selectable AT/ATX power mode through the switch inside the chassis
- Built-in two speakers
- One CompactFlash® slot
- IP 64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity is suggested)

Wireless 802.11 b/g | Speakers | One Key Recovery IEI symantec

Specifications

Model	AFL-15A(E)-N270 *Fanless*
LCD Size	15"
Max Resolution	1024 x 768
Brightness (cd/m²)	350 or 250
Contrast Ratio	700:1 or 600:1
LCD Color	262K or 16.7M
Pixel Pitch (mm)	0.297(H) x 0.297(V)
Viewing Angle (H-V)	140º/125º or 160º/160º
Backlight MTBF	50000 or 40000 hrs
SBC Model	AFLMB2-945GSE-N270-R10
CPU	Intel® Atom™ N270 1.6GHz processor
Chipset	Intel® 945GSE + ICH7M
RAM	Supports one 400MHz or 533MHz DDR2 SO-DIMM (Max. 2GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for GbE 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port (line-out) 1 x VGA Port 1 x Power Jack
SSD	CF Type II
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 1.5W + 1.5W (internal speakers)
Wireless Connection	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini interface)
Construction Front Panel	ABS + PC Plastic front frame
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Rack, Stand and Arm, VESA 100mm x 100mm
Front Panel Color	Sliver (877U) & Gray (ABSA2037)
Dimensions (WxHxD) (mm)	394 x 309 x 61
Operation Temperature (°C)	0°C ~40°C with SATA HDD -10°C ~50°C with CF Card or SATA interface 2.5" SSD HDD
Storage Temperature (°C)	-20°C ~ 60°C
N/G Weight	3.2 Kg
IP Level	Front Frame IP64
Safety & EMC	CE / FCC
Touch Screen	5-wire resistive type (Touch controller IC is on board) or Capacitive type touch screen without HDD bay
Power Adapter	P/N: 63000-FSP060DBAB1554-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz / Output: 12VDC
Power Requirement	12VDC
Power Consumption	49W

15" XGA AFOLUX Panel PC

AFL-15i(E)-HM55

Intel® Core i7-620M 2.66GHz Processor

Dual Independent Display!

NEW Features in HM55 Platform :

● Powered by high performance 2.66 GHz Intel® Core i7-620M CPU with Intel® HM55 chipset
● DDR3 1066MHz system memory up to 4GB
● HDMI/VGA port delivers high quality image on the second display
● IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity is suggested)

Wireless 802.11 b/g

Speakers

One Key Recovery

iEi symantec.

Specifications

Model	AFL-15i(E)-HM55
LCD Size	15"
Max Resolution	1024 x 768
Brightness (cd/m²)	350 or 250
Contrast Ratio	700:1 or 600:1
LCD Color	262K or 16.7M
Pixel Pitch (mm)	0.297(H) x 0.297(V)
Viewing Angle (H-V)	140º/125º or 160º/160º
Backlight MTBF	50000 hrs or 40000 hrs
SBC Model	AFLMB2-HM55-R10
CPU	Socket G (PGA989A) Intel® Core™ i series
Chipset	Intel® HM55
RAM	Two 204-pin 800/1066MHz DDR3 dual-channel SO-DIMMs supported (Max. 8GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port (Line-out) 1 x VGA 1 x Power Jack 1 x HDMI Port
SSD	SATA SSD
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 3W + 3W (internal speakers)
Wireless Connection	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)
Drive Bay	1 x 2.5" SATA HDD bay
Construction Front Panel	ABS + PC Plastic front frame
Membrane Keypad	LCD on/off, Brightness up/down, Volume up/down (5 keys)
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm
Front Panel Color	Sliver (877U) & Gray (ABSA2037)
Dimensions (WxHxD) (mm)	394 x 309 x 66
Operation Temperature (°C)	0°C~50°C
Storage Temperayure (°C)	-20°C ~ 60°C
N/G Weight	5.8 Kg
IP Level	Front Frame IP64
Touch Screen	Resistive Type 5-Wire (Touch controller IC is on board) or Capacitive type touch screen without HDD bay
Power Adapter	P/N: 63000-FSP096AHB-RS 96W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	80W

Fully Integrated I/O

AFL-15A-N270

- 12V DC Input
- Power Switch
- VGA Output
- Line-out
- External SATA
- 4 x USB 2.0
- 2 x LAN
- 1 x RS-232
- 1 x RS-232/422/485

AFL-15i-HM55

- VESA 100 x 100
- 2 x RJ-45 Giga LAN
- 4 x USB 2.0
- 1 x Line-out
- 1 x VGA
- 1 x HDMI
- AT/ATX Switch
- Reset Button
- 1 x RS-232
- 1 x RS-232/422/485
- 12 V DC Input
- Power Switch

Membrane Keypad
• LCD on/off   • Brightness up
• Volume up   • Brightness down   • Volume down
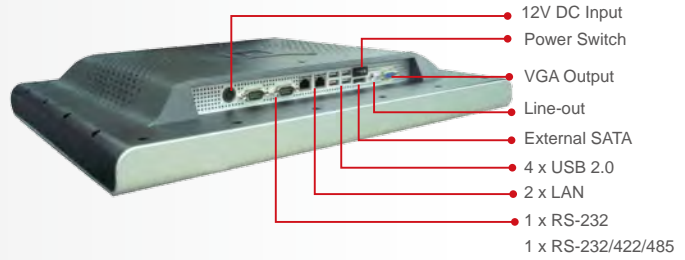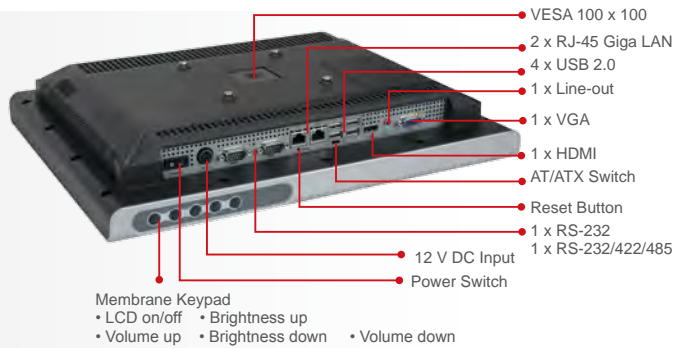
AFL-15A
Dimensions (Unit: mm)
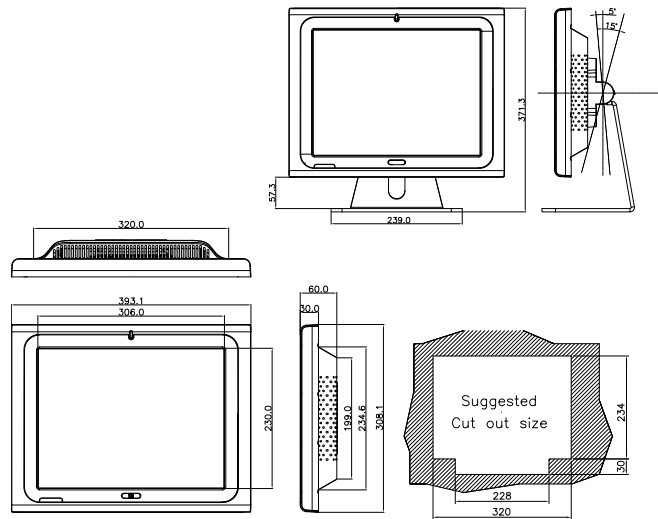
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Dimensions (Unit: mm)
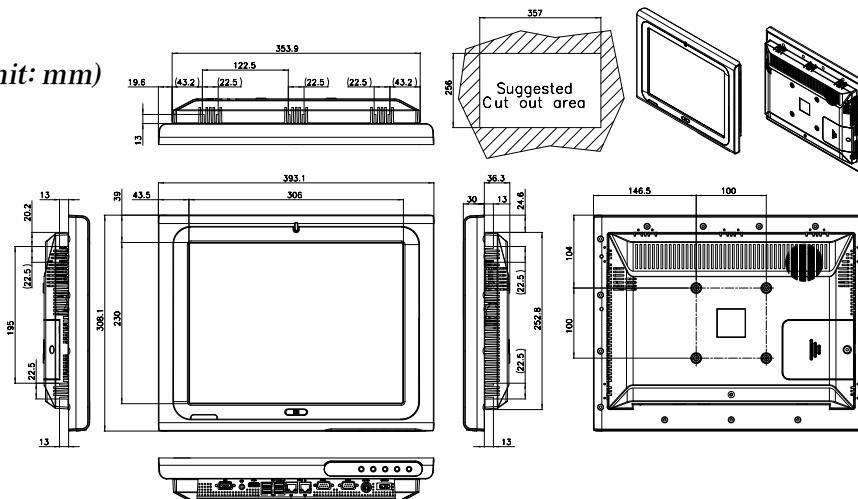
1 — IEI Mobile Solutions

2 — Automation Panel Solutions

3 — RISC-based Solutions

4 — PACSmate Medical Solutions

5 — Optional Peripherals

AFL-15i(E)-2013-V10   2-64

Ordering Information

● High Luminance (350 cd/m²)

Part Number	Description
AFL-15A-N270/R/1G-R22	15" 350cd/m² XGA fanless panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, touch screen, R22
AFL-15i-HM55-P45/R/1G-R12	15" 350cd/m² XGA panel PC with Intel® Celeron P4500 1.86G CPU, 1GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-15i-HM55i3-35/R/2G-R12	15" 350cd/m² XGA panel PC with Intel® Core™ i3-350M 2.26G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-15i-HM55i5-52/R/2G-R12	15" 350cd/m² XGA panel PC with Intel® Core™ i5-520M 2.4G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-15i-HM55i7-62/R//2G-R12	15" 350cd/m² XGA panel PC with Intel® Core™ i7-620M 2.66G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS

● Regular Luminance (250 cd/m²)

Part Number	Description
AFL-15AE-N270/R/1G-R22	15" 250cd/m² XGA fanless panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, touch screen, R22
AFL-15iE-HM55-P45/R/1G-R12	15" 250cd/m² XGA panel PC with Intel® Celeron P4500 1.86G CPU, 1GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-15iE-HM55i3-35/R/2G-R12	15" 250cd/m² XGA panel PC with Intel® Core™ i3-350M 2.26G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-15iE-HM55i5-52/R/2G-R12	15" 250cd/m² XGA panel PC with Intel® Core™ i5-520M 2.4G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-15iE-HM55i7-62/R/2G-R12	15" 250cd/m² XGA panel PC with Intel® Core™ i7-620M 2.66G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	WDT	Cash Drawer
AFL-15i(E)-HM55	V	V	V	V	V	
AFL-15A(E)-N270	V			V	V	

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adapter	63040-010060-030-RS 63040-010060-050-RS 63040-010096-010-RS	1	90~264V AC; 12V DC; 60W (15A-N270) 90~264V AC; 12V DC; 96W (15i-HM55)
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

Options

Model	AFL-15A(E)-N270	AFL-15i(E)-HM55
Panel Mounting Kit	AFLPK-15	AFLPK-15B
Wall Mounting Kit	AFLWK-19	
Rack Mounting Kit	AFLRK-15-R11	N/A
Arm	ARM-11-RS / ARM-31-RS	
Stand	STAND-A19 / STAND-B19 / STAND-POS15 / STAND-210-R11	
OS: Win CE 6.0 (128 MB CF card)	AFLCF-15-N270-CE060-R21	--
OS: Win XPE (1 GB CF card)	AFLCF-15-N270-XPE-R21	AFLSD-15-HM55-2G-XPE-R12 (2GB SATA SSD)
OS: LINUX (2 GB CF card)	AFLCF-15-N270-LNX-R21	--
OS: Win 7 Embedded (2GB CF card)	AFLCF-15-N270-WES7E-R21	AFLSD-15-HM55-4G-WES7E (4GB SATA SSD)
Hybrid Card Reader	AFLP-17AMSI-U	
Magnetic Stripe Reader	AFLP-17AMSR-U	
DC 12V Input UPS	AUPS-B10-R10 (14.8V 3800mAH)	
DC 9~36V Input UPS	AUPS-B20-R10 (14.8V 3800mAH)	
Bluetooth V2.0+EDR	AFL-BT-KIT04-R10	AFL-BT-KIT01-R10

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

15" Wide 1366 x 768 AFOLUX Panel PC

AFL-W15A-N270
Intel® Atom™ N270 1.6GHz Processor

AFL-W15A-GM45
Intel® Core™ 2 Duo T9400 2.53GHz Processor (Max.)

16:9 Wide Screen

Membrane Keypad for LCD On/Off, Brightness Down/Up, Volume Down/Up, Lock, Ambient Light Sensor On/Off Control

Ambient Light Sensor

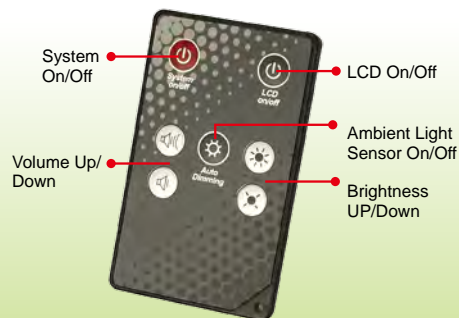300K Pixel Camera (with Low Light Function) and Digital Microphone

HDMI High-Definition Multimedia Interface (for GM45 Systems Only)

Features

- 15" wide screen all-in-one system with resistive touch panel
- IEEE 802.11b/g/n Wi-Fi connection
- New High-Definition multimedia HDMI interface (for Intel® GM45 system)
- Built-in HSUPA module for mobile connection (optional)
- Ambient light sensor detects ambient light for automated screen adjustments.
- VESA-mountable for flexibility in mounting and deployment
- Membrane keypad to control LCD backlight, panel brightness, speakers volume, ambient light sensor and lock the keypad functions
- Software system settings utility support
- Support for Windows CE, Windows XP Embedded and Linux (optional)
- IP 64 compliant front panel

One Key Recovery
iEi ● symantec.

Wireless 802.11 b/g | **Speakers** | **Microphone** | **Camera**

Infrared Remote Control

System On/Off

LCD On/Off

Volume Up/Down

Ambient Light Sensor On/Off

Brightness UP/Down

Ambient Light Sensor

The AFL-W15A series has a built-in ambient light sensor at the front of the panel to automatically detect the amount of light in the viewing environment and auto-adjust the brightness of the screen.

Benefits:

- More comfortable viewing decreases eye strain and tiredness
- Power consumption saving
- Extend lamp lifetime

Day: Higher Ambient Luminance

Night: Lower Ambient Luminance

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1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Fully Integrated I/O

4 x USB 2.0
Power Switch
VGA Output
Line-out for Speakers
1 x HDMI (For GM45 System)
Reset Button
2 x LAN

1 x RS-232
1 x RS-232/422/485

Membrane Keypad   12V DC Input

Specifications

Fanless

Model	AFL-W15A-N270	AFL-W15A-GM45
LCD Size	15.6"	
Max Resolution	1366 x 768	
Brightness (cd/m²)	250	
Contrast Ratio	500 : 1	
LCD Color	16.2M	
Pixel Pitch (mm)	0.252 (W) x 0.252 (H)	
Viewing Angle (H-V)	110º / 85º	
Backlight MTBF	50000 hrs	
SBC Model	AFLMB2-945GSE-N270-R10	AFLMB2-GM45-R10
CPU	Intel® Atom™ N270 1.6GHz CPU	Intel® Celeron® M 575 2.0GHz CPU Intel® Core™2 Duo P8400 2.26GHz CPU Intel® Core™2 Duo T9400 2.53GHz CPU
Chipset	Intel® 945GSE + ICH7M	Intel® GM45 Chipset + ICH9M
RAM	Supports one 400MHz or 533MHz DDRII SO-DIMM (Max. 2GB)	Supports two 667MHz or 800MHz DDR2 SO-DIMM (Max. 4GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port 1 x VGA Port 1 x Power Jack	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x HDMI Port 1 x Audio Port 1 x VGA Port 1 x Power Jack
SSD	CF Type II	
Watchdog Timer	Software programmable supports 1~255 sec. system reset	
Audio	AMP 3W + 3W (internal speakers)	
Camera Module	300K pixel camera (with low light function) and digital microphone	
Wireless Connection	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)	
Construction Front Panel	ABS + PC Plastic front frame	
Membrane Keypad	LCD On/Off, Brightness Down/Up, Volume Down/Up, Lock, Ambient Light Sensor On/Off (OSD Lock: Lock button+ ALS button) (7 keys)	
Infrared Remote Control	LCD On/Off, Brightness Up/Down, Volume Up/Down, System On/Off, Ambient Light Sensor On/Off	
Ambient Light Sensor	Yes	Yes
Mounting	Panel, Wall, Stand and Arm VESA 100mm x 100mm	
Front Panel Color	Gray 7539U	
Dimensions (WxHxD) (mm)	400 x 273 x 63	400 x 273 x 63
Operation Temperature (°C)	0°C ~40°C with SATA HDD -10°C ~50°C with CF Card or SATA interface 2.5" SSD HDD	
Storage Temperature (°C)	-20°C ~60°C	
N/G Weight	3.3 Kg	
IP Level	Frant Frame IP64	
Safety & EMC	CE / FCC	
Touch Screen	5-wire Resistive Type (Touch controller IC is on board)	
Power Adapter	P/N: 63000-FSP060DBAB1554-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP096AHB-RS 96W Power Adapter Input: 90VAC~264VAC,50/60Hz Output: 12VDC
Power Requirement	12VDC	
Power Consumption	50W	90W

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

2-67

AFL-W15A-2013-V10
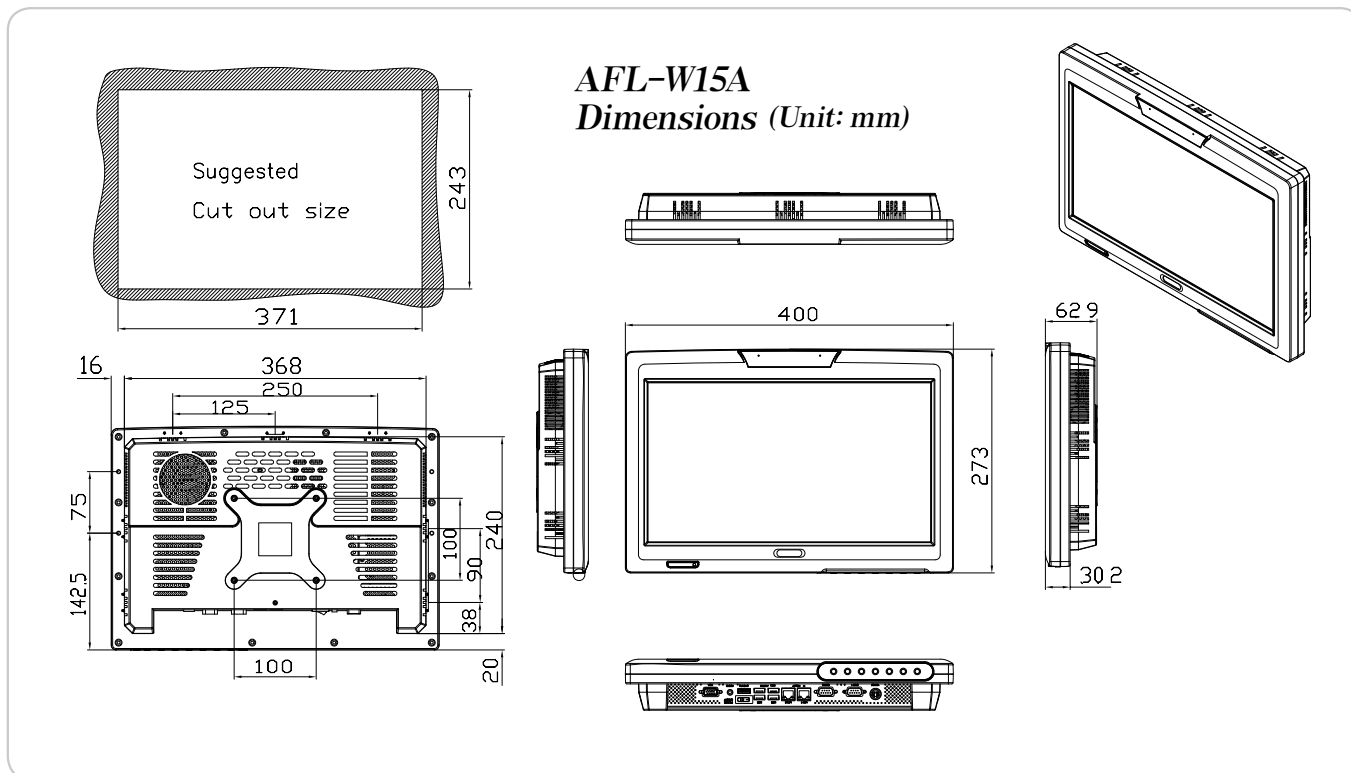
AFL-W15A
Dimensions (Unit: mm)

Ordering Information

Part Number	Description
AFL-W15A-N270/R/1G-R30	15.6" 250cd/m² 1366x768 panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, touch screen, 300K camera, microphone, R30
AFL-W15A-GM45-CM5/R/1G-R30	15.6" 250cd/m² 1366x768 panel PC with Intel® Celeron® 2.0GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n WiFi, touch screen, 300K camera, microphone, R30, RoHS
AFL-W15A-GM45-P84/R/2G-R30	15.6" 250cd/m² 1366x768 panel PC with Intel® Core™2 Duo P8400 2.26GHz CPU, 2GB DDR2 RAM, 802.11 b/g/n WiFi, touch screen, 300K camera, microphone, R30, RoHS
AFL-W15A-GM45-T94/R/2G-R30	15.6" 250cd/m² 1366x768 panel PC with Intel® Core™2 Duo T9400 2.53GHz CPU, 2GB DDR2 RAM, 802.11 b/g/n WiFi, touch screen, 300K camera, microphone, R30, RoHS

Note 1: AFL-W15B-N270 is for project-based order

Options

Model	AFL-W15A-N270	AFL-W15A-GM45
Panel Mounting Kit	AFLPK-15B	
Wall Mounting Kit	AFLWK-19	
Rack Mounting Kit	AFLRK-W15	
Arm	ARM-11-RS / ARM-31-RS	
Stand	STAND-A19 / STAND-B19 / STAND-210-R11	
OS: Win CE 6.0 (128 MB CF card)	AFLCF-W15-N270-CE060-R30	N/A
OS: Win XPE (1 GB CF card)	AFLCF-W15-N270-XPE-R30	AFLCF-W15-GM45-XPE-R30
OS: Win LINUX (2 GB CF card)	AFLCF-W15-N270-LNX-R30	AFLCF-W15-GM45-LNX-R30
OS: Win 7 Embedded (2GB CF card)	AFLCF-W15-N270-WES7E-R30	AFLCF-W15-GM45-WES7E-R30
Hybrid Card Reader	AFLP-W15AMSI-U	
Magnetic Stripe Reader	AFLP-W15AMSR-U	
DC 12V Input UPS	AUPS-B10-R10 (VESA 100, DC 12V input, 12V output 100W UPS module with 3800mAH)	
DC 9~36V Input UPS	AUPS-B20-R10 (VESA 100, DC 9~36V input, 12V output 100W UPS module with 3800mAH)	
Bluetooth V2.0+EDR	AFL-BT-KIT04-R10	AFL-BT-KIT03-R10

Note: Win CE application without digital microphone function

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3; 5mm
Power Adpater	63000-FSP096AHB-RS 63000-FSP060DBAB1554-RS	1	90~264V AC; 12V DC; 96W (W15A-GM45) 90~264V AC; 12V DC; 60W (W15A-N270)
Power Cord	32000-000002-RS	1	1750mm (EU or US, depending on the shipment country)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	WDT	Cash Drawer
AFL-W15A-N270	V			V	V	
AFL-W15A-GM45	V	V	V	V	V	

17" SXGA AFOLUX Panel PC

AFL-17i(E)-HM55

Intel® Core i7-620M 2.66GHz Processor

New HM55 Platform Features:

● Powered by high performance 2.66 GHz Intel® Core i7-620M CPU with Intel® HM55 chipset

● DDR3 1066MHz system memory up to 4GB

● HDMI port delivers high image quality on the second display

● IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity is suggested)

Wireless 802.11 b/g   **Speakers**   **One Key Recovery** IEI symantec.

Specifications

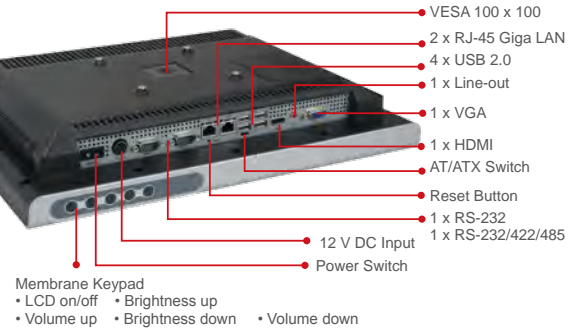| Model	AFL-17i-HM55
LCD Size	17"
Max Resolution	1280 x 1024
Brightness (cd/m²)	380
Contrast Ratio	800 : 1
LCD Color	16.7M
Pixel Pitch (mm)	0.264 (H) x 0.264 (V)
Viewing Angle (H-V)	160º / 160º
Backlight MTBF	50000 hrs
SBC Model	AFLMB2-HM55-R10
CPU	Socket G (PGA989A) Intel® Core™ series processor
Chipset	Intel® HM55
RAM	Two 204-pin 800/1066MHz DDR3 dual-channel SO-DIMMs supported (Max. 8GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port (Line-Out) 1 x VGA 1 x Power Jack 1 x HDMI Port
SSD	SATA SSD
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 3W + 3W (internal speakers)
Wireless Connection	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)
Drive Bay	1 x 2.5" SATA HDD bay
Construction Front Panel	ABS + PC Plastic front frame
Membrane Keypad	LCD On/Off, Brightness Up/Down, Volume Up/Down (5 keys)
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm
Front Panel Color	Sliver (877U) & Gray (ABSA2037)
Dimensions (WxHxD) (mm)	428 x 350 x 71
Operation Temperature (°C)	0ºC ~ 50ºC
Storage Temperature (°C)	-20°C ~60°C
N/G Weight	6.0 Kg
IP Level	Front Frame IP64
Touch Screen	5-wire resistive type (touch controller IC is on board) or Capacitive type touch screen without HDD bay
Power Adapter	P/N: 63000-FSP096AHB-RS 96W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	85W

17" SXGA AFOLUX Panel PC

AFL-17D-N270
Intel® Atom™ N270 1.6GHz Processor

AFL-17D-GM45
Intel® Core™2 Duo T9400 2.53GHz Processor

Digital Camera:
300K Camera with Low Light Function

HDMI HDMI High-Definition Multimedia Interface

Deep Glossy Black Surface

5-key membrane keypad

(for GM45 systems)

Easy access CF card   Convenient USBs on the side   Built-in ODD (optional)

Specifications

Fanless

Model	AFL-17D-N270	AFL-17D-GM45
LCD Size	17"	
Max Resolution	1280 x 1024	
Brightness (cd/m²)	300	
Contrast Ratio	800 : 1	
LCD Color	16.7M	
Pixel Pitch (mm)	0.264 (H) x 0.264 (V)	
Viewing Angle (H-V)	160º / 160º	
Backlight MTBF	50000 hrs	
SBC Model	AFLMB2-N270-R10	AFLMB2-GM45-R10
CPU	Intel® Atom™ processor N270 1.6GHz CPU	Intel® Celeron® M 575 2.0GHz CPU Intel® Core™ 2 Duo P8400 2.26GHz CPU Intel® Core™ 2 Duo T9400 2.53GHz CPU
Chipset	Intel® 945GSE + ICH7M	Intel® GM45 Chipset + ICH9M
RAM	Supports one 400MHz or533MHz DDR2 SO-DIMMs (Max. 2GB)	Supports two 667MHz or 800MHz DDR2 SO-DIMMs (Max. 4GB)
I/O Ports	1 x RS- 232 COM port 1 x RS-232/422/485 COM port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power switch 1 x Reset button 1 x Audio port 1 x VGA port 1 x Power jack	1 x RS-232 COM port 1 x RS-232/422/485 COM port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power switch 1 x Reset button 1 x HDMI port 1 x Audio port 1 x VGA port 1 x Power jack
SSD	CF Type II	
Watchdog Timer	Software programmable supports 1~255 sec. system reset	
Audio	AMP 3W + 3W (internal speakers)	
Camera Module	300K pixel with digital microphone	
Wireless Connection	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)	
Drive Bay	1 x 2.5" SATA HDD bay, 1 x Slim Type CD-ROM bay	
Construction Front Panel	ABS + PC Plastic front frame	
Membrane Keypad	LCD On/Off, Brightness Up/Down, Volume Up/Down (5 keys)	
LED Function	1 x Power on/off LED on front panel	
Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm	
Front Panel Color	Black C	
Dimensions (WxHxD) (mm)	410 x 349 x 83	
Operation Temperature (°C)	0°C ~40°C with SATA HDD -10°C ~50°C with CF Card or SATA interface 2.5" SSD HDD	0ºC ~40ºC with SATA HDD 0ºC ~45ºC with CF Card or SATA interface 2.5" SSD HDD
Storage Temperature (°C)	-20°C ~60°C	
N/G Weight	6.2 Kg	
IP Level	Front Frame IP64	
Safety & EMC	CE / FCC	
Touch Screen	5-wire resistive type (touch controller IC is on board) or Capacitive type touch screen without HDD bay	
Power Adapter	P/N: 63000-FSP084DMBA1308-RS 84W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP150AHAN1808-RS 150W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC	
Power Consumption	58W	90W

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Fully Integrated I/O

● **AFL-17D-N270/AFL-17D-GM45**

2 x LAN
1 x RS-232
1 x RS-232/422/485
12V DC Input
Power Switch
Membrane Keypad
Reset Button
AT/ATX Switch
HDMI (for AFL-17D-GM45)

4 x USB 2.0
Line-out
VGA Output

● **AFL-17i-HM55**

VESA 100 x 100
2 x RJ-45 Giga LAN
4 x USB 2.0
1 x Line-out
1 x VGA
1 x HDMI
AT/ATX Switch
Reset Button
1 x RS-232
1 x RS-232/422/485
12 V DC Input
Power Switch

Membrane Keypad
• LCD on/off   • Brightness up
• Volume up   • Brightness down   • Volume down
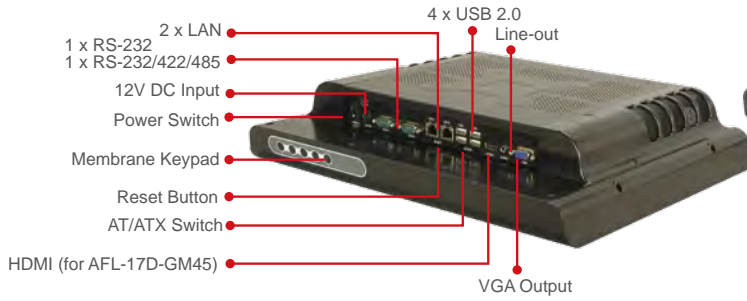
AFL-17D
Dimensions *(Unit: mm)*
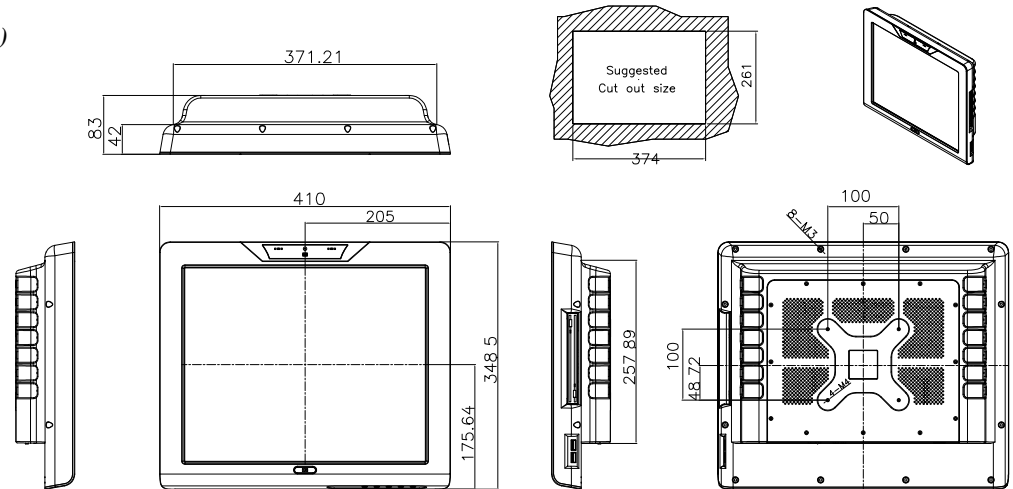
371.21
83
42
Suggested Cut out size
261
374
410
205
348.5
175.64
257.89
100
50
8-M3
100
48.72
4-M4

AFL-17i-HM55
Dimensions *(Unit: mm)*

383.9
(100)
22.1
13
(58.2) (22.5) (22.5)(22.5) (58.2)
387
Suggested Cut out Size
287
428
13
27.7
44.1
339.9
(25.4)
(22.5)
350.1
272.3
(22.5)
(20.4)
13
34 36.3
13
(25.4)
25.9
(22.5)
283.3
(20.4)
13
164
100
125
100

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

2-71   AFL-17D-2013-V10

Ordering Information

Part Number	Description
AFL-17D-N270/R/1G-R22	17" 300cd/m² SXGA fanless panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, touch screen, 300K camera, microphone, R22
AFL-17D-N270/RD/1G-R22	17" 300cd/m² SXGA fanless panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n Wi-Fi, touch screen, 300K camera, microphone, DVD-COMBO, R22
AFL-17D-GM45-CM5/R/1G-R23	17" 300cd/m² SXGA panel PC with Celeron® M 2.0GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, touch screen, 300K camera, microphone, R23, RoHS
AFL-17D-GM45-P84/R/2G-R23	17" 300cd/m² SXGA panel PC with Intel® Core™2 Duo P8400 2.26GHz CPU, 2GB DDR2 RAM, 802.11 b/g/n wireless module, touch screen, 300K camera, microphone, R23, RoHS
AFL-17D-GM45-T94/R/2G-R23	17" 300cd/m² SXGA panel PC with Intel® Core™2 Duo T9400 2.53GHz CPU, 2GB DDR2 RAM, 802.11 b/g/n wireless module, touch screen, 300K camera, microphone, R23, RoHS
AFL-17D-GM45-CM5/RD/1G-R23	17" 300cd/m² SXGA panel PC with Celeron® M 2.0GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n Wi-Fi, touch screen, 300K camera, microphone, DVD-RW, R23, RoHS
AFL-17D-GM45-P84/RD/2G-R23	17" 300cd/m² SXGA panel PC with Intel® Core™2 Duo P8400 2.26GHz CPU, 2GB DDR2 RAM, 802.11 b/g/n Wi-Fi, touch screen, 300K camera, microphone, DVD-RW, R23, RoHS
AFL-17D-GM45-T94/RD/2G-R23	17" 300cd/m² SXGA panel PC with Intel® Core™2 Duo T9400 2.53GHz CPU, 2GB DDR2 RAM, 802.11 b/g/n Wi-Fi, touch screen, 300K camera, microphone, DVD-RW, R23, RoHS
AFL-17i-HM55-P45/R/1G-R12	17" 380cd/m² SXGA panel PC with Intel® Celeron® P4500 1.86G CPU, 1GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-17i-HM55i3-35/R/2G-R12	17" 380cd/m² SXGA panel PC with Intel® Core™ i3-350M 2.26G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-17i-HM55i5-52/R/2G-R12	17" 380cd/m² SXGA panel PC with Intel® Core™ i5-520M 2.4G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-17i-HM55i7-62/R/2G-R12	17" 380cd/m² SXGA panel PC with Intel® Core™ i7-620M 2.66G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	WDT
AFL-17i-HM55	V	V	V	V	V
AFL-17D-N270	V			V	V
AFL-17D-GM45	V	V	V	V	V

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3; 5mm
Power Adpater	63000-FSP084DMBA1308-RS 63000-FSP096AHB-RS 63000-FSP150AHAN1808-RS	1	90~264V AC; 12V DC; 84W (17D-N270) 90~264V AC; 12V DC; 96W (17i-HM55) 90~264V AC; 12V DC; 150W (17D-GM45)
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

Options

Model	AFL-17D-N270	AFL-17i-HM55	AFL-17D-GM45
Panel Mounting Kit	AFLPK-17D	AFLPK-17B	AFLPK-17D
Wall Mounting Kit		AFLWK-19	
Rack Mounting Kit	AFLRK-17D-R11	N/A	AFLRK-17D-R11
Arm		ARM-11-RS / ARM-31-RS	
Stand		STAND-A19, STAND-B19, STAND-210-R11	
OS: Win CE 6.0 (128 MB CF card)	AFLCF-17-N270-CE060-R21	N/A	N/A
OS: Win XPE (1 GB CF card)	AFLCF-17-N270-XPE-R21	AFLSD-17-HM55-2G-XPE-R12 (2GB SATA SSD)	AFLCF-17-GM45-XPE-R23
OS: LINUX (2 GB CF card)	AFLCF-17-N270-LNX-R21	N/A	AFLCF-17-GM45-LNX-R23
OS: Win 7 Embedded (2GB CF card)	AFLCF-17-N270-WES7E-R21	AFLSD-17-HM55-4G-WES7E (4GB SATA SSD)	AFLCF-17-GM45-WES7E-R23
Hybrid Card Reader	N/A	AFLP-17BMSI-U	N/A
Magnetic Stripe Reader	N/A	AFLP-17BMSR-U	N/A
DC 12V Input UPS		AUPS-B10-R10 (VESA 100, DC 12V input, 12V output 100W UPS module with 3800mAH)	
DC 9~36V Input UPS		AUPS-B20-R10 (VESA 100, DC 9~36V input, 12V output 100W UPS module with 3800mAH)	
Bluetooth V2.0+EDR	AFL-BT-KIT04-R10	AFL-BT-KIT01-R10	AFL-BT-KIT03-R10

Note: Win CE application without digital microphone function

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

19" SXGA AFOLUX Panel PC

AFL-19i(E)-HM55

Intel® Core™ i7-620M 2.66GHz Processor

New HM55 Platform Features:

- Powered by high performance 2.66 GHz Intel® Core™ i7-620M CPU with Intel® HM55 chipset
- 1066MHz DDR3 system memory up to 4GB
- HDMI port delivers high image quality on the second display
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (over 4GB storage capacity is suggested)

Specifications

Model	AFL-19i-HM55
LCD Size	19"
Max Resolution	1280 x 1024
Brightness (cd/m²)	450
Contrast Ratio	1000 : 1
LCD Color	16.7M
Pixel Pitch (mm)	0.294 (H) x 0.294 (V)
Viewing Angle (H-V)	178º / 178º
Backlight MTBF	50000 hrs
SBC Model	AFLMB2-HM55-R10
CPU	Socket G (PGA989A) Intel® Core™ i series processor
Chipset	Intel® HM55
RAM	Two 204-pin 800/1066MHz DDR3 dual-channel SO-DIMMs supported (Max. 8GB)
I/O Ports	1 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 4 x USB 2.0 1 x Power Switch 1 x Reset Button 1 x Audio Port (Line-out) 1 x VGA 1 x Power Jack 1 x HDMI Port
SSD	SATA SSD
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 3W + 3W (internal speakers)
Wireless Connection	1 x Wireless LAN 802.11 b/g/n Module (internal PCIe Mini card interface)
Drive Bay	1 x 2.5" SATA HDD bay
Construction Front Panel	ABS + PC Plastic front frame
Membrane Keypad	OSD Keypad below the Front Panel (5 keys)
LED Function	1 x Power on/off LED on front panel
Mounting	Panel, Wall, Stand and Arm VESA 100mm x 100mm
Front Panel Color	Sliver (877U) & Gray (ABSA2037)
Dimensions (WxHxD) (mm)	470 x 383 x 72
Operation Temperature (°C)	0°C~50°C
Storage Temperature (°C)	-20°C ~60°C
N/G Weight	6.2Kg
IP Level	Front Frame IP64
Touch Screen	Resistive Type 5-Wire (Touch controller IC is on board)
Power Adapter	P/N: 63000-FSP096AHB-RS 96W Power Adapter Input: 90VAC~264VAC, 50 / 60 Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	88W (Intel® T7500, 2GB memory, 80G HDD)

Fully Integrated I/O

● **AFL-19i-HM55**

- VESA 100 x 100
- 2 x RJ-45 Giga LAN
- 4 x USB 2.0
- 1 x Line-out
- 1 x VGA
- 1 x HDMI
- AT/ATX switch
- Reset Button
- 1 x RS-232
- 1 x RS-232/422/485
- 12 V DC Input
- Power Switch

Membrane Keypad
- LCD on/off   • Brightness up
- Volume up   • Brightness down   • Volume down
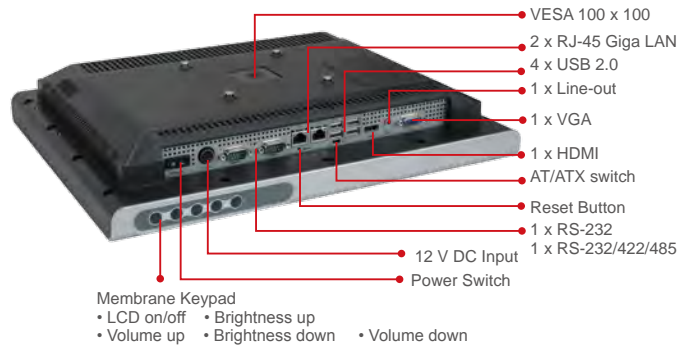
AFL-19i Dimensions (Unit: mm)
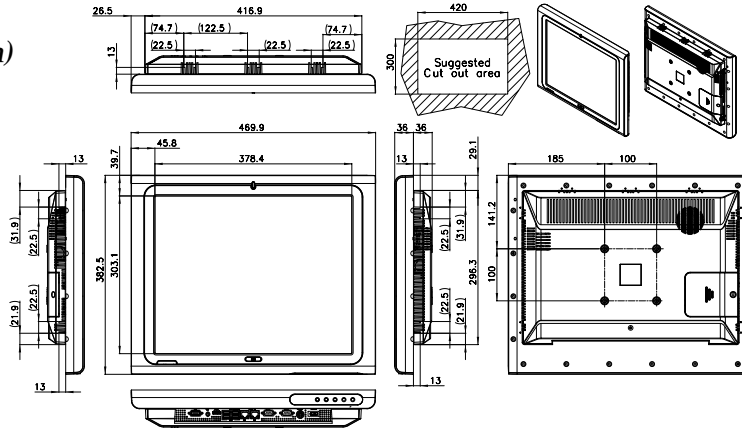
Ordering Information

Part Number	Description
AFL-19i-HM55-P45/R/1G-R12	19" 450cd/m² SXGA panel PC with Intel® Celeron® P4500 1.86G CPU, 1GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-19i-HM55i3-35/R/2G-R12	19" 450cd/m² SXGA panel PC with Intel® Core™ i3-350M 2.26G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-19i-HM55i5-52/R/2G-R12	19" 450cd/m² SXGA panel PC with Intel® Core™ i5-520M 2.4G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS
AFL-19i-HM55i7-62/R/2G-R12	19" 450cd/m² SXGA panel PC with Intel® Core™ i7-620M 2.66G CPU, 2GB DDR3 RAM, 802.11 b/g/n wireless module, touch screen, R12, RoHS

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adpater	63000-FSP096AHB-RS	1	90~264V AC; 12V DC; 96W (19i-HM55)
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	WDT	Cash Drawer
AFL-19i-HM55	V	V	V	V	V	

Options

Model	AFL-19i-HM55
Panel Mounting Kit	AFLPK-19B
Wall Mounting Kit	AFLWK-19
Arm	ARM-11-RS / ARM-31-RS
Stand	STAND-A19 / STAND-B19 / STAND-210-R11
OS: Win XPE (1 GB CF card)	AFLSD-19-HM55-2G-XPE-R12 (2GB SATA SSD)
OS: Win 7 Embedded	AFLSD-17-HM55-4G-WES7E (4GB SATA SSD)
Hybrid Card Reader	AFLP-19AMSI-U
Magnetic Stripe Reader	AFLP-19AMSR-U
DC 12V Input UPS	AUPS-B10-R10 (VESA 100, DC 12V input, 12V output 100W UPS module with 3800mAH)
DC 9~36V Input UPS	AUPS-B20-R10 (VESA 100, DC 9~36V input, 12V output 100W UPS module with 3800mAH)
Bluetooth V2.0+EDR	AFL-BT-KIT01-R10

1 IEI Mobile Solutions

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4 PACSmate Medical Solutions

5 Optional Peripherals

19" Wide 1440 x 900 AFOLUX Panel PC

AFL-W19A-N270

Intel® Atom™ N270 1.6GHz Processor

Mirror Black Glossy Finish

Features

- 19" wide screen all-in-one system with resistive touch panel
- High quality wide screen panel featuring 16:10 aspect ratio, high contrast and fast response time
- Fanless system integrated with Intel® Atom™ N270 1.6G processor for ultra low voltage
- IEEE 802.11b/g/n Wi-Fi connection
- Built-in two speakers
- Built-in capitalize technology
- Ambient light sensor detects ambient light for automated screen adjustments
- VESA-mountable for flexibility in mounting and deployment
- iSMM system utility included for system settings
- Support Windows® CE, Windows® XP Embedded and Linux (optional)
- IP 64 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (suggest over 4GB storage capacity)

Wireless 802.11 b/g | Speakers | Microphone | Camera | Built-in ODD | F3 One Key Recovery | iEi symantec.

Specifications

Model	AFL-W19A-N270
LCD Size	19"
Max Resolution	1440 x 900
Brightness (cd/m²)	300
Contrast Ratio	1000:1
LCD Color	16.2M
Pixel Pitch (mm)	0.285 (H) x 0.285 (V)
Viewing Angle (H-V)	170° / 160°
Backlight MTBF	50000 hrs
SBC Model	AFLMB2-945GSE-N270-R10
CPU	Intel® Atom™ N270 1.6GHz CPU
Chipset	Intel® 945GSE + ICH7M
RAM	Supports one 400MHz or 533MHz DDR2 SO-DIMM (Max. 2GB)
I/O Ports	1 x RS-232 COM Port / 1 x Reset Button 1 x RS-232/422/485 COM port / 1 x Audio Port 2 x RJ-45 for Giga LAN / 1 x VGA Port 4 x USB 2.0 / 1 x Power Jack 1 x Power Switch
SSD	CF Type II
Watchdog Timer	Software programmable supports 1~255 sec. system reset
Audio	AMP 1.5W + 1.5W (internal speakers)
Camera Module	300K pixel camera (with low light function) and digital microphone
Wireless Connection	1 x Wireless LAN 802.11 b/g/n module (internal PCIe Mini card interface)
Drive Bay	1 x 2.5" SATA HDD bay
Construction Front Panel	ABS + PC Plastic front frame
Membrane Keypad	LCD On/Off, Brightness Down/Up, Volume Down/Up, Lock, Ambient Light Sensor On/Off (7 keys)
Ambient Light Sensor	Yes
Infrared Remote Control	LCD On/Off, Brightness Up/Down, Volume Up/Down, System On/Off, Ambient Light Sensor On/Off
Mounting	Panel, Wall, Stand and Arm VESA 100mm x 100mm
Front Panel Color	Black C
Dimensions (WxHxD) (mm)	475 x 259 x 65
Operation Temperature (°C)	0°C ~40°C with HDD -10°C ~50°C with CF Card or SATA interface 2.5" SSD HDD
Storage Temperature (°C)	-20°C ~60°C
N/G Weight	5.8 Kg
IP Level	Frant Frame IP64
Safety & EMC	CE / FCC
Touch Screen	5-wire resistive type (touch controller IC is on board)
Power Adapter	P/N: 63000-FSP084DMBA1308-RS 84W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement	12VDC
Power Consumption	55W

Slim-type Optical Disk Drive

Membrane Keypad for System Function Control

Ambient Light Sensor

2megapixel Camera (with Low Light Function) and Digital Microphone

Infrared Remote Control (For AFL-W19A Series Only)

System On/Off

LCD On/Off

Volume Up/Down

Ambient Light Sensor On/Off

Brightness UP/Down

Auto Dimming

Sidebar

1 — IEI Mobile Solutions

2 — Automation Panel Solutions

3 — RISC-based Solutions

4 — PACSmate Medical Solutions

5 — Optional Peripherals

Fully Integrated I/O

Power Switch
4 x USB 2.0
VGA Output
Line-out for Speakers
Reset Button
2 x GbE LAN
1 x RS-232
1 x RS-232/422/485
12V DC Input
Membrane Keypad

AFL-W19A Dimensions (Unit: mm)
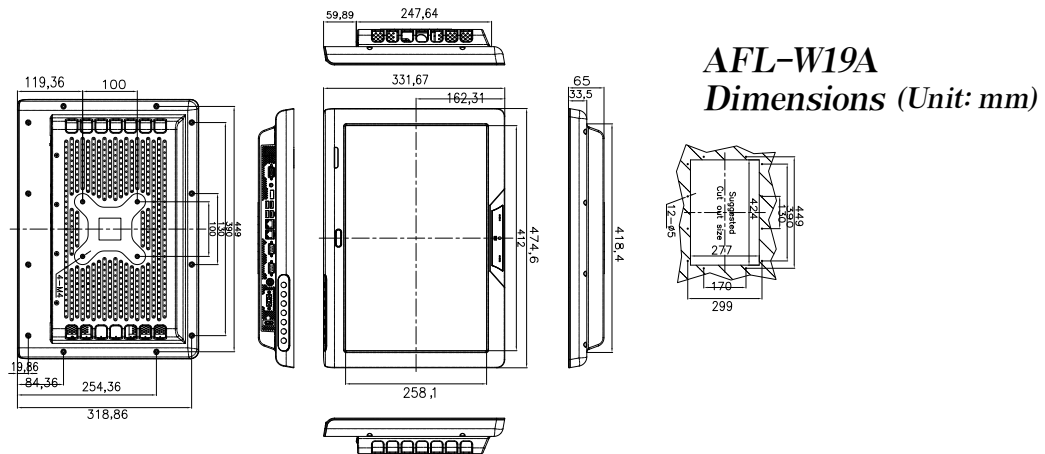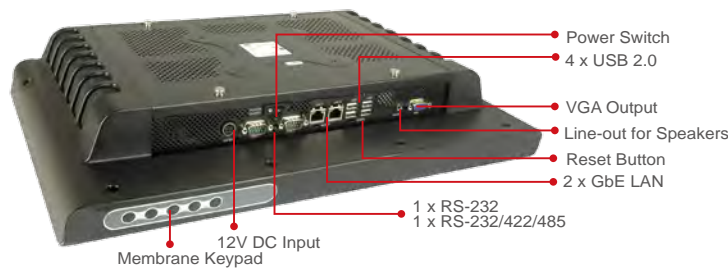
Ordering Information

Part Number	Description
AFL-W19A-N270/R/1G-R23	19" 300cd/m² 1440x900 panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, touch screen, 300K camera, microphone, R23

Packing List

Item	Part Number	Q'ty	Specification
Screw Pack	44013-030041-RS	4	M3;5mm
Power Adpater	63000-FSP084DMBA1308-RS 63000-FSP150AHAN1808-RS	1	90~264V AC; 12V DC; 84W (W19A/B-N270) 90~264V AC; 12V DC; 150W (W19A/B-GM45)
Power Cord	32000-000002-RS	1	1750mm; (EU or US, depending on the shipment country)
Utility CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	

ISMM Supported Functions

	Voltage	Fan	Smart Fan	Temperature	WDT	Cash Drawer
AFL-W19A- N270	V			V	V	

Options

Model	AFL-W19A-N270
Panel Mounting Kit	AFLPK-W19B
Wall Mounting Kit	AFLWK-19
Arm	ARM-11-RS / ARM-31-RS
Stand	STAND-A19 / STAND-B19 / STAND-210-R11
OS: Win CE 6.0 (128 MB CF card)	AFLCF-W19-N270-CE060-R23
OS: Win XPE (1 GB CF card)	AFLCF-W19-N270-XPE-R23
OS: LINUX (2 GB CF card)	AFLCF-W19-N270-LNX-R23
OS: Win 7 Embedded (2GB CF card)	AFLCF-W19-N270-WES7E-R23
DC 12V Input UPS	AUPS-B10-R10 (VESA 100, DC 12V input, 12V output 100W UPS module with 3800mAH)
DC 9~36V Input UPS	AUPS-B20-R10 (VESA 100, DC 9~36V input, 12V output 100W UPS module with 3800mAH)
Bluetooth V2.0+EDR	AFL-BT-KIT04-R10

Note: Win CE application without digital microphone function

AFOLUX Vertical Market Panel PC

The AFOLUX all-in-one PPC series is based on an integrated multi-functional design. Its new vertical market capability allows a wide variety of applications to be easily integrated, from high performance KIOSKs RFID solutions and more.

A. Public Information Solutions

Printer PC - EP-308A

■ 8" Panel PC integrated with 2" easy-loading thermal printer
■ Small footprint satisfies limited space requirements

Model	LCD Size	CPU	Thermal Printer
EP-308A	8.0"	Intel® 945GSE / Atom™ N270 Processor	●

Mini Kiosk - IMK-571R

■ 5.7" Panel PC integrated with wide scanning angle 1D/2D Barcode module
■ Supports PoE (Power Over Ethernet) agile deployment

Model	LCD Size	CPU	1D/2D Barcode scan	POE	RFID (Optional)	MSR (Optional)
IMK-571R	5.7"	RMI Alchemy™ AU1250	●	●	●	●

B. In-Wall Mount Solutions

AFOLUX 4 Series

■ In-wall mounting design allows the system to be flush with the wall with no visible wall mount
■ Changeable face plate and face plate skin sticker available to match diverse decoration styles
■ One digital I/O (4 inputs / 4 outputs)

Model	LCD Size	CPU	Changeable Faceplate	Digital Input / Output	Wide Power Requirement
AFL 4 Series	8.0" / 8.4" / 10.4" / 12.1" / 15"	Intel® 945GSE / Atom™ N270 Processor	●	4 x Digital Input 4 x Digital Output	10~28VDC

C. RFID Collector Solutions

ACT series

■ Integrated RFID reader for MIFARE 13.56 MHz or EM 125 KHz RFID tag

Model	LCD Size	CPU	RFID Reader (EM / Mifare)	Relay Output	Digital Input / Output	Wiegand Slave Reader Port	Changeable Faceplate
ACT-457A	5.7"	RMI Alchemy™ AU1250	●	2 x Relay Output	2 x Digital Input	-	●

Sidebar: 1 IEI Mobile Solutions / 2 Automation Panel Solutions / 3 RISC-based Solutions / 4 PACSmate Medical Solutions / 5 Optional Peripherals

AFOLUX Vertical Market Panel PC
Selection Guide

PoE

PoE

| Model		Mini Kiosk	Printer PC	RFID Collector Solutions
		IMK-571A	**EP-308A**	**ACT-457A**
Display	LCD Size	5.7"	8.0"	5.7"
	Max Resolution (W x H)	640 x 480	800 x 600	640 x 480
	Brightness (cd/m²)	400	250	400
	Max. Colors	262K	262K	262K
	Viewing Angle (H-V)	140º/160º	140º / 130º	140º / 100º
	Backlight MTBF (hrs)	50000 (LED backlight panel)	30000 (LED backlight)	50000 (LED backlight)
Motherboard	CPU	RMI Alchemy™ AU1250 500MHz	Intel® Atom™ N270 1.6GHz CPU	RMI Alchemy™ AU1250 500MHz CPU
	Chipset	--	Intel® 945GSE + ICH7M	--
	RAM	256MB DDR2 SDRAM	Supports one 400MHz / 533MHz DDR2 SO-DIMM (2GB max.)	256MB DDR2 SDRAM
I/O Ports and Switches		1 x RS-232 COM port 1 x RJ-45 for 10/100Mbps LAN (With on-board POE design) 2 x USB 2.0 1 x Stereo audio jack	1 x RJ-45 for RS-232 COM port 1 x RJ-45 for RS-232/422/485 COM port 1 x RJ-45 for Gigabit LAN 4 x USB 2.0 1 x VGA port	1 x RS-232 COM port 1 x RS-422/485 COM port 1 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0
Digital Input/Output		--	1 x RJ-12,12V cash drawer port	2 x Relay output 2 x Digital input
Drive Bay	SSD	--	CF Type II	--
	HDD	--	--	--
	CD-ROM	--	--	--
Wireless Connection	Wi-Fi	IEEE 802.11 b/g (internal PCIe Mini interface)	--	IEEE 802.11 b/g (optional) (internal PCIe Mini interface)
Audio/Video Device	Audio	AMP 1.5W + 1.5W (Internal speakers)	AMP 1.5W + 1.5W (Internal speakers)	AMP 2W + 2W
	Webcam	--	--	1 x 300K pixel camera (internal USB interface)
	Microphone	--	--	1 x Digital microphone (internal USB interface)
RFID Reader		--	--	EM 125KHz MIFARE 13.56MHz
1D / 2D Barcode Scanner		1D / 2D barcode scanner	--	--
Thermal Printer		--	2" Thermal Printer	--
Physical	Mounting	Wall, stand and arm (VESA 100mm x 100mm)	VESA 100mm	In-wall mount, VESA 75mm x 75mm
System Cooling		Fanless	Fanless	Fanless
Environment	Operation Temperature (°C)	0°C~50°C	0°C~40°C	-10°C~60°C
	Storage Temperature (°C)	-20°C~60°C	-20°C~60°C	-20°C~70°C
Power Requirement		12~24VDC	12VDC	12VDC

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

AFOLUX Vertical Market Panel PC
Selection Guide

Model		In-Wall Mount Solutions			
		AFL-408B	**AFL-408A**	**AFL-W410A**	**AFL-412A**
Display	LCD Size	8.0"	8.4"	Wide 10.2"	12.1"
	Max Resolution (W x H)	800 x 600	800 x 600	1024 x 600	1024 x 768
	Brightness (cd/m²)	250	450	400	500
	Max. Colors	262K	262K	262K	262K
	Viewing Angle (H-V)	140º /130º	160º / 140º	140º / 110º	160º / 160º
	Backlight MTBF (hrs)	30000 (LED backlight)	50000 (LED backlight)	40000	50000 (LED backlight)
Motherboard	CPU	Intel® Atom™ N270 1.6GHz CPU			
	Chipset	Intel® 945GSE + ICH7M			
	RAM	Supports one 400MHz / 533MHz DDR2 SO-DIMM (2GB max.)			
I/O Ports and Switches		1 x RJ-45 for RS-232 COM Port 1 x RJ-45 for RS-232/422/485 COM Port 1 x RJ-45 for Gigabit LAN 5 x USB 2.0 (4 in the rear, 1 in front panel) 1 x VGA Port			
Digital Input/Output		1 x DIO (4in / 4out)	1 x DIO (4in / 4out)	1 x DIO (4in / 4out)	1 x DIO (4in / 4out)
Drive Bay	SSD	CF Type II	CF Type II	CF Type II	CF Type II
	HDD	--	--	--	1 x 2.5" SATA HDD bay
	CD-ROM	--	--	--	--
Wireless Connection	Wi-Fi	IEEE 802.11 b/g/n (internal PCIe Mini interface)			
Audio/Video Device	Audio	AMP 1.5W + 1.5W	AMP 1.5W + 1.5W	AMP 1.5W + 1.5W	AMP 1.5W + 1.5W
	Webcam	--	300K pixels camera	300K pixels camera	300K pixels camera
	Microphone	--	1 x Digital microphone (internal USB interface)	1 x Digital microphone (internal USB interface)	1 x Digital microphone (internal USB interface)
IR Remote Control		LCD On/Off, System Power On/Off, Volume Up/Down, Brightness Up/Down			
Physical	Mounting	In-wall mount, VESA 75mm x 75mm / 100mm x 100mm	In-wall mount, VESA 75mm x 75mm / 100mm x 100mm	In-wall mount, VESA 75mm x 75mm / 100mm x 100mm	In-wall mount, VESA 75mm x 75mm / 100mm x 100mm
System Cooling		Fanless	Fanless	Fanless	Fanless
Environment	Operation Temperature (°C)	-10°C~50°C	-10°C~50°C	-10°C~50°C	-10°C~50°C
	Storage Temperature (°C)	-20°C~60°C	-20°C~60°C	-20°C~60°C	-20°C~60°C
Power Requirement		10~28VDC	10~28VDC	10~28VDC	10~28VDC

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Mini Kiosk Panel PC

IMK-571R

- 5.7 inch VGA TFT touch panel LCD with LED backlight
- RMI Alchemy™ MAE multimedia platform
- 10/100Mbps Ethernet with on-board PoE (Power over Ethernet)
- Built-in stereo speakers
- Wi-Fi 802.11 b/g and wired network connectivity
- Watchdog timer
- Wide-angle, 1D/2D barcode scanner
- Default 2GB miniSD for data storage
- Optional MSR+SCR card reader
- Optional RFID Mifare reading module

1D/2D Code Reading

PoE

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1. Reliable Multimedia Platform with RMI AU1250 Microprocessor

Powered by RMI Alchemy™ AU1250 microprocessor with MAE (Multimedia Acceleration Engine), IMK-571R achieves great performance with its versatile multimedia support including most available video and audio types (MPEG1/2/4, DivX and WMV9).

- Video codecs inside, rich media support at full D1 resolution
- 15W low power consumption system
- 0ºC~50ºC wide temperature range

FORMAT	STREAM TYPE	AUDIO FORMAT	SUPPORTED BIT RATES
MPEG-1	System	MPEG	8 Mbps
MPEG-2	Program	MPEG	10 Mbps
	Transport	MPEG	8 Mbps
WMV9	Unencrypted only	WMA	2.5 Mbps
	CBR w/o filters, 720x480	WMA	2.5 Mbps
	VBR w/o filters, 720x480	WMA	2.5 Mbps
DivX	Unencrypted only/ no subtitles - V3.11	MP3/AAC/MPEG	4 Mbps
	V4	MP3/AAC/MPEG	4 Mbps
	V5	MP3/AAC/MPEG	4 Mbps
MPEG-4 MP4ISO/EIC 14496-2.	Advanced Simple Profile – level 5	AAC	3 Mbps
MPEG-4 AVI	Advanced Simple Profile – level 5	MP3, AC-3	4 Mbps

Full D1 (720 x 480)

Advertising platform maximizes customer satisfaction and ROI
- Play multimedia video to attract the attention of customers and make shopping more interesting
- At DVD rental stores, customers can watch movie previews by scanning DVD barcodes

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2. Applications

Self-service
Allows customer to check price, obtain product related information or motivate them with promotional messages

Customer loyalty program
Customer can access their loyalty card to see their accumulated credit and reward programs

Production line information
Operator can scan barcode on WIP carrier to get production information and update production status

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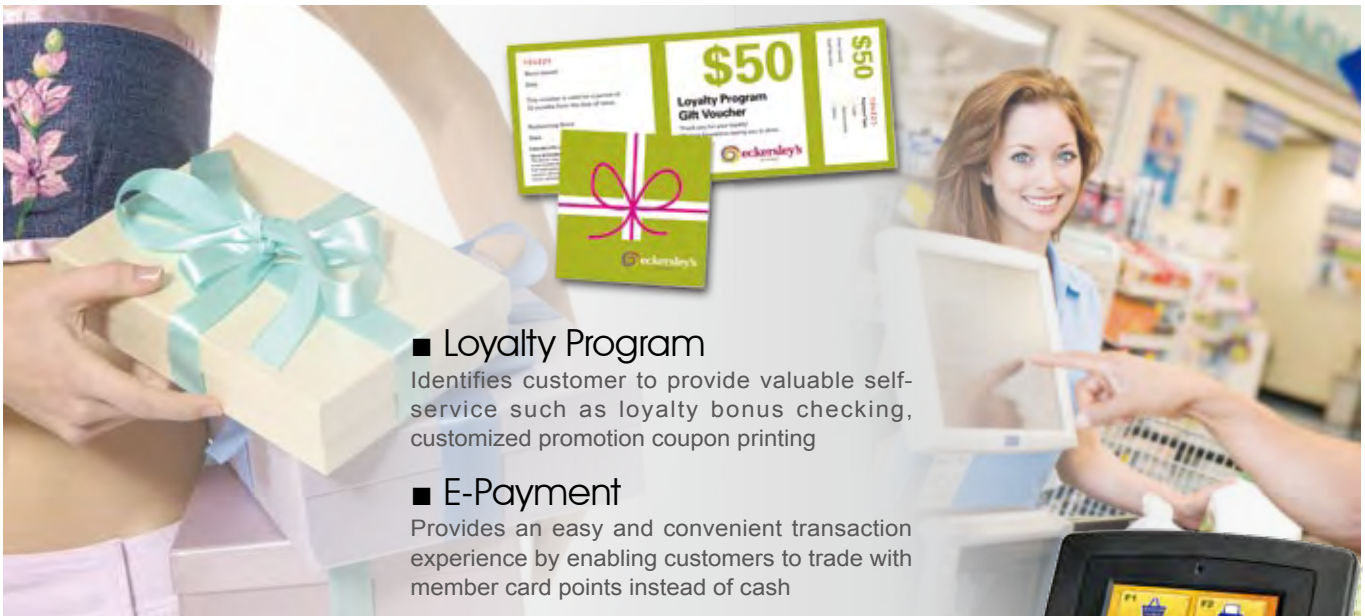
■ Loyalty Program

Identifies customer to provide valuable self-service such as loyalty bonus checking, customized promotion coupon printing

■ E-Payment

Provides an easy and convenient transaction experience by enabling customers to trade with member card points instead of cash

3. Built-in 1D/2D Barcode Scanner

● Accurately decodes all 1D and 2D codes, even wrinkled, damaged or poorly printed
● 1.23 mega-pixel CMOS sensor captures high resolution images for decoding
● 50º / 37.5º (H/V) large scanning area

123456789

Technology	1D Code	2D Code
Read Condition	20 to 25 characters	100 to about 7,089 characters

2D Barcode

A 2D (two-dimensional) barcode is a graphical image that stores information both horizontally.
● Greater storage than is possible with the 20-character capacity of a unidimensional barcode.
● Faster data access allows for quicker response codes.

1D/2D Code Reading

4. Identification / Payment Card Empowered Models

■ IMK-571R-CE5/MIFARE/-R10

RFID Reader Feature

● ISO14443A (MIFARE) UID (Read Only) and block date Read/Write
● Reading Distance : 3-5cm (Card dependent)
● Supports up to 115.2Kbps data rate
● PWR, ACT LED Indicators

Mifare Reading

■ IMK-571R-CE5/MSR/-R10

Magnetic Card Reader Feature

● Reading Track : ISO1,2,3 (IATA, ABA, THRIFT, MINTS)
● Card Standard : ANSI, ISO, ABA
● Beeper Reading Indicator

Magnetic CardReading

RFID

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6. Barcode Capability

IMK-571R is equipped with the leading Metrologic IS4920 scanner engine. IS4920 is a decoded miniature area imaging scan engine designed to scan 1D and 2D bar codes. It features a megapixel imaging sensor, a wide angle lens design, integrated illumination and aiming, and industrial leading decoding software and delivers a fast and aggressive scanning performance.

Features	Benefits
Powered by Adaptus® Imaging Technology	Adaptus Imaging Technology delivers leading technologies and utilizes Honeywell's continuous commitment to provide superior data capture solutions
Point-and-Shoot Scanning Ease of Use	Available in high visibility LED and laser aimer versions makes reading linear and full matrix codes quick and easy with industry-leading motion tolerance, low light sensitivity, and broad depth of reading distances
Durable	Incorporates industrial grade image sensor technology which are designed with no moving parts, these imagers can withstand rugged applications
Decoding	Read all major linear, stacked linear, and matrix bar codes, as well as machine-readable OCR fonts, quickly and easily
Fifth Generation Image Processing	Industry-leading image processing performance. In addition to reading bar codes well, these products also capture crisp digital images.
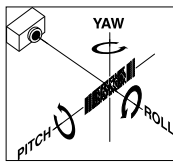
Barcode Reading Angles		
Pitch	Skew	Tilt
40° @ 0° tilt and 0° skew	40° @ 0° tilt and 0° pitch	360° @ 0° pitch and 10° skew

PS : The scanner may not operate under conditions of specular reflection: +/- 5° (assuming Pitch & Skew @ 0° tilt only)
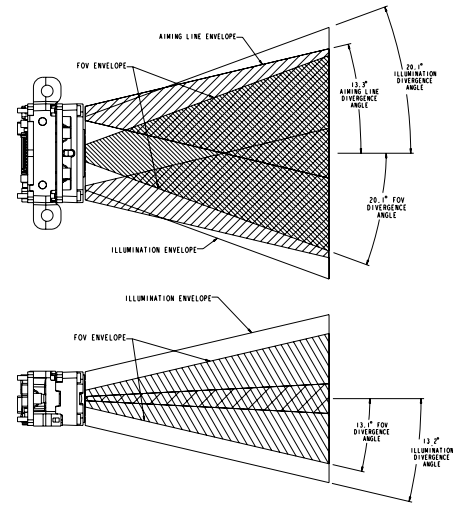
■ Window Size Diagram (Laser Aimer)

Bar Code Element Width			Depth of Field (In the Field of View)		
			Start (From Engine Face)	End (From Engine Face)	Total
1D (Code 39)	.203 mm	8 mil	89 mm (3.5")	193 mm (7.6")	104 mm (3.1")
	.254 mm	10 mil	81 mm (3.2")	234 mm (9.2")	153 mm (6")
	.381 mm	15 mil	53 mm (2.1")	325 mm (12.8")	272 mm (10.7")
PDF417	.168 mm	6.6 mil	114 mm (4.5")	159 mm (6.25")	45 mm (1.75")
	.254 mm	10 mil	79 mm (3.1")	229 mm (9.0")	150 mm (5.9")
Data Matrix	.381 mm	15 mil	58 mm (2.3")	259 mm (10.2")	201 mm (7.9")

7. Power over Ethernet (PoE)

■ What is the Benefit of PoE?

● PoE is a revolutionary feature changing the way manufacturers design and build networking products. The need for PoE has been largely driven by the VoIP, surveillance camera, and Panel PC industry, but the benefits spread much further. The single data connection makes it cheaper and easier to install.

● Power is supplied to the IMK-571R panel PC and peripherals through a PoE connection. No additional power supply is needed which reduces engineering costs.
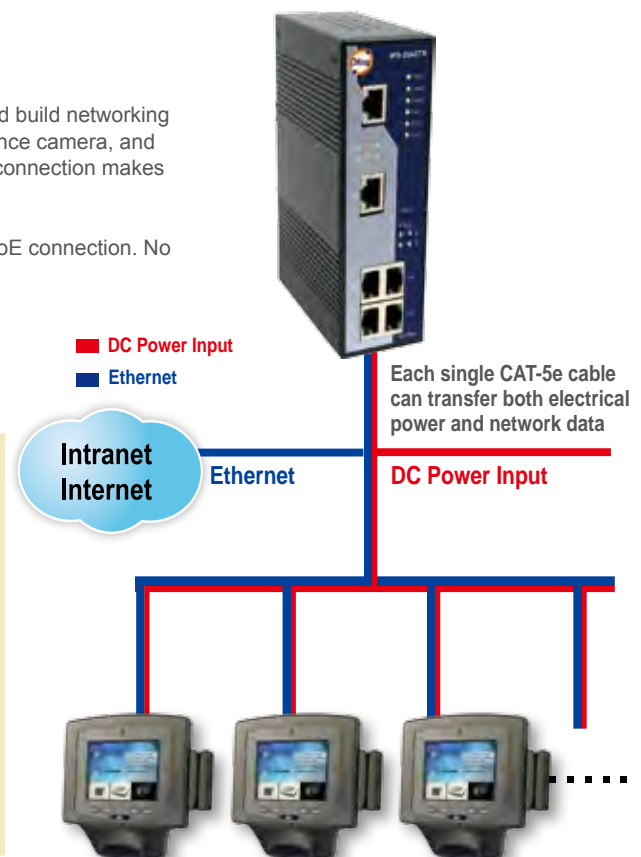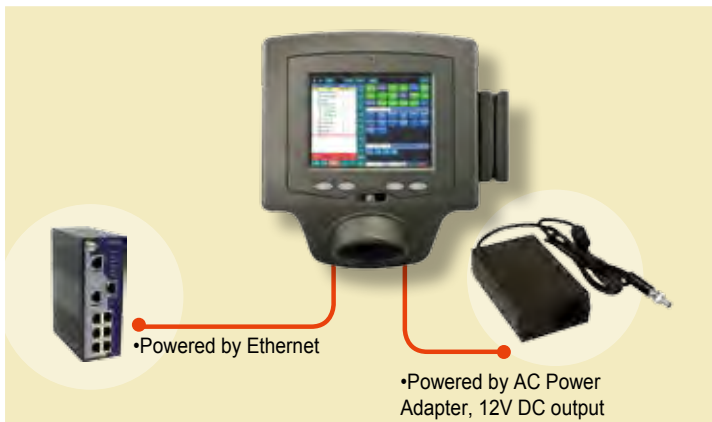
■ **DC Power Input**
■ **Ethernet**

Each single CAT-5e cable can transfer both electrical power and network data

■ Power Input Options

•Powered by Ethernet

•Powered by AC Power Adapter, 12V DC output

Intranet
Internet

Ethernet   DC Power Input

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8. IMK Runtime Demo

Main Menu

Product Inquiry

Access Control

Receipt Print
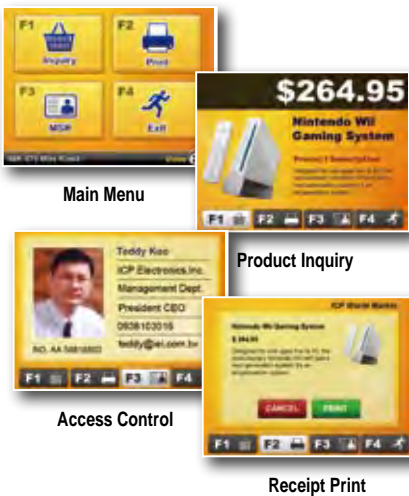
■ IMK Runtime Demo:
IMK Runtime Demo is a pre-installed application which introduces the functions of the IMK-571R to new users

■ Product Inquiry:
In this mode the user can scan pre-defined product barcodes, view relative product information, and check barcode type

■ Receipt Print:
Print receipts in product inquiry mode by pressing the print button when prompted

■ Access Control:
Access control allows users to read magnetic cards and display pre-defined personal information

9. IMK Merchandise Manager

■ IMK Merchandise Manager
IMK Merchandise Manager provides a friendly interface for the administrator to maintain and manage product information on an IMK-571R in the network.

■ Find IMK-571R in Your Network
Use Find IMK-571R to search and list all available IMK-571R in the network. Then select the IMK-571R which you want to upload or download product information files from.

■ Upload/Download Product Information File
When executing the download command, IMK Merchandise grabs the product information file from the previously selected IMK-571R and generates local sub folders with different device names. When execute upload command, IMK Merchandise will transfer the product information file in sub folders named after the device name onto the relative IMK-571R.

■ Edit Product Information File
User can select and open the product information file (*.xml) to edit content. In editing mode, the user can add and remove product items or edit product details. Then using 'Apply to all' generate sub folders named after selected IMK-571R devices and imitate the product information file with the edited content into the folders.

IMK Web Configurator
IMK Web Configurator is a Web-based utility which allows users to access IMK-571R and modify the settings via a web browser interface at anytime and in any place, anywhere without any PC client application installed. It makes management of IMK-571R in the network very easy and convenient for IT administrator while minimizing system maintenance costs and time.

▪ System Setting: User can inquire system information and set up Ethernet and Wireless parameters. Remote restart option allows users to restart the system once any abnormal circumstance occurs and a restart procedure is needed.

▪ Barcode Setting: User can adjust universal barcode parameters and the variables of various barcode types. The available settings will auto change when a specific barcode type is selected on the left side of the screen. User can also use the 'Factory default' function to restore all settings to default when needed.

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IMK-571R in a glance

- Wi-Fi Antenna
- Power LED
- MSR/SCR Extension Connector (Optional)
- Function Keys
- Stereo Speakers
- 1D/2D Barcode Scanner

- 75mm VESA Mount
- miniSD Slot
- 2 x USB 2.0 Host
- 1 x Audio Jack
- 1 x RS-232
- 1 x LAN w/PoE
- 12V-24V DC Power Input
- Reset Button

210.00
116.37
236.31
175.68

5.00°
63.96
23.00
55.00°
30.00°

75.00
45.91
102.00
75.00
12.50
13.23
52
131.00

Specifications

Model	IMK-571R MiniKiosk
Core System	• RMI Alchemy™ AU1250 500MHz CPU • 2MB NOR flash for bootloader • 256MB DDR2 • miniSD slot with default 2GB miniSD memory card for OS and user data/program • Watchdog Timer
Display	• 5.7" VGA TFT touch panel LCD with LED backlight • Resistive type 4-wire touch screen
Data Input and Display	• Power LED • 4 x Function keys • 1D/2D barcode scanner • 1 x Reset button • MSR (IMK-571R-CE5/MSR-R10 only)

Connectivity	• 10/100Mbps Ethernet with on-board POE design • Built-in Wi-Fi 802.11 b/g • RS-232 x 1 • 2 x USB host Rev. 2.0 • 1 x Stereo Audio Jack • 2 x Stereo Speaker
Physical Specification	• Operation temperature : 0°C-50°C • Humidity : 5%-90% RH
Power	• 1 x 12-24V DC power input • 8W power consumption
OS	• Windows® CE 5.0 • Built-in web server • Built-in RDC (Remote Desktop Connection) Thin Client support • SDK for embedded Visual C++
Utility	• IMK Web Configurator • IMK Remote Management Tool • IMK Merchandise Manager
Demo	• IMK Runtime Demo Application

Ordering Information

Part Number	Description
IMK-571R-CE5/-R10	RISC-BASED MINI KIOSK PANEL PC, ALCHEMY™ AU1250 CPU, 5.7" TFT TOUCH PANEL, HONEYWELL IT5180 1D/2D BARCODE SCANNER, WIFI B/G, ON-BOARD POE, W/O MAGNETIC STRIPE READER, WIN CE5.0, RoHS
IMK-571R-CE5/MSR/-R10	RISC-BASED MINI KIOSK PANEL PC, ALCHEMY™ AU1250 CPU, 5.7" TFT TOUCH PANEL, HONEYWELL IT5180 1D/2D BARCODE SCANNER, WIFI B/G, ON-BOARD POE, W/ MAGNETIC STRIPE READER, WIN CE5.0, RoHS
IMK-571R-CE5/MIFARE/-R10	RISC-BASED MINI KIOSK PANEL PC, ALCHEMY™ AU1250 CPU, 5.7" TFT TOUCH PANEL, HONEYWELL IT5180 1D/2D BARCODE SCANNER, MIFARE 13.56MHz RFID READER, WIFI B/G, ON-BOARD POE, W/O MAGNETIC STRIPE READER, WIN CE5.0, RoHS
7Z000-MIFARES50-RS	RFID PROXIMITY, CARD, 13.56MHz, ISO14443A; MIFARE-S50; SIZE: 85.6X 54X 0.76MM, PVC SURFACE; RoHS
AFLWK-12	VESA 75 WALL MOUNT KIT

Packing List

1 x IMK-571R	1 x Utility CD includes SDK, utilities, and technical document
1 x 9-pin RS-232 cable	1 x Touch pen
1 x Screw kit	

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IEI Mobile Solutions

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Optional Peripherals

8.0" Printer PC
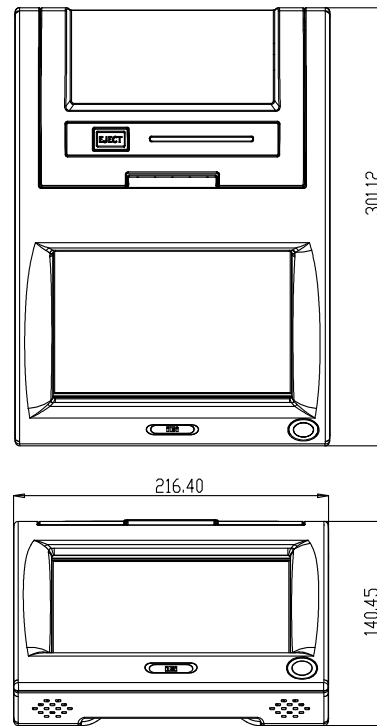
EP-308A

- 8.0" printer PC with Intel® Atom™ processor
- Small footprint satisfies limited space requirements
- Extendable connections for peripheral devices
- Built-in 2" easy-loading thermal printer
- Built-in resistive touch screen
- IP 64 compliant front panel

Compact Desktop PC built in thermal printer

Fanless

(intel) Intelligent Systems Alliance

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1. Compact Low Profile System

A compact and efficient desktop system is the perfect solution for small and medium business, allowing the business owner to easily manage the business transactions and records. The small footprint EP-308A is perfect for any environment installation.

Mobile POS System

Space Sensibility Retail Store

30 cm
21.6 cm

44.8 cm   39.3 cm

---

2. Customer Display Connection via VGA

* Migrating from vacuum fluorescent display (VFD) to
    LCD customer display via VGA connection
* Double screen space
* Displays retail advertisements and promotions

Customer Display

VFD

LCD monitor

Customer side display via VGA connection

3. Built-in 2" Easy-Loading Thermal Printer with Auto-cutting

■ **High Speed Thermal Printer**
The built-in printer can print at 100 mm/s (800 dot line/s) maximum.

■ **Auto Cutter**
The built-in printer supports full cut or partial cut paper according to user selection.

■ **Easy Paper Setting**
Paper can be easily inserted or the auto-load function can be selected. When a paper jam occurs, simply re-insert the roll of paper.
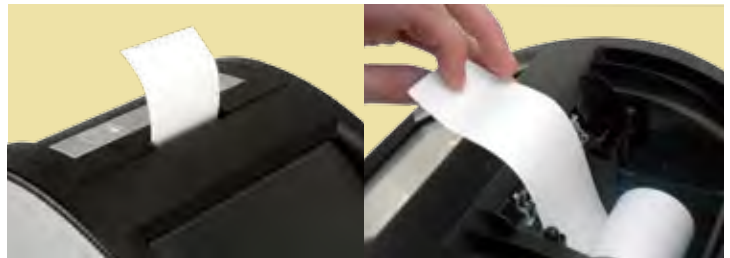
4. Cash Drawer Port via RJ-12 with 12V / 24V Power

Equipped with a digital I/O RJ-12 12 V/24 V port that provides extension for peripherals such as a cash drawer device.

Pin	Assignment
1	Ground
2	CASH_1 (Digital Out Programmable)
3	Digital IN
4	+12V/24V
5	NC
6	Ground
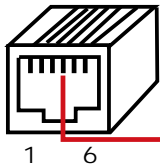
Digital I/O control diagram

Super IO

GPI GET STATUS — GPO ACTION (OPEN/CLOSE)

Control Block

LOW LEVEL (CASHDRAWER OPEN STATUS) HIGH LEVEL (CASHDRAWER CLOSE STATUS) — LOW LEVEL (OPEN CASHDRAWER) HIGH LEVEL (CLOSE CASHDRAWER)

Cash Drawer

5. IEI Intelligent System Management Module (iSMM)

The AFOLUX panel PC is equipped with the IEI patent system management module for tracking system and CPU temperatures, voltages, cooling fan speed, etc. By quickly capturing and reporting health data, users can prevent disasters from system instability or damage.

INTELLIGENT SYSTEM MANAGEMENT MODULE

Temp.	Fan	Voltage	DIO	WDT	Save/Load	Cash drawer
CPU + System temperature monitoring	Dynamic fan controlling	Real time voltage alarm	Easy Digital I/O configuring	Trouble free watch dog timer testing	Flexibility user profile selection	Cash drawer control
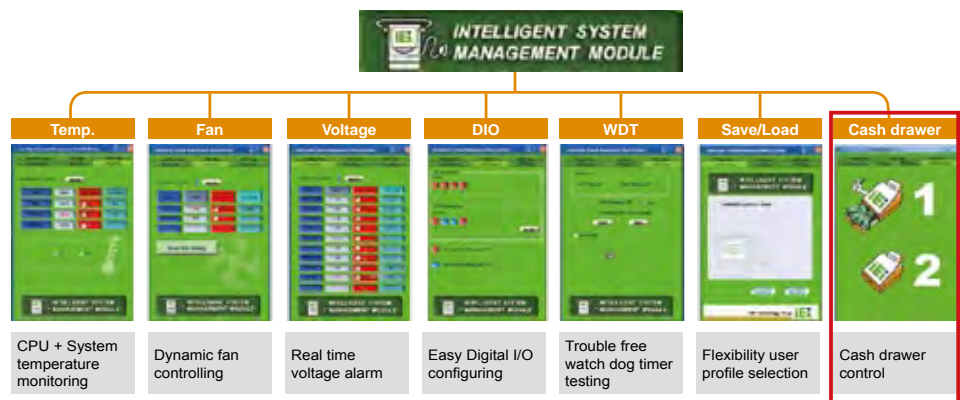
Cash Drawer Control For POS Application

6. Watchdog Timer Prevents System Lock-up

The watchdog timer will automatically restart the system if it stops responding, ensuring dependability during unattended operation.

With Watchdog Timer

Without Watchdog Timer

Rear Panel Input/Output

LED Indicator
Built-in Speakers
Power On/Off

Great Cable Management

24V DC
LAN
COM1
RJ-12 for Cash Drawer
USB 2.0 x 4
VGA
COM3

Specifications

Model		EP-308A-N270
LCD Size		8"
CPU		Intel® Atom™ 1.6GHz N270 Processor
Chipset		Intel® 945GSE
Memory		Built-in 1GB DDR2 Memory System Supports One 200-pin Dual-Channel 667 MHz DDR2 up to 2 GB
Max. Resolution (W x H)		800 x 600
Brightness (cd/m²)		250
Contrast Ratio		500:1
LCD Color		262K
Pixel Pitch (mm)		0.2025(H) x 0.2025(V)
Viewing Angle (H-V)		130º / 110º
Backlight MTBF		30000 hrs
Touch Screen		5-Wire Resistive Type
HDD		1 x 2.5" SATA HDD
SSD		1 x CF Type II
I/O Interface	Display	1 x VGA Port
	Powered USB	4 x USB 2.0
	Powered COM	2 x RJ-45 for RS-232 COM Port
	Cash Drawer Port	1 x RJ-12, 12V Cash Drawer Port
	LAN	1 x RJ-45 for Gigabit LAN
	Wireless	(Optional) IEEE 802.11 b/g/n (Internal PCIe Mini interface)
	Audio	AMP 1.5W + 1.5W (Internal speakers)
	Power Switch	1 x 24V DC-IN Power Jack
	Quick Buttons	1 x Power Switch with LED on Front Panel
Power	Adapter	FSP070-RAA607, VAC:90~264V, 24V/70W
	Output	24V DC
Mounting		VESA 75mm x 75mm / 100mm x 100mm
Construction		Aluminum Chassis
Color		Black / Sliver or Selected Color
Operation Temperature (ºC)		0°C~40°C
IP Level		IP64 (Front Panel)
Safety & EMI		CE / EMC / FCC / UL / BSMI
Dimensions (WxHxD)		320 x 217 x 141 mm
Net Weight		2.80 Kg

EP-308 Dimensions (Unit: mm)

301.12

216.40

140.45

Ordering Information

Part Number	Description
EP-308A-N270/T-R/1GB-R11	8" 250cd/m² POS PC with Intel® Atom™ N270 1.6GHz,1GB DDR2 RAM, 10/100Base-T Ethernet, built-in 2" easy loading thermal printer with auto cutter WPOS/OPOS support only, touch screen, RoHS
EP-308AX-N270/T-R/1GB-R11	8" 250cd/m² POS PC with Intel® Atom™ N270 1.6GHz, 1GB DDR2 RAM, 10/100Base-T Ethernet, touch screen, RoHS
EP-308AS-N270/T-R/1GB-R11	8" 250cd/m² POS PC with Intel® Atom™ N270 1.6GHz, 1GB DDR2 RAM, 10/100Base-T Ethernet, built-in 2" easy loading thermal printer with auto cutter command mode supported, touch screen, RoHS

Options

Barcode Reader	AFLP-BRW01-U (White color) / AFLP-BRB01-U (Black color)
Customer Display	AFL-CDW01 (White color)/ AFL-CDB01 (Black color)
OS: Windows® XPE	EPCF-308-N270-XPE (4GB CF Card)
OS: Windows® WEPOS	EPCF-308-N270-WEPOSREADY (4GB CF Card)

In-Wall Mount Solutions

AFL-4xxA series

Customizable Slim Bezel + In-Wall Mount

■ **8.0"~15" Highly Customizable All-in-One System**
The system is extremely configurable. The semi-open frame system equipped with customizable faceplate, and the flexible LCD size options match your diverse style and OEM/ODM project request.

■ **Easy In-Wall Mount Mechanical Design**
In-wall mounting just three simple steps: cut-out the panel install the screw and put on the faceplate

■ **Fanless Intel® Atom™ Platform**
An on-board 1.6GHz Intel® Atom™ N270 CPU ensures low power requirements. Metal cast design housing replaces the fan as it helps dissipate heat.

■ **Changeable Faceplate/Sticker Skin**
Multiple faceplates/skin stickers available to match decoration styles

System On/Off — LCD On/Off
Volume Up/Down — Ambient Light Sensor On/Off
Brightness UP/Down

OSD Remote Controller

Front-accessible USB port provides a convenient data update solution

Fanless | Wireless 802.11 b/g | Speakers | Microphone | Camera | Touch Screen | IP 63 | WiFi CERTIFIED | intel Intelligent Systems Alliance | One Key Recovery iEi symantec.

1. Customizable Front Bezel

Highly customizable ideal for OED/ODM project

The AFOLUX 4 Series with its metal casing and open front bezel with flexible faceplate options is easy to integrateinto your mechanical housing.

Available in 3 color finishes: white, black or gray finish. (Standard model support)

Customizable Front Bezel

A. Stylish Front Bezel Customization

Open Bezel + **Stylish Design Faceplate** = **Slim Bezel AIO**

Self-Service KIOSK in Museum

B. Function Added Front Bezel Customization

Open Bezel + **Function Key Faceplate** = **HMI Control Panel**

CNC Machine Control Panel

1 IEI Mobile Solutions

2 **Automation Panel Solutions**

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

AFL-4 series-2013-V10

2-93

2. Sleek In-Wall Mounting

AFL-4xxA with Removable Faceplate

In Wall Mounting Holes

■ Benefits of In-Wall Mounting:

- In-wall mounting can hide power cord and wall electric outlet, and is flush with the wall.
- Never tire of your fireplace design because it can be customized to suit any decor. Change your front bezel design for a season, any holidays or a party theme.
- Frame allows for a finished look
- Space saving

■ In-Wall Cage Available

The IWC series is designed to house the AFL-4xxA 15" panel displays. It comes with knockouts for power and signal cables.

Metal Rear Cover helps Heat Dissipation

■ In-Wall Mount Residential Automation
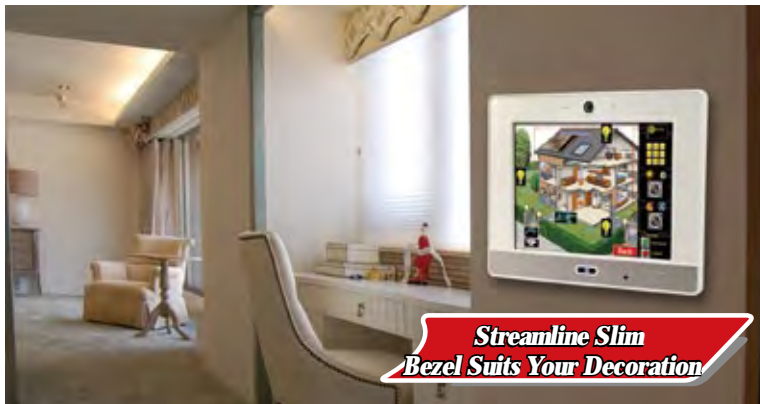
AFL-4xxA 10 mm

General PPC 22 mm

Slim Bezel Only 1cm Depth

Streamline Slim Bezel Suits Your Decoration

3. Digital Input Output ON/OFF Control

Built-in Digital Input and Output

DI — Motor — Smoke Sensor

DO — Alarm — Fan — Lighting

The DIO (digital input output) ports provides a 4-channel ON/OFF control for the external devices like Relay.

Super IO		
GPI (Get Status)	⬆⬇	GPO Action (Open / Close)
Control Block		
Low Level High Level	⬆⬇	Low Level High Level

iSMM DIO Control

IEI iSMM is an easy system supervision API which utilizes sensor chips on IEI motherboards to send the signal by Digital I/O. Users can capture and report system data quickly.

4. Built-in Ambient Light Sensor

AFL-4xxx series built in the ambient light sensor automatically detects the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

Benefits:

- More comfortable viewing decreases eye strain and tiredness
- Reduces power consumption
- Extends lamp lifetime

Day: Higher Ambient Luminance

Night: Lower Ambient Luminance

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

2-94 AFL-4 series-2013-V10
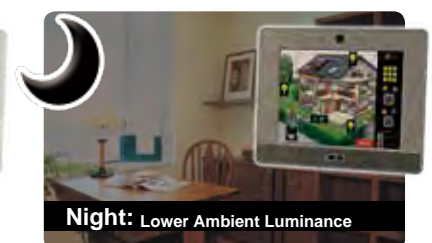
5. Rich Multimedia Devices Built In

AFOLUX 4 Series integrates with Intel® Atom™ N270 processor down to 0.65W, but has great performance of playing multimedia files and great graphic engine.

• Built-in High Resolution 300K Pixels Webcam
• Built-in High-Performance 2 Channel Stereo Speakers, and Microphone

Built-in 300K pixel webcam with digital microphone

Two built-in 1.5W speakers

6. Communication Capabilities

■ Bluetooth (by ATO Request)

The preinstalled Bluetooth module communicates with a wide range of electronic products such as PDAs, cellular phones, printers and barcode readers.

■ Wi-Fi

The integrated PIFA antenna on the AFOLUX ensures an uninterrupted wireless connection. PIFA type antennas can receive high-quality and uniform signals in any locations.

7. Easy In-Wall Installation in Minutes

(A) Cut Out the Panel

Select the position on the panel to mount the flat panel PC. Cut out a section of the panel that corresponds to the rear panel dimensions.
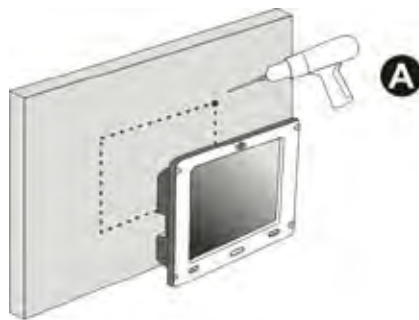
(B) Install the Screws

Tighten the screws that pass through the panel mounting holes until the screws are firmly secured to the panel.
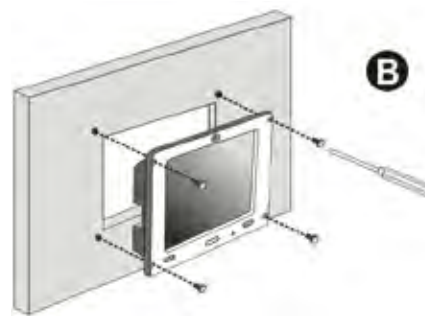
(C) Put on the Faceplate
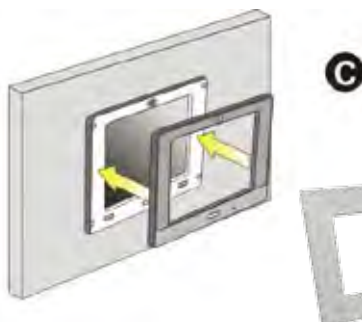
(D) Changeable Faceplate Sticker Skin (Customize by Order)

In-Wall Mounting Solutions

AFL-408A-N270	8.4" SVGA Fanless In-Wall Panel PC
AFL-408B-N270	8.0" SVGA Fanless In-Wall Panel PC
AFL-W410A-N270	Wide 10.2" SVGA Fanless In-Wall Panel PC

Features

- 8" ~ 15" TFT LCD with resistive touch screen
- Fanless system with Intel® Atom™ N270 1.6GHz CPU
- Changeable faceplate and sticker skin
- In-wall mechanism design installs in minutes
- Built-in CMOS camera with digital microphone and two 1.5W speakers for multimedia applications (optional)
- Connect peripheral devices through a built-in Bluetooth connection to reduce the amount of cables in the workspace
- VESA-mountable for flexible mounting and deployment
- Ambient light sensor detects ambient light and adjusts screen settings to optimize viewing.
- One Digital I/O (4 input/4 output)
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Suggest over 4GB storage capacity)

Specifications

Economical Version — Economical Version

Model		AFL-408A-N270	AFL-408B-N270	AFL-W410A-N270
Display	LCD Size	8.4"	8.0"	10.2"
	Max. Resolution	800 x 600	800 x 600	1024 x 600
	Brightness (cd/m²)	450	250	400
	Contrast Ratio	600 : 1	500 : 1	400 : 1
	LCD Color	262K	262K	262K
	Pixel Pitch (mm)	0.213(H) x 0.213(V)	0.2025(H) x 0.2025(V)	0.2175(H) x 0.2175(V)
	Viewing Angle (H-V)	160° / 140°	140° / 130°	140° / 110°
	Backlight MTBF (hrs)	50000	30000	40000
Motherboard	CPU	Intel® Atom™ N270 1.6GHz CPU		
	Chipset	Intel® 945GSE + ICH7M		
	RAM	Supports one 400MHz or 533MHz DDR2 SO-DIMM (Max. 2GB)		
I/O Ports and Switches		1 x RJ-45 for RS-232 COM port 1 x RJ-45 for RS-232/422/485 COM port 1 x RJ-45 for Gigabit LAN 5 x USB 2.0 (4 in the rear, 1 in front panel) 2 x Power switch (inside fornt panel & rear cover) 1 x Reset button 1 x DIO (4in / 4out) 1 x Terminal block for 10~28VDC input 1 x VGA port 1 x Power jack	1 x RJ-45 for RS-232 COM port 1 x RJ-45 for RS-232/422/485 COM port 1 x RJ-45 for Gigabit LAN 5 x USB 2.0 (4 in the rear, 1 in front panel) 2 x Power switch (inside fornt panel & rear cover) 1 x Reset button 1 x DIO (4in / 4out) 1 x Terminal block for 10~28VDC input 1 x VGA port 1 x Power jack	1 x RJ-45 for RS-232 COM port 1 x RJ-45 for RS-232/422/485 COM port 1 x RJ-45 for Gigabit LAN 5 x USB 2.0 (4 in the rear, 1 in front panel) 2 x Power switch (inside fornt panel & rear cover) 1 x Reset button 1 x DIO (4in / 4out) 1 x Terminal block for 10~28VDC input 1 x VGA port 1 x Power jack
Driver Bay	SSD	CF Type II		
Other Function	Watchdog Timer	Software programmable supports 1~255 sec. system reset		
	Audio	AMP 1.5W + 1.5W (Internal speakers)		
	Wi-Fi	1 x Wireless LAN 802.11 b/g/n module (internal PCIe Mini interface)		
	Webcam and Digital Microphone	1 x 2megapixel camera with digital microphone (internal USB interface)	--	1 x 2megapixel camera with digital microphone (internal USB interface)
	Remote Control	1 x remote controller (LCD on/off; system power on/off; volume; brightness)		
	LED Function	1 x Power ON/OFF LED on front panel		
Physical	Construction Material	ABS + PC plastic front frame		
	LED Function	1 x Power ON/OFF LED on front panel		
	Mounting	Panel, wall VESA 75mm x 75mm / 100mm x 100mm		
	Front Panel Color	Black (black U) / White (apple white) / Gray (422C)		
	Dimensions (WxHxD) (mm)	263.2 x 221.2 x 54.4	263.2 x 221.2 x 54.4	313.83 x 222.13 x 52.5
Environment	Operation Temperature (°C)	-10°C ~50°C		
	Storage Temperature (°C)	-20°C ~60°C		
	Net Weight	0.8 Kg	0.8 Kg	1.5 Kg
	IP Level	IP63	IP63	IP63
	EMC	CE, FCC	CE, FCC	CE, FCC
Touch Screen		4-wire resistive type (touch controller IC is on board)	5-wire resistive type (touch controller IC is on board)	
Power Adapter		P/N: 63000-FSP036RAB608-RS / 36W power adapter / Input: 90VAC~264VAC, 50/60Hz / Output: 12VDC		
Power Requirement		10~28VDC	10~28VDC	10~28VDC
Power Consumption		25W	25W	28W

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

In-Wall Mounting Solutions

AFL-412A-N270	12.1" XGA Fanless In-Wall Panel PC
AFL-415A-N270	15" XGA Fanless In-Wall Panel PC
AFL-415AE-N270	15" XGA Economical Fanless In-Wall Panel PC

Changeable Faceplate

- 300K Pixel CMOS Camera with Digital Microphone
- System Power On/Off
- USB
- Light Sensor
- IR Receiver

Fanless · Wireless 802.11 b/g · Speakers · Microphone · Camera · Touch Screen · IP 63 · WiFi CERTIFIED · Intel Intelligent Systems Alliance · F3 One Key Recovery iEi symantec.
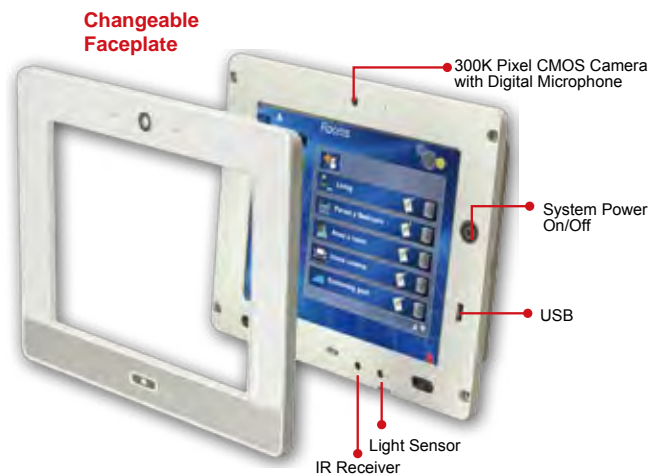
Specifications

	Model	AFL-412A-N270	AFL-415AE-N270
Display	LCD Size	12.1"	15
	Max. Resolution	1024 x 768	1024 x 768
	Brightness (cd/m²)	500	250
	Contrast Ratio	700 : 1	600 : 1
	LCD Color	262K	16.2M
	Pixel Pitch (mm)	0.3075(H) x 0.3075(V)	0.297(H) x 0.297(V)
	Viewing Angle (H-V)	160° / 160°	160° / 160°
	Backlight MTBF (hrs)	50000	30000
Motherboard	CPU	Intel® Atom™ N270 1.6GHz CPU	
	Chipset	Intel® 945GSE + ICH7M	
	RAM	Supports one 400MHz or 533MHz DDR2 SO-DIMM (Max. 2GB)	
I/O Ports and Switches		1 x RJ-45 for RS-232 COM Port 1 x RJ-45 for RS-232/422/485 COM Port 1 x RJ-45 for Gigabit LAN 5 x USB 2.0 (4 in the rear, 1 in front panel) 2 x Power switch (inside fornt panel & rear cover) 1 x Reset button 1 x DIO (4in / 4out) 1 x Terminal block for 10~28VDC input 1 x VGA port 1 x Power jack	
Driver Bay	HDD Drive Bay	1 x 2.5 SATA HDD bay	
	SSD	CF Type II	
Other Function	Watchdog Timer	Software programmable supports 1~255 sec. system reset	
	Audio	AMP 1.5W + 1.5W (Internal speakers)	AMP 3W + 3W (Internal speakers)
	Wi-Fi	1 x Wireless LAN 802.11 b/g/n module (internal PCIe Mini interface)	
	Webcam and Digital Microphone	1 x 2megapixel camera with digital microphone (internal USB interface)	
	Remote Control	1 x Remote controller (LCD on/off; system power on/off; volume; brightness)	
	LED Function	1 x Power ON/OFF LED on front panel	
Physical	Construction Material	ABS + PC plastic front frame	
	LED Function	1 x Power ON/OFF LED on Front Panel	
	Mounting	Panel, Wall VESA 75mm x 75mm / 100mm x 100mm	
	Front Panel Color	Black (black U) / White (apple white) / Gray (422C)	
	Dimensions (WxHxD) (mm)	339 x 276 x 51.6	385.7 x 330.7 x 55.5
Environment	Operation Temperature (°C)	0°C ~40°C with 2.5 SATA HDD / -10°C ~50°C with CF Card or SATA interface 2.5 SSD HDD	
	Storage Temperature (°C)	-20°C ~60°C	-20°C ~60°C
	Net Weight	1.8 Kg	3.2 Kg
	IP Level	IP63	IP63
	EMC	CE, FCC	CE, FCC
Touch Screen		Resistive type 5-wire (touch controller IC is on board)	
Power Adapter		P/N: 63000-FSP050DBAB1405-RS 50W power adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP060DBAB1553-RS 60W power adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement		10~28VDC	10~28VDC
Power Consumption		32W	49W

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

## AFL-4xxx In-Wall PPC Product Line Naming Rule

AFL- 408 A B-N270 / R / 1G - R21

4 Series LCD Size
(8.0" to 15")

Mechanism Design

Faceplate Color:
B: Black
W: White
G: Gray

Touch sensor type

DDR2 Memory 1GB

Processor Platform (Intel® Atom™ process N270 1.6GHz CPU)
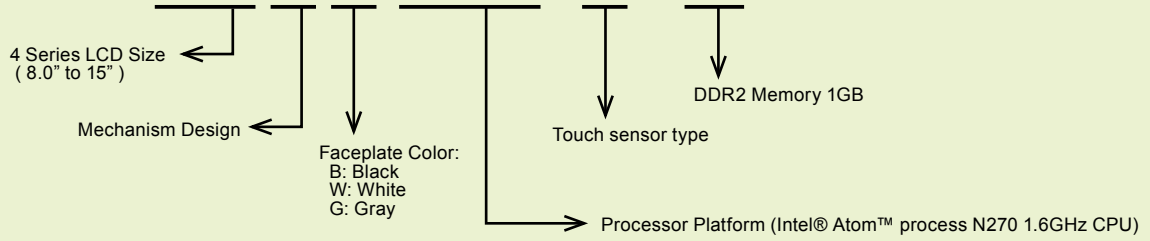
Ordering Information

Model		Description
8"	AFL-408BB-N270/R/1G-R23	8.0" 250 cd/m², 800x600 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, touch screen and, 10-28VDC wide range, black color, R23
	AFL-408BW-N270/R/1G-R23	8.0" 250 cd/m², 800x600 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, touch screen and, 10-28VDC wide range, white color, R23
	AFL-408BG-N270/R/1G-R23	8.0" 250 cd/m², 800x600 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, touch screen and, 10-28VDC wide range, gray color, R23
8.4"	AFL-408AB-N270/R/1G-R23	8.4" 450 cd/m², 800x600 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, 2megapixel Camera W/Microphone, touch screen and, 10-28VDC wide range, black color, R23
	AFL-408AW-N270/R/1G-R23	8.4" 450 cd/m², 800x600 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, 2megapixel Camera W/Microphone, touch screen and, 10-28VDC wide range, white color, R23
	AFL-408AG-N270/R/1G-R23	8.4" 450 cd/m², 800x600 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, 2megapixel Camera W/Microphone, touch screen and, 10-28VDC wide range, gray color, R23
10.2"	AFL-W410AB-N270/R/1G-R31	10.2" 400 cd/m², 1024x600 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, touch screen and, 10-28VDC wide range, black color, R31
	AFL-W410AW-N270/R/1G-R31	10.2" 400 cd/m², 1024x600 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, touch screen and, 10-28VDC wide range, white color, R31
	AFL-W410AG-N270/R/1G-R31	10.2" 400 cd/m², 1024x600 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, touch screen and, 10-28VDC wide range, gray color, R31
12.1"	AFL-412AB-N270/R/1G-R23	12.1" 500 cd/m², 1024x768 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, 2megapixel Camera W/Microphone, touch screen and, 10-28VDC wide range, black color, R23
	AFL-412AW-N270/R/1G-R23	12.1" 500 cd/m², 1024x768 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, 2megapixel Camera W/Microphone, touch screen and, 10-28VDC wide range, white color, R23
	AFL-412AG-N270/R/1G-R23	12.1" 500 cd/m², 1024x768 fanless In-wall panel PC with Intel® Atom™ N270 1.6GHz CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g/n wireless, 2megapixel Camera W/Microphone, touch screen and, 10-28VDC wide range, gray color, R23

ISMM Support Functions

	Voltage	Fan	Smart Fan	Temprature	DIO	WDT	Beep
AFL-408A-N270	V			V	V	V	V
AFL-408B-N270							
AFL-W410A-N270	V			V	V	V	V
AFL-412A-N270	V			V	V	V	V

1
IEI Mobile
Solutions

2
Automation
Panel
Solutions

3
RISC-
based
Solutions

4
PACSmate
Medical
Solutions

5
Optional
Peripherals

Terminal Block with 10-28V DC Input

Power Switch

12V DC Jack

1 x RJ45 for RS-232
1 x RJ45 for RS-232/422/485

VGA Output

1 x LAN

1 x Reset Button

1 x DIO Terminal Block

4 x USB 2.0

Accessible CF Card
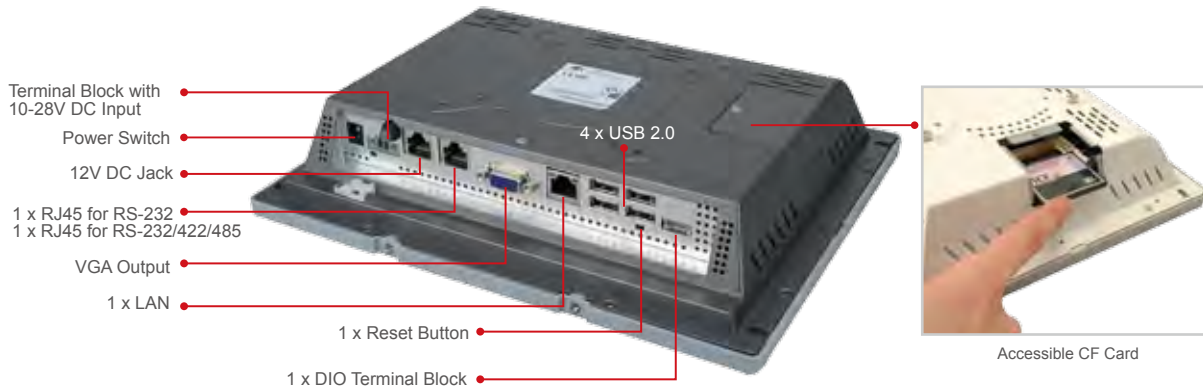
Options

Model	AFL-408A-N270	AFL-408B-N270	AFL-W410A-N270	AFL-412A-N270
Wall Mounting Kit	AFLWK-12			
Arm	ARM-11-RS / ARM-31-RS			
Stand	STAND-A08 / STAND-100-RS		STAND-A12 / STAND-100-RS	
V-STAND	VSTAND-A10			VSTAND-A12
9~30VDC to 12VDC Converter Module	IDD-930160-KIT			
OS — OS: Win CE 5.0 (128 MB CF Card)	AFLCF-408A-N270-CE-R21		AFLCF-W410-N270-CE-R21	AFLCF-412-N270-CE-R21
OS — OS: Win CE 6.0 (128 MB CF Card)	AFLCF-408A-N270-CE060-R21		AFLCF-W410-N270-CE060-R21	AFLCF-412-N270-CE060-R21
OS — OS: Win XPE (1 GB CF Card)	AFLCF-408A-N270-XPE-R21		AFLCF-W410-N270-XPE-R21	AFLCF-412-N270-XPE-R21
OS — OS: Linux (2 GB CF Card)	AFLCF-408A-N270-LNX-R21		AFLCF-W410-N270-LNX-R21	AFLCF-412-N270-LNX-R21
DC 12V Input UPS	AUPS-A10-R10			
DC 9~36V Input UPS	AUPS-A20-R10			
Faceplate (Black Color)	AFLFP-408A-B-R10	AFLFP-408B-B-R10	AFLFP-W410A-B-R10	AFLFP-412A-B-R10
Faceplate (White Color)	AFLFP-408A-W-R10	AFLFP-408B-W-R10	AFLFP-W410A-W-R10	AFLFP-412A-W-R10
Faceplate (Gray Color)	AFLFP-408A-G-R10	AFLFP-408B-G-R10	AFLFP-W410A-G-R10	AFLFP-412A-G-R10
In-Wall Cage (Options)	AFLIWC-408-R10	AFLIWC-408-R10	AFLIWC-W410-R10	AFLIWC-412-R10
Bluetooth V2.0+EDR	AFL-BT-KIT01-R10	N/A	N/A	AFL-BT-KIT01-R10

Note: Win CE application without digital microphone function

Packing List

Item	P/N	Q'ty	Specifications
Screws	44233-030081-RS	4	M3; φ8mm
Power Adapter	63000-FSP036RAB608-RS 63000-FSP050DBAB1405-RS 63000-FSP060DBAB1553-RS	1	90 ~ 264V 12v; 36W / 50W / 60W
Power Cable	32000-000002-RS	1	1750mm, European Standard
User's Manual CD	7B000-000087-RS	1	
Touch Pen	43125-0002C0-RS	1	
Remote Control Unit	72000-8T00320ICP05G-RS	1	
One Key Recovery CD		1	

Changeable Faceplate:

AFL-408A-N270
Dimensions (Unit: mm)

233.5
Suggested Cut out size
198

230.5
42
54.40

263.20
131.60
110.60
221.20

11.0
241.3
19.2
195.0
182.9
75.0
100.0

75.0
100.0

253.5
184.4
126.8
R2.2
R7.2
Ø19.9
174.6
139.0
156.8
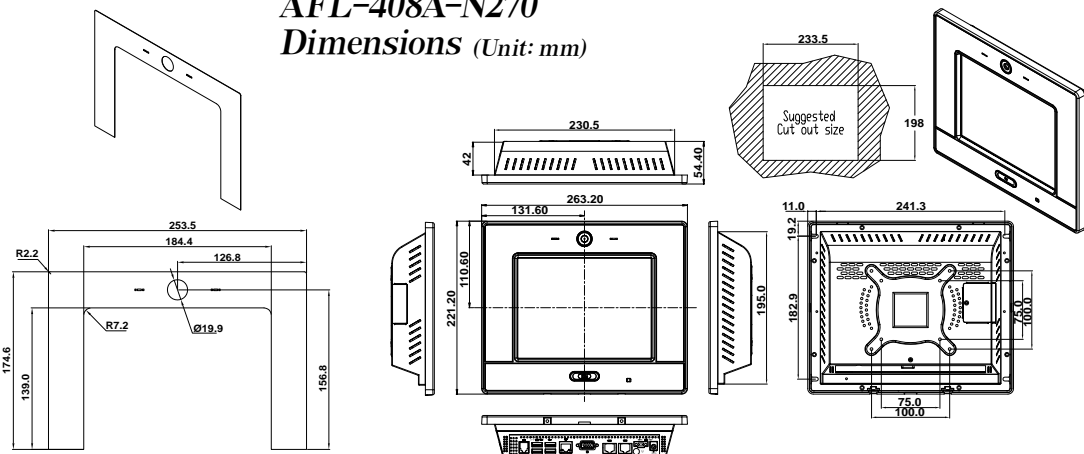
AFL-408B-N270
Dimensions *(Unit: mm)*
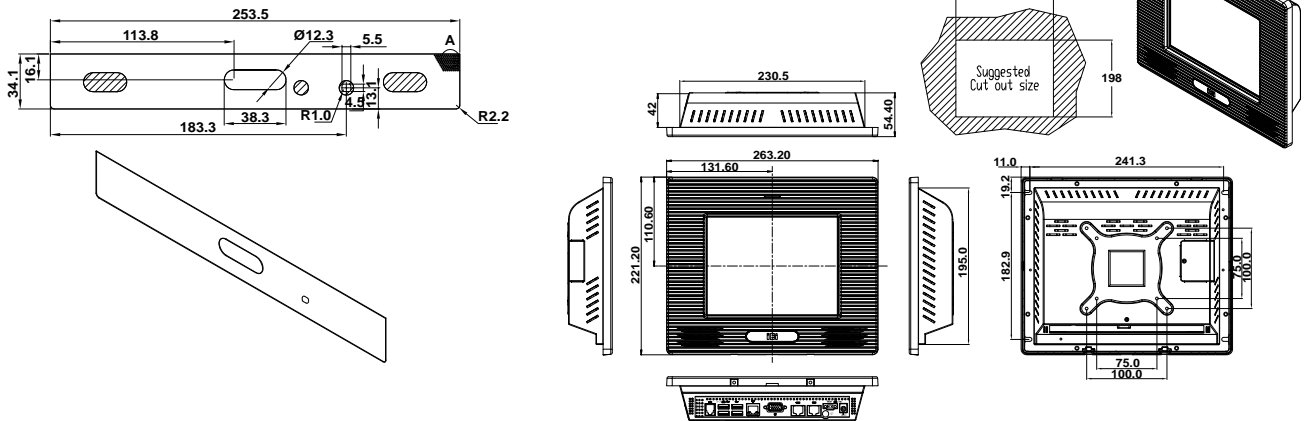
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Dimensions *(Unit: mm)*
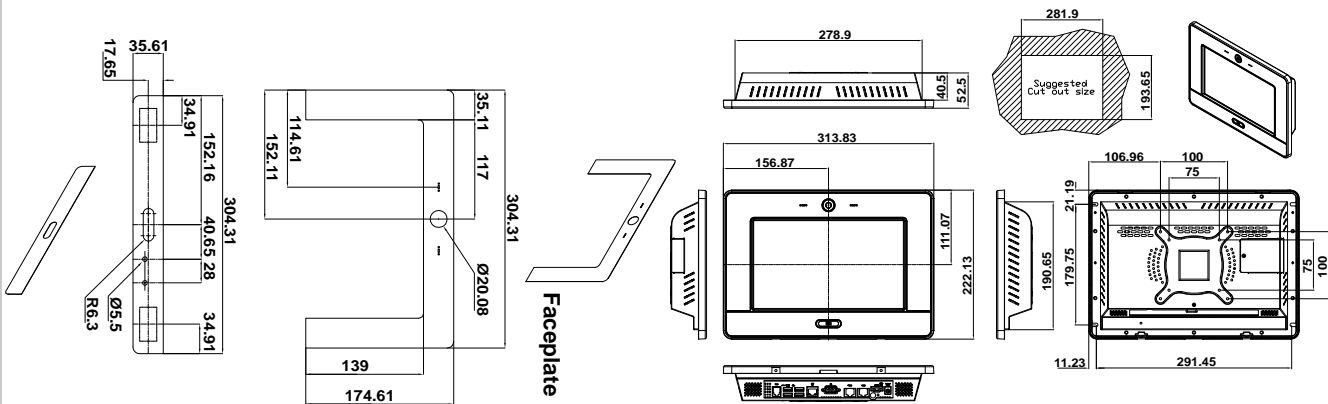
AFL-412A-N270
Dimensions *(Unit: mm)*
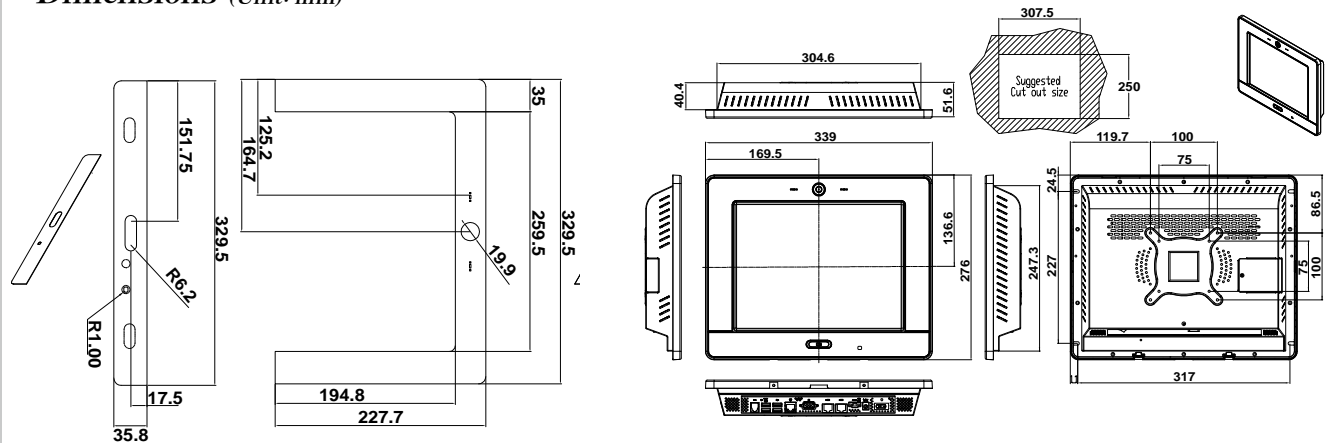
In-Wall Cage

- Cable routing along frame and through knockouts
- Frame allows for a finished look
- Fits: 8.0"- 15" panel displays
- Color: White

Remove appropriate electrical conduit knockouts prior to installation of the cage.

AFLIWC–408A/B–R10
Dimensions *(Unit: mm)*
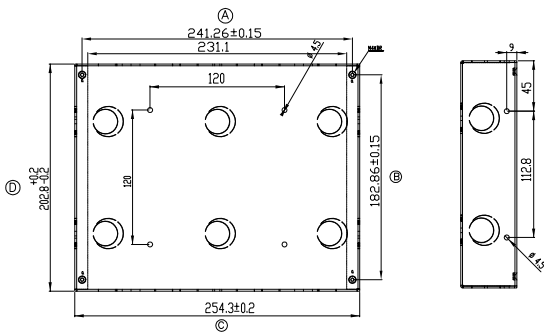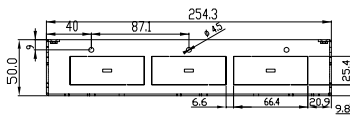
AFLIWC–W410A–R10
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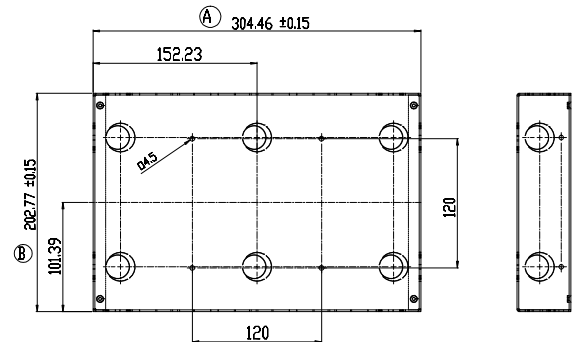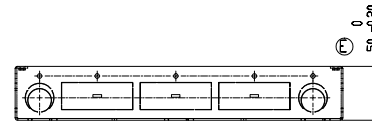
AFLIWC–412A–R10
Dimensions *(Unit: mm)*
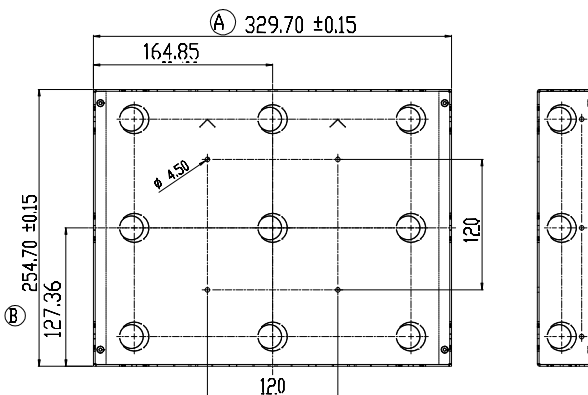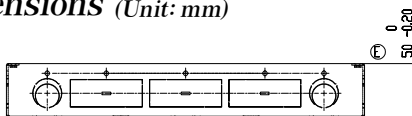
AFLIWC–415A–R10
Dimensions *(Unit: mm)*
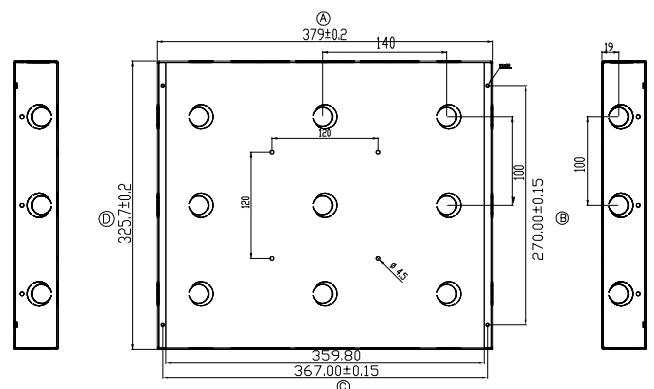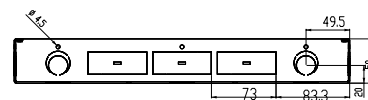
1
IEI Mobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

RFID Collector Solutions

ACT series

The ACT series integrated with RFID technology provides complete access control and security systems for commercial, residential, industrial, financial, education and government institutions.

Home Automation

Video/Audio Communication

Digital Signage

Identification

Reliable
- Meets MIL-STD 810F testing procedures
- Sealed against water and dust intrusion (IP64 Front Panel)
- Fanless system design decreases downtime and reduces the need for on-site support

Innovative
- Built-in RFID reader works with EM or Mifare cards and tags
- In-wall mounting design
- Intuitive touch panel for easy operation

Flexible
- Built-in webcam and microphone can be used as an intercom through the LAN connection or as a biometric access control system based on face and voice recognition
- Computer architecture under Windows® operating system enables system developers to easily integrate versatile applications

Wireless
- 802.11 b/g WLAN

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

PoE IEEE802.3af

■ ACT-457A
5.7" RISC-based EM/Mifare RFID Panel PC

Model		ACT-457A
TFT LCD	Panel size	5.7"
	Resolution	640 x 480
	Brightness	400 cd/m²
CPU Platform		RMI® Alchemy™ AU1250 500MHz CPU
RFID Reader		EM 125KHz, MIFARE 13.56MHz
In-Wall Mounting		●
Wi-Fi		IEEE 802.11 b/g
PoE (IEEE 802.3at)		●
Digital I/O		1 x DI for exit button
Relay Output		Open door relay, alarm relay
Wiegand 26		--

1. ACT Series General Features

■ Integrated RFID Technology

Since RFID technology uses radio frequency as a data transmission intermediary, it can be classified by the frequency band the RFID system adopts since different frequencies will results in different physical attributes.

ACT-457A supports LF/HF Dual Modes!

Low Frequency (125-134KHz)   **High Frequency (13.56MHz)**   **Ultra High Frequency (860-960MHz)**   **Microwave (2.45GHz)**

100KHz	1MHz	100MHz	1GHz	5GHz

		Low Frequency (125KHz)	High Frequency (13.56MHz)			UHF (860-960MHz)
			ISO14443	ISO15693	Felica (NFC)	
Data Rate		Up to 16kbps	Up to 106kbps *Faster!*	Up to 53kbps	Up to 424kbps	Up to 640kbps
Reading Distance		0-200cm	0-10cm *Long Distance!*	0-150cm	0-10cm	300-800cm
Memory	**R/O**	48/64 bits	64 bits	64 bits	64 bits	64 bits
	R/W	2048/1024 bits	512-4096 bits *High Capacity!*	Max. 2048 bits	N/A	Max. 4096 bits
Interfe-rence	**Liquid**	Low	Mid	Mid	Mid	High
	Metal	High	High	High	High	High
	RF	Very low	Low	Low	Low	High
Security		32-bit password	High (AB keys)	Low	High (AB Keys)	32 bits Kill/Access PW

■ RFID Identification in Access Market

The ACT-457A RFID operating system contains RFID tags, Reader Antenna, Reader and Software (operation system, middleware and applications). When a command is generated by the application, the reader encodes the command (reads the tag UID) and transmits it in RF format. Then, tags in range of RF coverage receive the RF signal, turn it into energy and decode the command and response in RF format (return UID '01234567').

Antenna   Chip

RF (Command = Read Tag UID)

RF (With Data, UID = 01234567)

Integration

ACT-457A   **RFID Reader**   **RFID Tag**
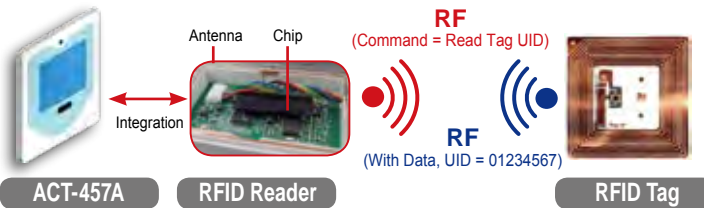
RFID in Access Market Advantages:

● **High Security**
Each RFID tag contains an integrated chip with a unique permanent identification (UID) number burned-in during the manufacturing process to make counterfeiting difficult.
● **High Efficiency**
Multiple tags can be read in parallel; no line of sight reading
● **High Durability**
Less subject to environmental damage

■ IEI RFID Software Development Kit

A ● **COM Port Settings and Activation Area**
Allows the user to select the serial port that communicates with the RFID reader module.

B ● **Commands Area**
Displays various command options for user to select.

C ● **Data Input Area**
The data input area is where the user enters block number, key, key data, and other information required by certain commands.

D ● **Raw Data Display Area**
Shows all communication logs and responses of the executed commands.

E ● **EM Card ID Display Area**
Displays the EM card ID when the EM card is detected.

F ● **Mifare Card ID Display Area**
Displays the Mifare card ID when the Mifare card is detected.

G ● **Error Code Display Area**
Shows the error message when an error occurs.
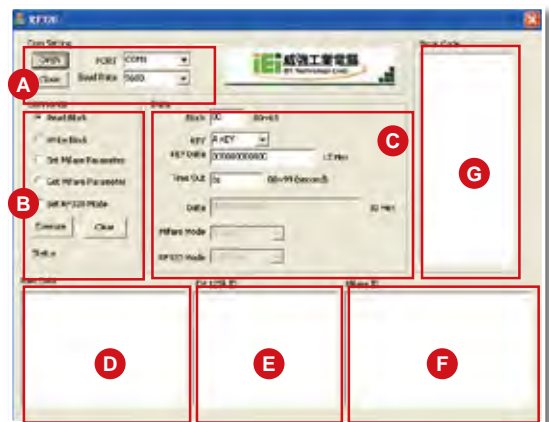
2. Windows® Environment for Easy and Fast 3rd Party Integration

Windows® CE 6.0 and Windows® XP Embedded operating systems are able to integrate with other applications to create a complete solution.

LED only for display of time and card number.

19:00 Time
122334455 Card Number

1 IEI Mobile Solutions

2 **Automation Panel Solutions**

3 RISC-based Solutions

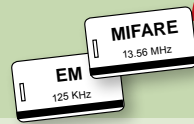*4* PACSmate Medical Solutions

5 Optional Peripherals

3. Video/Audio Hardware Device Ready for 3rd-Party Integration

ACT-412A is unsurpassed in functionality with built-in 3W speakers and a microphone for two-way voice communication or voice messaging. Included is a 300K pixel web-camera for real-time image/video capability and facial identification. The ACT-412A offers a unique opportunity for third-party hardware integration.

Low Light Function

300K pixel camera up to VGA resolution (640 x 480)

Face Recognition
The digital camera captures the image of a person's face and compares facial contours and other facial features with those stored in a database.

Microphone

Voice Recognition
The microphone captures the voice of a person and compares the signature frequencies with those stored in a database.

3W Speakers

High quality hands-free speakerphone
Talk with visitors while they wait outside.
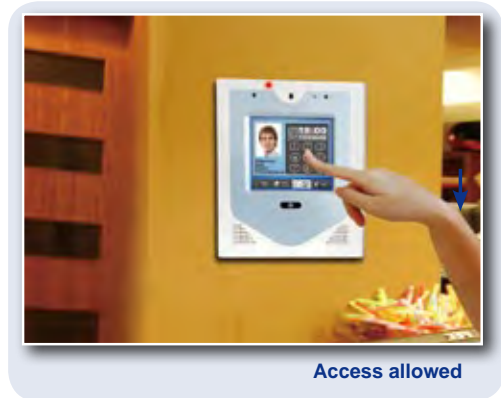
Access allowed

4. Tough System Design Ideal for Indoor and Outdoor Applications

The housing of the ACT terminal is hard plastic with IP64 front panel protection. With anti-shock, anti-vibration shields and the ability to withstand temperatures ranging from -10ºC~50ºC, the system design is secured against vandalism and protected against extreme environmental conditions.

Vibration
Follow MIL-STD-810F 514.5C-1

Shock
1. Operating Shock Half-Sine Wave Shock
   3G: 11ms, 3 shocks per axis: Vertical / Transverse / Longitudinal.
2. Non-Operation Shock Half-Sine Wave Shock
   10G: 11ms, 3 shocks per axis: Vertical / Transverse / Longitudinal.

Waterproof Testing   **Vibration/Shock Testing**   **Dustproof**

5. In-Wall Mount

Using an in-wall mounting box allows you to achieve "breathtaking" style installations.

Match your Decoration Style!
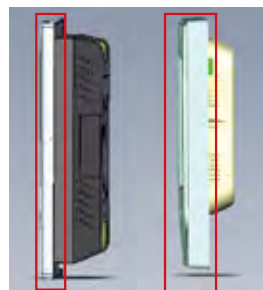
Only 1cm thick!   **Before**
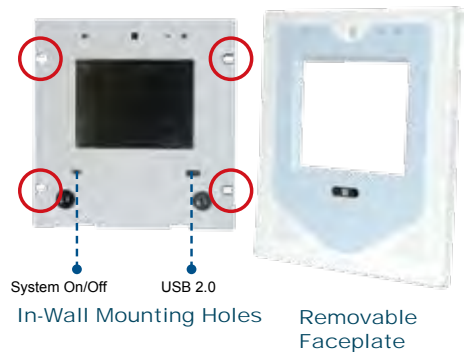
System On/Off   USB 2.0

In-Wall Mounting Holes   **Removable Faceplate**

6. Membership Management

Ethernet   **Ethernet**

Communication Server

HR Server

Message Server

Surveillance Server

We Offer:
- Proximity EM card/tag reading capability to control access to areas and resources in a given physical facility
- 5.7" large color TFT LCD shows the visitor information and delivers event information
- Interactive touch panel allows users to access the information with a full interface display. All operations can be done directly on the touch screen.
- Sleek frame and in-wall mounting match every location
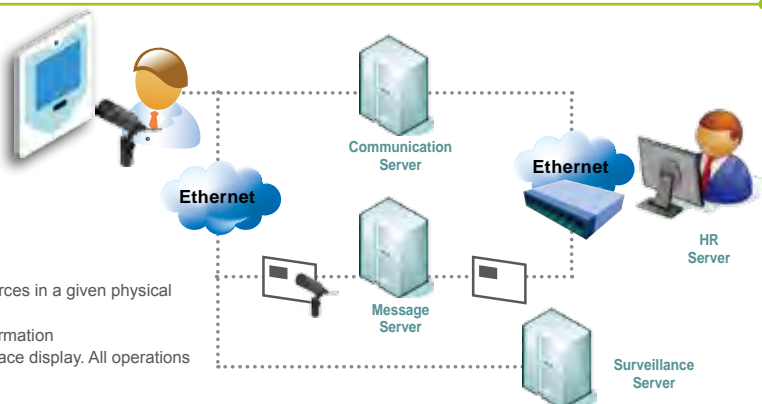
7. RFID Automated Parking Control System

RS-232

RS- 422/485

PLC

Automatic Barrier

MIFARE
13.56 MHz

MIFARE Card

Access Control

USB
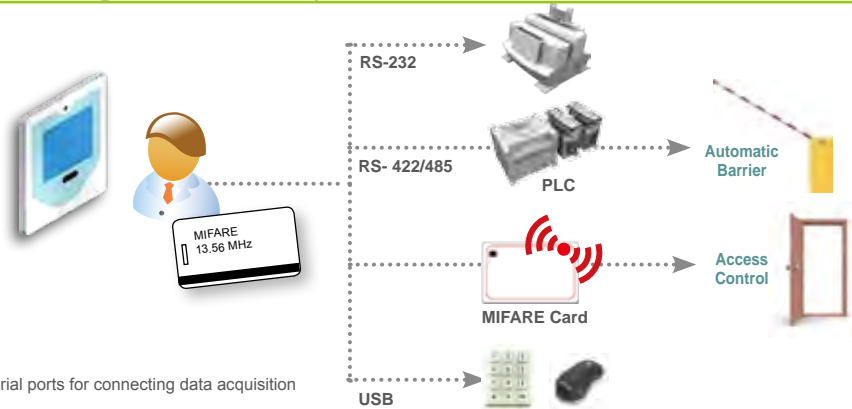
We Offer:

● **Serial port for Data Transmission**
We provide two independent RS-232 and RS-422/485 serial ports for connecting data acquisition equipment and many other serial devices .

8. Access Control Door System

The two-in-one EM/MIFARE compliant RFID reader installed in the ACT-08A x86 based panel PC supports sophisticated security applications.

5cm~10 cm(max)

300K pixel camera supports up to VGA resolution (640)

Microphone

MIFARE/EM Card

Speakers

● **Face Recognition**
The digital camera captures the image of a person's face and compares facial contours and other facial features with those stored in a database in a few seconds.

● **Voice Recognition**
The microphone captures the voice of a person and compares the signature frequencies with those stored in a database.

● **High quality hands-free speakerphone**
Talk with visitors while they wait outside.

Welcome to the meeting

We Offer

● **x86 architecture that is easy for system integrator application development**

● **Bluetooth Connectivity (optional)**
Bluetooth infrastructure eliminates the use of wires or line-of sight.

9. Healthcare Solutions

The ACT-08A with Radio Frequency Identification (RFID) technology can be utilized in hospitals and healthcare facilities to identify and track patients, objects, and assets or speed up / eliminate manual operations in checking and processing patients.

Mobile POI

WiFi CERTIFIED

● **Medication Tracking System**
Monitor the flow of medication through the hospital, from shipment to administration, to help prevent medical mistakes.

● **Asset Tracking**
Attaching an RFID tag to each piece of equipment to locate ACT-08A readers throughout the area of operations where the hardware is used.

● **Family Access Control to Babies in Neonatal Care**
After authorization, families have the ability to view details about their babies on the ACT-08A outside the baby care room.
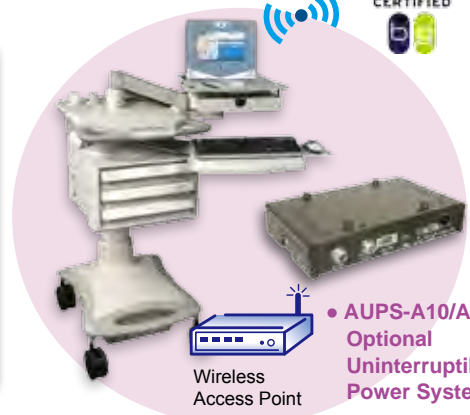
● **AUPS-A10/A20 Optional Uninterruptible Power Systems**

Wireless Access Point

We Offer

● **Compact Fanless System**

● **Optional Uninterruptible Power System**
Protecting your ACT-08A from damage in medical environments is critically important.
Uninterruptible power supplies reduces the risk of losing valuable data when power failures occur.

Wristband (with space to insert small paper card tag)

1	IEI Mobile Solutions
2	Automation Panel Solutions
3	RISC-based Solutions
4	PACSmate Medical Solutions
5	Optional Peripherals

ACT-457A

5.7" RISC-based RFID Panel PC

PoE IEEE802.3at

CMOS Digital Camera with Microphone

Features

- 5.7" TFT touch color screen, full interface display, all operations can be done directly on the touch screen

- Integrating with RMI Alchemy™ AU1250 500MHz media processor provides hardware decoding for MPE1/2/4, DivX and WMV9

- Dual 125KHz-EM/13.56MHz-Mifare RFID reading capacity

- Built-in open door relay, alarm relay and exit button input

- Windows® CE5.0 operating system support

- IP64 front panel watertight and dustproof is the perfect solution for harsh environments

- Optional IEEE802.3at Power Over Ethernet (PoE) compliant

MIFARE 13.56 MHz

EM 125 KHz

F3 One Key Recovery
iEi ● symantec.

MPEG1 MPEG2 MPEG4 WMV9 DivX MIPS TECHNOLOGIES

■ Low Power, High Multimedia Performance

Integrated with RMI Alchemy™ technology to enable users to play DVD quality video efficiently at full-frame rates with low power consumption. The integrated MAE (Media Acceleration Engine) supports common digital video formats including MPEG1, 2, 4, DivX, and WMV9, and delivers full D1 resolution without the need for a DSP or specialized coding.

Multi Video/Audio Format Support Table			
Format	Stream Type	Audio Format	Supported Bit Rates
MPEG-1	System	MPEG	8 Mbps
MPEG-2	Program	MPEG	10 Mbps
	Transport	MPEG	8 Mbps
WMV9	Unencrypted only	WMA	2.5 Mbps
	CBR w/o filters, 720x480	WMA	2.5 Mbps
	VBR w/o filters, 720x480	WMA	2.5 Mbps
DivX	Unencrypted only / no subtitles - V3.11	MP3/AAC/MPEG	4 Mbps
	V4	MP3/AAC/MPEG	4 Mbps
	V5	MP3/AAC/MPEG	4 Mbps
MPEG-4 MP4 ISO/EIC 14496-2.	Advanced Simple Profile – level 5	AAC	3 Mbps
MPEG-4 AVI	Advanced Simple Profile – level 5	MP3, AC-3	4 Mbps

RMI Raza Microelectronics, Inc.

RMI Alchemy Au1250 Processor

6.2W Only

■ PoE Power Reduces Cost of System Installation

The ACT-457A is IEEE 802.3at compliant. The IEEE 802.3at PoE standard ensures that 25W of DC power is provided to each connected device. PoE Technology describes a system to safely transfer electrical power, along with data, to remote devices over standard category 5e cable in an Ethernet network.
-No need for electricians to install conduit, electrical wiring, and outlets throughout the enterprise.
-No wiring hassles! Install anywhere a RJ-45 jack is present.
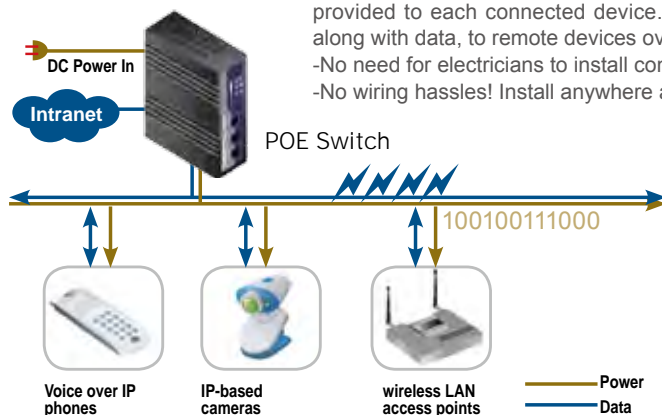
DC Power In

Intranet

POE Switch

100100111000

PoE IEEE802.3at

Voice over IP phones

IP-based cameras

wireless LAN access points

━━ Power
━━ Data

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

■ How Does the Relay Switch Work in the ACT-457A?

ACT-457A has two built-in output controls. Electricity flows through one circuit while the other circuit controls the flow of electricity. When the electromagnet is energized, it exerts a force on the armature that overcomes the pull of the spring and moves the contact. The contact is then complete or the circuit is broken. When the electromagnet is de-energized, the contact returns to its original position.

● Normal Close Example:

In its normal state, the relay is typically closed. When the electromagnet is energized, it will open and break the circuit.

Magnetic Door Lock

Normal Close Pole

Max
120VAC 12A
240VAC 10A
28VDC 10A

Magnet

Normal Close Pole

Magnet
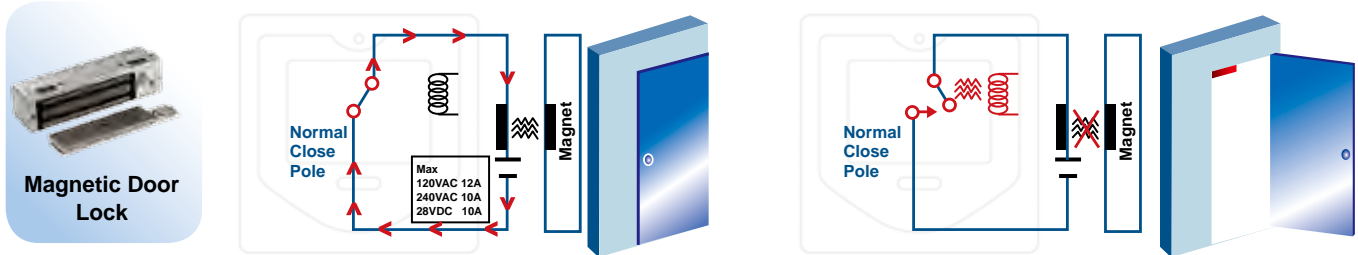
● Normal Open Example:

When the relay is open, there is no connection between the two wires until the relay receives a signal (outside source energizes the relay) to close. Simply put, an open relay is the same as a light switch that is turned off, and will always be off until turn on.

Alarm

Normal Open Pole

Normal Open Pole
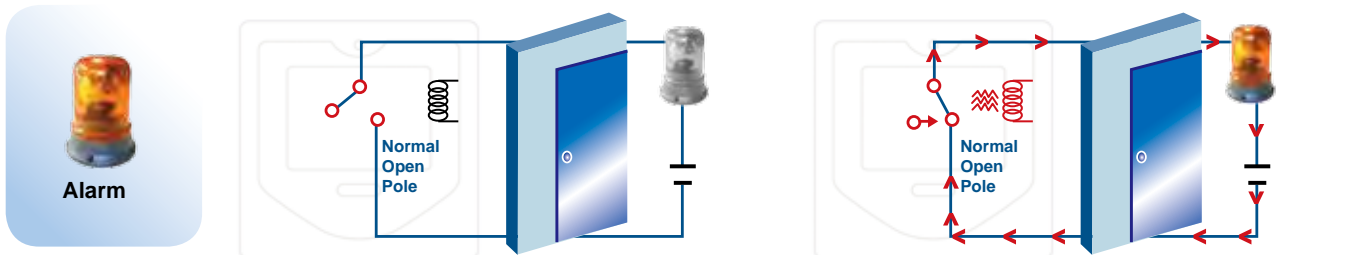
EM Application Access Control

When a user is identified by RFID sensor, their personal access information will be automatically stored and backed up on the surveillance server. At the same time, identification data will be sent to the back-end system for processing. Authentication server will confirm with a valid list and feedback the result via Ethernet.

············▶ Digital Input
──────▶ Relay Output
·········· Ethernet/VPN

MIFARE
13.56 MHz

Exit Button
Door Sensor
Door Lock
Alarm

Front Door

Back Office Operation

Authentication Data
Authentication Server
HR Server

Surveillance Server
Message/ Bulletin
Bulletin/ Message Server
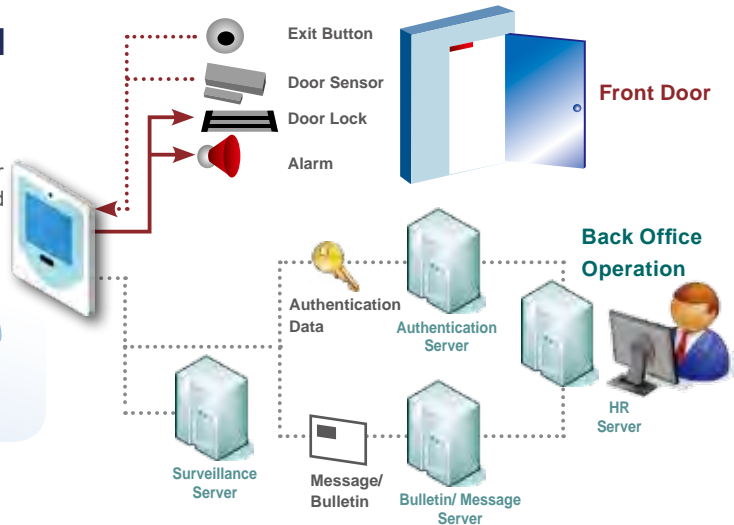
Mifare Application Restrict Assets

What is MIFARE®?
MIFARE is a contact-less smart card technology owned by Philips. MIFARE technology is based on ISO 14443A and operates at a frequency of 13.56 MHz. Its application segments range from identification, access control, payment and billing systems, and many more.

One Pass for All Situations!

············▶ Digital Input
──────▶ Relay Output
·········· Ethernet/VPN
──────▶ RS-232
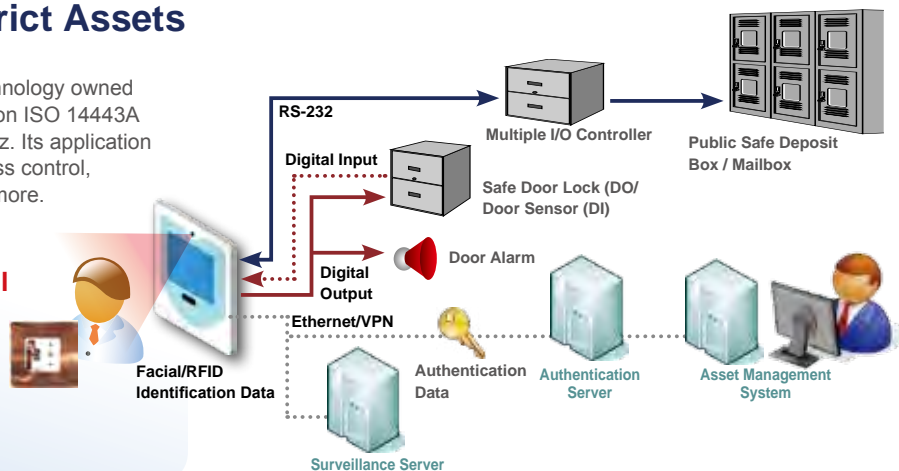
RS-232

Digital Input

Digital Output

Ethernet/VPN

Facial/RFID Identification Data

Multiple I/O Controller

Public Safe Deposit Box / Mailbox

Safe Door Lock (DO/ Door Sensor (DI)

Door Alarm

Authentication Data
Authentication Server
Asset Management System

Surveillance Server

■ Remote Management Tool

IEI RMT allows remote management of several ACT terminals at the same time via a network. You can quickly access distributed ACT terminals from anywhere in the world and control/resolve issues remotely!

Remote Screen

Windows CE

Network

Site 1

Site 2

Windows CE
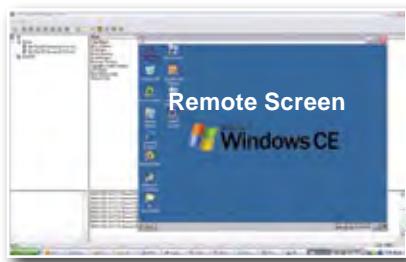
Site n

Remote Office
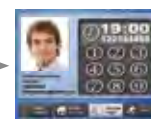
IEI RMT Tool

Input the IP address range on the Internet, the management system will automatically scan the distributed ACT terminals in the desired range.

■ Web-based Configurator

Allows users to access ACT-457A and modify the settings on a web browser interface anytime, anywhere without installing any applications. It makes management of ACT-457A easy and convenient for IT administrators and reduces your system maintenance costs.

System Setting

User can recall system information and set up Ethernet and Wireless parameters using the system setting menu. The remote restart option allows users to restart the system when any abnormal circumstance occurs and a restart procedure is needed.

SYSTEM

© Copyright ILI Systems, Inc. All rights reserved. Version build

■ Runtime DEMO

ACT Runtime Demo is a pre-installed application which introduces the functions of the ACT-457A to new users.

300K Pixel CMOS Camera
In the video camera window, user can preview video output. The Capture and Open function enable user to capture preview image, save as bitmap file and open.

Access Control by Smart Card or Exit Button
On the home automation page, user can open the magnetic door by pressing the exit button or read a sample RFID card.

Member Login
User can test the RFID reading function on the member login page. When a sample card is read, the application will identify and display personnel information on the screen. User can edit the valid XML member list file with PC-based utility included on the ACT-457A.

Kevin HU
ICP Electronics, Inc.

Alarm
Pressing the light button enables the on-screen lights. (Shown: the access door alarm is activated)

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

I/O Interface

Preinstalled 1GB SD Card with CE5.0 Image

1GB SD Card

Windows CE 5.0

8-pin Relay Output

10/100Mbps LAN
Optional PoE IEEE802.3at

Top Side

5-pin Digital Input

1 x 12V DC Jack

1 x USB

Reset Button

1 x RS-232
1 x RS-422/485

Bottom Side
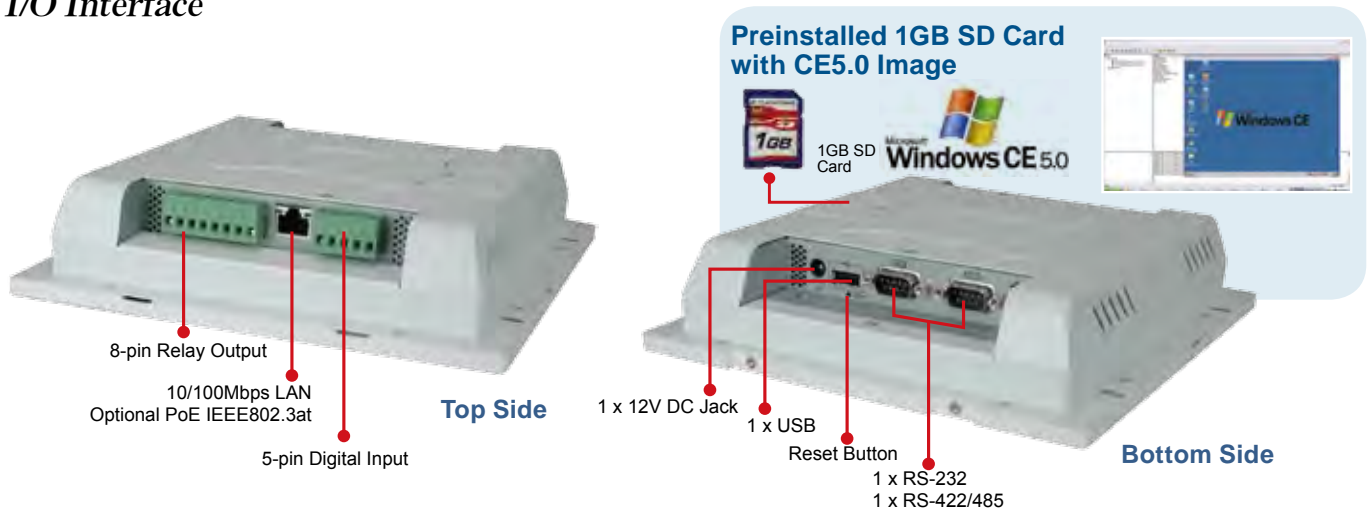
Digital Input/Relay Output Pin Definition

Relay Output

Pin	Assignment
1	+12V
2	Ground
3	Relay Output-1 (For Electronic Lock Common)
4	Relay Output-1 (For Electronic Lock Normal Close)
5	Relay Output-1 (For Electronic Lock Normal Open)
6	Relay Output-2 (For Alarm Normal Open)
7	Relay Output-2 (For Alarm Normal Close)
8	Relay Output-2 (For Alarm Common)

2 Relay Output
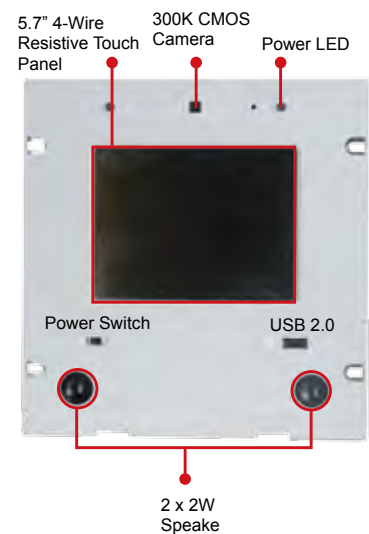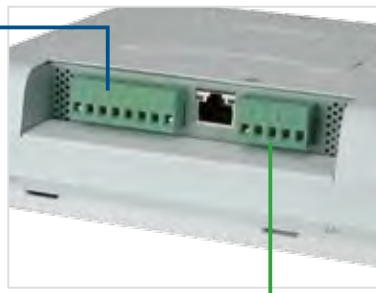
Digital Signal Input

Pin	Assignment
1	Digital Signal Input-1 (For Exit Button)
2	Ground
3	Digital Signal Input-2 (For Door Sensor)
4	Ground
5	Ground

5.7" 4-Wire Resistive Touch Panel

300K CMOS Camera

Power LED

Power Switch

USB 2.0

2 x 2W Speake

ACT-457A
Dimensions *(Unit: mm)*

15.3

176.6

13

189.1

132

70.1

75

4-M4

ø5

75

184.7

207.1

215.1

52.7

12.8

179.6

192.1

Suggested

Cut out size

1 — IEI Mobile Solutions

2 — **Automation Panel Solutions**

3 — RISC-based Solutions

4 — PACSmate Medical Solutions

5 — Optional Peripherals

Specifications

Model		ACT-457A-1250
Display	LCD Size	5.7"
	Max. Resolution	640 x 480
	Brightness (cd/m²)	400
	Contrast Ratio	300 : 1
	LCD Color	262K
	Pixel Pitch (mm)	0.06(H) x 0.18(V)
	Viewing Angle (H-V)	140°/100°
	Backlight MTBF (hrs)	50000 (LED Backlight)
Motherboard	CPU	Alchemy™ AU1250 500MHz
	Bootloader Storage	2MB
	RAM	256MB DDR2 SDRAM
	OS/Program Storage	1GB SD card for WIN CE 5.0 OS and user's Program
I/O Ports		1 x RS-232 COM port
		1 x RS-422/485 COM port
		1 x RJ-45 for 10/100Mbps Ethernet with PoE
		2 x USB 2.0
		1 x Power jack
		1 x Reset button
		1 x 5-pin terminal block for signal input
		2 x Digital Input *
		3 x GND
		1 x 8-pin terminal block for relay output
		2 x Relay (one NC and one NO contacts for Alarm, one NC and one NO contacts for Lock)
		1 x 12V 1A max. output (for door control)
		1 x GND

*Low level(0): 2V MAX., High level (1): +4~+50V

RFID Module	Working Frequency	EM 125KHz and MIFARE 13.56MHz
	Reading Range	1~3 cm (Under 13.56MHz)/ 5 cm (Under 125KHz)
Drive Bay	SSD	SD Card
Other Features	Watchdog Timer	Software programmable supports 1~255 sec. System reset
	Audio	AMP 2W + 2W
	Extension	Webcam & Mic Function
	LED Function	1 x Power ON/OFF LED on Front Panel
Physical	Construction Material	ABS + PC Plastic front frame
	Mounting	Panel, Wall, VESA 75mm x 75mm
	Front Panel Color	Blue & White
	Net Weight	0.7Kg
	Dimensions (WxHxD) (mm)	215 x 207 x 52.7
Environment	Operation Temperature (°C)	-10°C ~60°C
	Storage Temperature (°C)	-20°C ~70°C
	IP Level	IP64
	EMC	CE, FCC
Power over Ethernet		Optional IEEE 802.3at (via RJ45 10/100Mbps LAN)
Touch Screen		Resistive Type 4-Wire
Power Adapter		63000-FSP040DGAA1106-RS Power: 40W Input: 90VAC~264VAC, 50/60Hz Output: 12VDC
Power Requirement		12V DC-IN
Power Consumption		9W , Maximum 21W (include Max 12V@1A internal Power output)

Relay Specifications

Contact Rating	12A 120VAC, 10A 240VAC, 10A 28VDC
Max. switching voltage	240VAC, 60VDC
Max. switching current	12A
Min. switching load	10mmA 5VDC

Ordering Information

Model	Description
ACT-457A-1250/T-R/POE/-R10 POE Power	5.7" 400cd/m² VGA fanless panel PC with Alchemy™ AU1250 500MHz, touch screen, 3megapixel camera, MIFARE & EM RFID module, door control, IEEE802.3at PoE, 256MB DDR2, RoHS

Packing List

Item	P/N	Q'ty	Specifications
Self Drill Oval Head Screw	44233-030081-RS	4	M3*8 ;T24
Power Cord	32000-000002-RS	1	1830MM; European Power Cord
Power Adapter	63000-FSP040DGAA1106-RS (40W Power Adapter)	1	VAC: 90V~264V; 40W; 1500MM
Touch Pen	43125-0002C0-00-RS	1	
One Key Recovery CD		1	
Utility CD			

*Preinstalled 1 GB SD crad with CE5.0 image

Utility CD includes:
- **ACT-457A User Manual**
- **ACT-457A DEMO AP (w/ source code)**
- **ACT-457A SDK**
  - IEI MIPS Windows® CE standard SDK
  - Record application development guide
  - Camera application development guide
  - DI/DO application development guide
  - RFID configuration guide
- **IEI Utilities**
  - ACT Remote Management Tool
  - ACT Web-based Configurator

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Heavy Industrial Panel PC Series

IEI heavy industrial panel PC series are robust design which meet industrial requirements. Take innovation in mind, IEI offers latest high performance platform H61 and 37 series with N2600 to our product portfolio. To catch the wave of cloud computing and intelligent solutions, IEI products provide comprehensive network communications. With all these benefits, IEI is your solid solution for industrial computing.

- IP65 and above dust/ water protection aluminum housing
- Flexible PCI/ PCIe/ PCIe mini card expansion
- Seamless communication through LAN/ SFP/ WiFi
- Wide operating temperature

IP65 Dust/Water Protection   SFP Fiber LAN   Wide Voltage Input

Heavy Industrial Panel PC

Size	8.4"	10.4"	12.1"	15"	17"	19"
Intel® Atom™ N2600 *New*	PPC-3708A-N26	PPC-3710A-N26	PPC-3712A-N26	-	-	-
Intel® Atom™ D525	-	-	-	PPC-5152-D525	-	-
Intel® Atom™ N270	PPC-3708A-N270	PPC-3710A-N270	PPC-3712A-N270	-	-	-
Intel® 945GM	PPC-3708GS-945	PPC-3710GS-945	PPC-3712GS-945	-	-	-
Intel® H61 *New*	-	-	-	PPC-5150A(D)-H61 WIDS-515A(D)-H61	PPC-5170A(D)-H61 WIDS-517A(D)-H61	PPC-5190A(D)-H61
Intel® 945G	-	-	-	PPC-5150A/9455	PPC-5170A/9455	PPC-5190A/9455

Heavy Industrial Vertical Market Panel PC

Size	12.1"	15"
Intel® Atom™ N270	S12A(SR)	-
Intel® Atom™ D525	UPC-V312	-
Intel® GM45	UPC-12A(H)	-
Intel® QM77 *New*	-	UPC-V315
Intel® NM70	-	UPC-V315

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

▪ Latest High Performance Platform

Powerful Intel® QM77 Mobile Solution

Latest Intel ® QM77 mobile chipset is the most powerful solution than ever! Comparing to previous platform, the performance is higher with following new technologies:

- Better graphic engine
- Intel® vPro™ remote management
- Intel® Intelligent Power Technology
- iAMT 8.0 support

UPC-V315

CPU Performance Passmark Comparison

UPC-V315	Intel Core i3-3217U @ 1.80 GHz	2228
UPC-V312	Intel Atom D525 @ 1.80 GHz	762
UPC-12A	Intel Core 2 Duo T9400 @ 2.53 GHz	1813
UPC-12A	Intel Core 2 Duo P8400 @ 2.26 GHz	1540
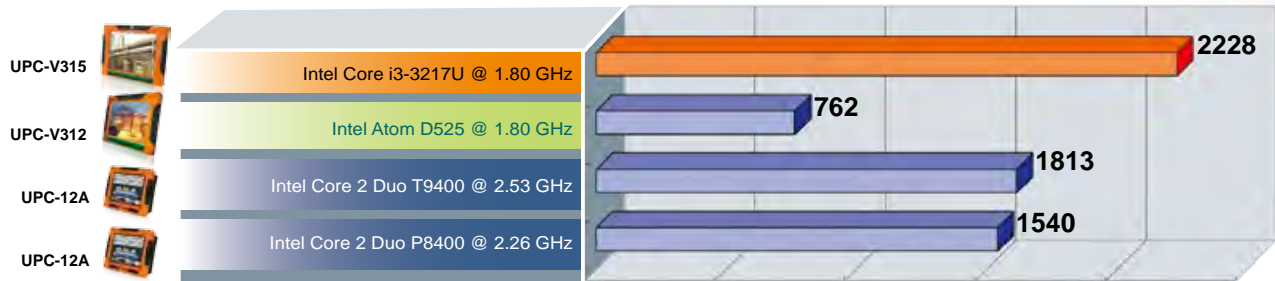
Better Performance and Cost-effective H61 High C/P Value H61 Solution

Desktop solution is no longer inferior to mobile solution! Intel H61 chipset with desktop CPU provides higher performance than mobile chipset and much cost-effective options.

Mobile 2nd Core i3 V.S. Desktop Pentium & 2nd Core i3

Desktop 2nd Core i3-2100T ★

Desktop Pentium G620T

Mobile 2nd Core i3-2330E

300　320　340　360　380

CPU Performance (CPUMark 99)

CPU Type	Intel 2nd Core i3-2330E (Mobile 35W CPU)	Intel Pentium G620T (Desktop 35W CPU)	Intel 2nd Core i3-2100T (Desktop 35W CPU)
CPU Performance (CPUMark 99)	337	337	380

Mobile Celeron V.S. Desktop Celeron

Desktop Celeron G530T ★

Mobile Celeron B810

0　50　100　150　200　250　300　350

CPU Performance (CPUMark 99)

CPU Type	Intel Celeron B810 (Mobile 35W CPU)	Intel Celeron G530T (Desktop 35W CPU)
CPU Performance (CPUMark 99)	245	306

Strongest Atom Solution

The 3rd generation of Intel® Atom™ solution, N2600 is a new compact solution, outperforms to N270. Total TDP is lower than D525, which improves significantly a lot in thermal solution.

	Navy Pier N270	Pine Trail D525	Cedar Trail N2600
Process	45nm	45nm	32nm
Processor Frequency	N270: 1.6GHz	D525: 1.8GHz	N2600: 1.6GHz
CPU TDP	N270: 2.5W	D525: 13W	N2600:3.5W ★
Chipset/ PCH TDP	945GSE: 5.5W ICH7M: 1.9W	ICH8M 2W	Intel NM10 1.5W ★

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▪ Robust Product Design

IP Protection Improvement

PPC-H61 series support robust front panel for water protection and tightly front assembly against the component from any direction.

IP Code Table

The IP Code (International Protection Rating) consists of the letters IP followed by two digits.

Solids			Liquids	
First Numerical			Second Numerical	
No Protection	0	0	No Protection	
Objects Greater than 50mm	1	1	Vertically Dripping Water	
Objects Greater than 12mm	2	2	75o-90o Sprayed water	
Objects Greater than 2.5mm	3	3	30o-90o Sprayed water	
Objects Greater than 1.0mm	4	4	Water sprayed-low pressure	
Dust-Protected	5	5	Water jets-low pressure	
Dust-Tight	6	6	Water jets-high pressure	
IP 66 Compliant!		7	Temporary immersion	
		8	Indefinite Immersion	

IP66 Dust and Water Resistant

PPC-51xxA-H61

▪ Wide Temperature Range (-20°c~60°c)

PPC-5150A-H61/ PPC-5170A-H61 and UPC-V315 supports wide operating temperature, surviving from any kind of harsh environment.

-20°c   **60°c**

▪ High Efficiency Transmission

SFP Fiber LAN

The small form-factor pluggable transceiver (SFP) is a compact, hot pluggable transceiver used for both telecommunication and data communications applications.

- Immunity to electromagnetic interference
- High electrical resistance
- No sparks
- Long transmit distance – up to 2KM (multi-mode)/ 120KM(single-mode)

Transmission distance

Type	Core diameter	Wavelength(nm)	Cost	Max Distance (km)
Single-Mode	8 to 10	1310 or 1550	More expensive	120 ★
Multi-Mode	50 or 62.5	850 or 1300	Medium	2
RJ45	N/A	N/A	cheaper	0.1

Multiple choice

We provide two transmission for choose, either 2 × Fiber Lan or 2 × RJ45.
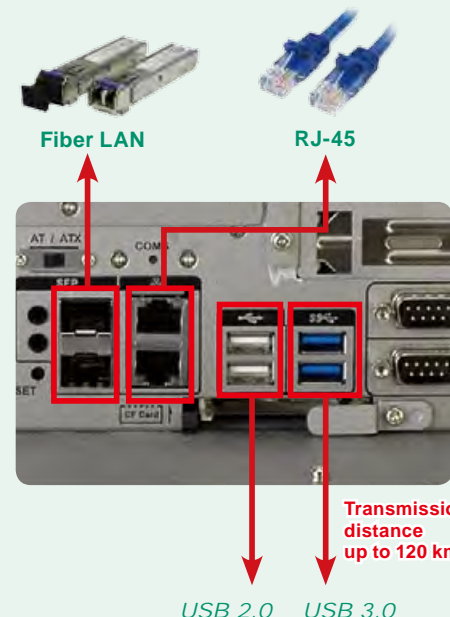
Fiber LAN   **RJ-45**

Transmission distance up to 120 km

USB 2.0   **USB 3.0**

USB 3.0 – Faster Data Transmission

USB 3.0 has higher transmission speed and wider data bandwidth. Support faster transferring for the user.

USB version	USB1.0	USB2.0	USB3.0
Data Transfer Rate)	12Mbps	480Mbps	5Gbps ★
Media (Data Size)	Transfer Time		
Song / Pic (4 MB)	5.3 sec	0.1 sec	0.01 sec
HD-Movie (25GB)	9.3 hr	13.9 min	70 sec

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2-145

High Brightness Panel With LED Backlight

LED backlight v.s. Traditional CCFL

- ■ Can be more brighter in color display
- ■ Lower power consumption
- ■ Longer lifecycle

Higher Brightness

Sunlight Readable!
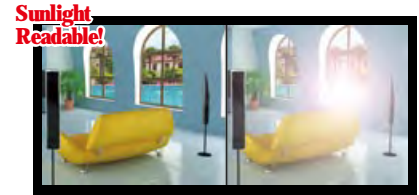
LED in large size product

PPC-51XXA-H61 series support LED backlight, improving display capability in high quality.

Display	PPC-5150A-9455	PPC-5150A-H61	PPC-5170A-9455	PPC-5170A-H61	PPC-5170A-9455	PPC-5170A-H61
LCD size	15"	15"	17"	17"	19"	19"
Max Resolution	1024 (W) X 768 (H)	1024 (W) X 768 (H)	1280 (W) X 1024 (H)	1280 (W) X 1024 (H)	1280 (W) X 1024 (H)	1280 (W) X 1024 (H)
Brightness	350	400	300	350	300	350
Contrast Ratio	700:1	700 : 1	800:1	800 : 1	700:1	1000 : 1
LCD color	16.2M	16.2M	16.7M	16.7M	16.7M	16.7M
Pixel Pitch (mm)	0.297X 0.297	0.297 X 0.297	0.264X 0.264	0.264 X 0.264	0.294X 0.294	0.294 X 0.294
Viewing Angle(V-H)	125°/140°	140°/160°	160°/160°	170°/160°	160°/170°	160°/170°

Flexible Expansion Options

A. PCI and PCIe x1 Signal Expansion Slot (For PPC-51xxA Series)

Capture Card

Data Acquisition &Control Card

Communication Card

Motion Control Card

CAN bus/Profi-Bus

PCIe x1 and PCI Signal on Board

PCI Signal
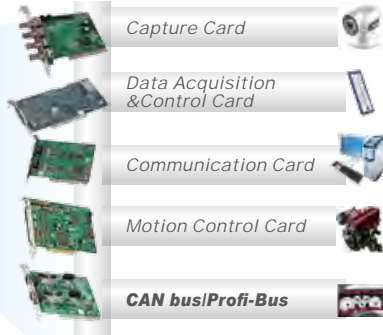
PCIe x1 Signal

B. Two PCI/ One PCI+ One PCIe x1 Signal Modular Expansion Slot (For PPC-5152-D525)

1. One PCI and One PCIe x1 slot

PCIe Mini slot on the other side

PCI

PCIe x1

2. Two PCI slots

PCIe Mini slot on the other side

PCI

PCI
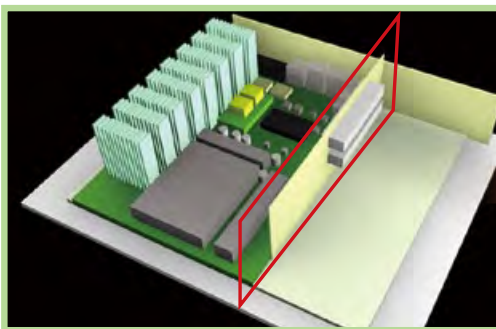
C. PCIe Mini Card (PPC-51xxA-H61/ PPC-37xxA Series)

PCIe mini interface provides either SATA signals such as mSATA storage or WIFI module for full-size or half-size devices.

PCIe mini card

SATA signal

Digital switch

USB/ PCIe signal

OR

mSATA storage

WiFi module

IEEE 802.11 b/g/n 2T2R wirless module

300 Mbps

150 Mbps

2T2R

1T1R

54 Mbps

6x

4x

1x
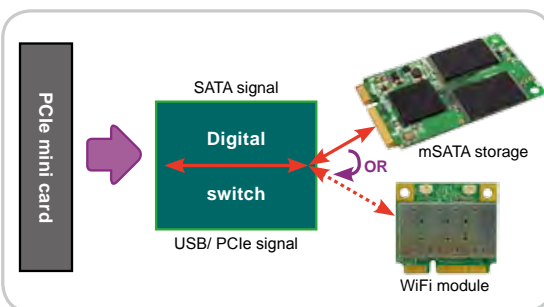
T: Transmitter
R: Receiver
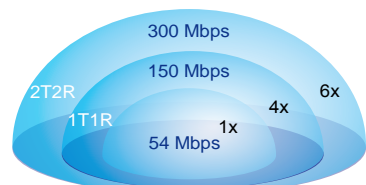
Flexible expansion

This series provide 2T2R for transferring wider range and faster speed rate, which depands on how many antennas are for MIMO.

big Wi-Fi n

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IEI Quick Mounting Technology

■ DIN Mount PPC

Din-Mount design is for the compact size LCD products. It allows the LCD product to be used in various environments.

DIN Mount Kit:
DK-84MS

■ Wall Mount PPC

IEI quick wall mount kit allows an IEI LCD to be removed from and mounted on the wall easily. It makes the LCD product a quick installation and easy maintenance solution.

Wall Mount Kit:
WK-190MS-R10

■ Panel Mount PPC

IEI panel mount allows customers to mount IEI LCD products on the panel kit with IP 65 waterproof protection.

Panel Mount Bracket:
PK-170M

■ Rack Mount PPC

Rack-mountable equipment is mounted simply by bolting its front panel to the rack, or with a square-holed rack by clipping or some other variation on the theme.

Fit 19-inch rack cabinet (482.6 mm wide)

RACK Mount Kit:
RK-170MS-R10

■ VESA Mount PPC

The new IEI LCD family features an easy, quick, and solid mounting kit attached to the VESA mount adapter which is attached to the computer. IEI LCD products are ready to attach to any VESA compliant mounting solution that has a 100 mm x 100 mm attachment.

ARM-11-RS   ARM-31-RS
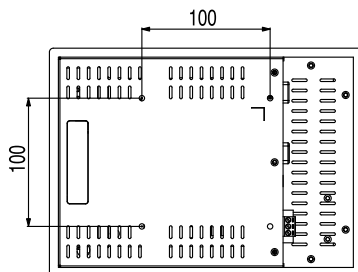
Optional Item List

LCD Size	6.5"	8.4"	10.4"	12.1"	15"	17"	19"
Panel Mount Kit	PK-65M	PK-84M	PK-104M	PK-170M			PK-190M
Wall Mount Kit	WK-065MS-R10	WK-190MS-R10					
Rack Mount Kit	RK-065MS-R10	RK-084MS-R10	RK-104MS-R10	RK-121MS-R10	RK-150MS-R10	RK-170MS-R10	RK-190MS-R10
Din Mount Kit	DK-84MS			N/A			
Stand	STAND-100-RS				STAND-210-R11		
Arm	ARM-11-RS			ARM-11-RS/ARM-31-RS	ARM-31-ARM-31-RS		

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PPC Series 8.4"~10.4" PPC Selection Guide

LCD Size		8.4"			10.4"		
Model		**PPC-3708A-N26**	**PPC-3708A-N270**	**PPC-3708GS-945**	**PPC-3710A-N26**	**PPC-3710A-N270**	**PPC-3710GS-945**
Display	LCD Size	8.4 "	8.4 "	8.4 "	10.4 "	10.4 "	10.4 "
	Max Resolution	800(W) x 600(H)	800(W) x 600(H)	800(W) x 600(H)	800(W) x 600(H)	800(W) x 600(H)	800(W) x 600(H)
	Brightness (cd/m²)	450	450	450	400	400	400
	Contrast Ratio	600:1	600:1	600:1	700:1	700:1	700:1
	LCD Color	262K	262K	262K	262K	262K	262K
	Pixel Pitch (mm) (HxV)	0.213(H) x 0.213(V)	0.213(H) x 0.213(V)	0.213(H) x 0.213(V)	0.264(H) x 0.264(V)	0.264(H) x 0.264(V)	0.264(H) x 0.264(V)
	Viewing Angle (V/H)	140°/ 160°	140°/ 160°	140°/ 160°	140°/ 160°	140°/ 160°	140°/ 160°
	Backlight MTBF (hrs)	50000 (LED backlight)	50000 (LED backlight)	50000 (LED backlight)	50000 (LED backlight)	50000 (LED backlight)	50000 (LED backlight)
Touch	Touch screen	Resistive Type 4-Wire with RS-232 interface	Resistive Type 4-Wire with RS-232 interface	Resistive Type 4-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	EETI MBMER4040CPBG	EETI MBMER4040CPBG	EETI MBMER4040CPBG	EETI MBMER4050CMBG	EETI MBMER4050CMBG	EETI MBMER4050CMBG
Motherboard	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ N270 1.6GHz CPU	Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ process N270 1.6GHz CPU	Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB
	Chipset	Intel® NM10	Intel® 945GSE + ICH7M	Intel® 945GM + ICH7M	Intel® NM10	Intel® 945GSE + ICH7M	Intel® 945GM + ICH7M
	RAM	One 200-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB	1 x 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	IRealtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	IRealtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC'97 audio codec	Realtek ALC655 AC'97 audio codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC'97 audio codec	Realtek ALC655 AC'97 audio codec
I/O Ports and Switches		2 x RS-232	2 x RS-232	2 x RS-232	2 x RS-232	2 x RS-232	2 x RS-232
		1 x RS-422/485	1 x RS-232 (Alternative to RS-422/485)	1 x RS-232 (Alternative to RS-422/485)	1 x RS-422/485	1 x RS-232 (Alternative to RS-422/485)	1 x RS-232 (Alternative to RS-422/485)
		2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port
		2 x USB 3.0	2 x USB 2.0	2 x USB 2.0	2 x USB 3.0	2 x USB 2.0	2 x USB 2.0
		2 x USB 2.0	1 x VGA Port	1 x VGA Port	2 x USB 2.0	1 x VGA Port	1 x VGA Port
		1 x HDMI	1 x Line-in, 1 x Line-out, 1 x Mic-in	1 x Line-in, 1 x Line-out, 1 x Mic-in	1 x HDMI	1 x Line-in, 1 x Line-out, 1 x Mic-in	1 x Line-in, 1 x Line-out, 1 x Mic-in
		1 x VGA Port	1 x PS/2 mouse and keyboard interface	1 x PS/2 mouse and keyboard interface	1 x VGA Port	1 x PS/2 mouse and keyboard interface	1 x PS/2 mouse and keyboard interface
		1 x Line-in, Line-out, Mic-in	1 x 12VDC input Power Jack	1 x 12VDC input Power Jack	1 x Line-in, Line-out, Mic-in	1 x 12VDC input Power Jack	1 x 12VDC input Power Jack
		1 x 12VDC input Power Jack	1 x Power Switch	1 x Power Switch	1 x 12VDC input Power Jack	1 x Power Switch	1 x Power Switch
		1 x Power Switch			1 x Power Switch		
Drive Bay	HDD Driver Bay	1 x 2.5 SATA HDD Bay	1 x 2.5" SATA HDD bay with anti-shock	1 x 2.5" SATA HDD bay with anti-shock	1 x 2.5 SATA HDD Bay	1 x 2.5" SATA HDD bay with anti-shock	1 x 2.5" SATA HDD bay with anti-shock
	SSD	1 x mSATA	CF Type II	CF Type II	1 x mSATA	CF Type II	CF Type II
Expansion Slot		1 x PCIe mini card	1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe mini card	1 x PCIe Mini card	1 x PCIe Mini card
System Cooling		Fanless	Fanless	Active with Fan	Fanless	Fanless	Active with Fan
Environment	Operation Temperature	-20°C~60°C	-10°C~50°C	-10°C~50°C	-10°C ~ 50°C	-10°C~50°C	-10°C~50°C
	Storage Temperature	2.2Kg/ 4.4Kg	-20°C~60°C	-20°C~60°C	-20°C~60°C	-20°C~60°C	-20°C~60o°C

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Optional Peripherals

PPC Series 12.1" PPC Selection Guide

New

LCD Size		12.1"		
Model		**PPC-3712A-N26**	**PPC-3712A-N270**	**PPC-3712GXS-945**
Display	**LCD Size**	**12.1 "**	**12.1 "**	**12.1 "**
	Max Resolution	1024(W) x 768(H)	1024(W) x 768(H)	1024(W) x 768(H)
	Brightness (cd/m²)	500	500	500
	Contrast Ratio	700:1	700:1	700:1
	LCD Color	262K	262K	262K
	Pixel Pitch (mm) (HxV)	0.3075(H) x 0.3075(V)	0.3075(H) x 0.3075(V)	0.3075(H) x 0.3075(V)
	Viewing Angle (V/H)	160°/ 160°	160°/ 160°	160°/ 160°
	Backlight MTBF (hrs)	50000 (LED backlight)	50000 (LED backlight)	50000 (LED backlight)
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	EETI MBMER4050CMBG	EETI MBMER4050CMBG	EETI MBMER4050CMBG
Motherboard	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ process N270 1.6GHz CPU	Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB
	Chipset	Intel® NM10	Intel® 945GSE + ICH7M	Intel® 945GM + ICH7M
	RAM	One 200-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC'97 audio codec	Realtek ALC655 AC'97 audio codec
I/O Ports and Switches		2 x RS-232	2 x RS-232	2 x RS-232
		1 x RS-422/485	1 x RS-232 (Alternative to RS-422/485)	1 x RS-232 (Alternative to RS-422/485)
		2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port
		2 x USB 3.0	2 x USB 2.0	2 x USB 2.0
		2 x USB 2.0	1 x VGA Port	1 x VGA Port
		1 x HDMI	1 x Line-in, 1 x Line-out, 1 x Mic-in	1 x Line-in, 1 x Line-out, 1 x Mic-in
		1 x VGA Port	1 x PS/2 mouse and keyboard interface	1 x PS/2 mouse and keyboard interface
		1 x Line-in, Line-out, Mic-in	1 x 12VDC input Power Jack	1 x 12VDC input Power Jack
		1 x 12VDC input Power Jack	1 x Power Switch	1 x Power Switch
		1 x Power Switch		
Drive Bay	HDD Driver Bay	1 x 2.5 SATA HDD Bay	1 x 2.5" SATA HDD bay with anti-shock	1 x 2.5" SATA HDD bay with anti-shock
	SSD	1 x mSATA	CF Type II	CF Type II
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay
Expansion Slot		1 x PCIe mini card	1 x PCIe Mini card	1 x PCIe Mini card
System Cooling		Fanless	Fanless	Acitve with Fan
Environment	Operation Temperature	-10°C ~ 50°C	-10°C~50°C	-10°C~50°C
	Storage Temperature	-20°C~60°C	-20°C~60°C	-20°C~60°C

PPC Series 15" PPC Selection Guide

LCD Size		15"			
Model		PPC-5150A-H61	PPC-5150A/9455	PPC-5150A-G41	PPC-5152-D525
Display	LCD Size	15 "	15 "	15 "	15 "
	Max Resolution	1024(W) x 768(H)	1024(W) x 768(H)	1024(W) x 768(H)	1024(W) x 768(H)
	Brightness (cd/m²)	400	350	350	400
	Contrast Ratio	700:1	700:1	700 : 1	500 : 1
	LCD Color	16.2M	16.2M	16.2M	16.2M
	Pixel Pitch (mm) (HxV)	0.297(H) x 0.297(V)	0.297(H) x 0.297(V)	0.297(H) x 0.297(V)	0.1095(H) x 0.1095(V)
	Viewing Angle (V/H)	125°/ 140°	125°/ 140°	125°/ 140°	160° / 140°
	Backlight MTBF (hrs)	50000	50000	50000	50000
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	DMC 9000	DMC 9000	DMC 9000	DMC 9000
Motherboard	CPU	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor	LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz	LGA 775 Intel® Core™ 2 Extreme/Quad/ Duo, Celeron with a 1333/1066/800MHz FSB support	Intel® Atom™ D525 1.8GHz dual core processor
	Chipset	Intel® H61	Intel® 945G + ICH7R	Intel® G41 + Intel® ICH7	Intel® ICH8M
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16G)	Two 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules (Max. 4G)	Two 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB	One 204-pin DDR3 SO-DIMM slot (Max. 4G)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111CP GbE controller	RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 audio codec	Realtek ALC888 audio codec	Realtek ALC888 audio codec	Realtek ALC888 audio codec
I/O Ports and Switches		4 x RS-232 COM Port	4 x RS-232	4 x RS-232	2 x RS-232 (DB-9 connector)
		1 x RS-232/422/485 Port	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232 or RS-422/485 (DB-9 connector)
		2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RS-422/485 (RJ-45 connector)
		4 x USB 2.0, 2 x USB 3.0 on rear	4 x USB 2.0	4 x USB 2.0	2 x USB 2.0 connector
		1 x VGA Port	1 x VGA Port	1 x VGA Port	VGA port (DB-15 connector)
		1 x Audio (Line-out, MIC-in)	1 x Line-in, 1 x Line-out, 1 x Mic-in	1 x Line-in, 1 x Line-out, 1 x Mic-in	2 x Audio jacks (Line-out, MIC)
		2 x SFP Fiber LAN	2 x PS/2 mouse and keyboard interface	2 x PS/2 mouse and keyboard interface	AT/ATX switch
		1 x Power Switch	1 x Power Switch	1 x Power Switch	2 x USB 3.0 connector
		1 x AT / ATX Switch	AT / ATX Switch	AT / ATX Switch	2 x Combo (SFP / RJ-45) Gigabit LAN
		1 x PCI/PCIe Slot	1 x LPT	1 x LPT	4-channel video / audio capture (optional)
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook	1 x 2.5" SATA HDD bay with anti-shock	1 x 2.5" SATA HDD bay with anti-shock	2.5" SATA HDD bay
	SSD	CF Type II, mSATA	CF Type II	CF Type II	CF Type II socket
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay	N/A
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot,	Either 1 x PCI or PCIe x1 expansion slot	Either 1 x PCI or PCIe x1 expansion slot	Two PCI slots or one PCI slot plus one PCIe x1 slot
		1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card
System Cooling		Active with Fan	Active with Fan	Active with Fan	Fanless
Environment	Operation Temperature	-20°C ~ 60°C	-10°C~50°C	-10°C~50°C	-20°C ~ 50°C
	Storage Temperature	-30°C ~ 70°C	-20°C~60°C	-20°C~60°C	-20°C ~ 70°C

PPC Series 17" ~ 19" PPC Selection Guide

LCD Size		17"			19"		
Model		PPC-5170A-H61	PPC-5170A/9455	PPC-5170A-G41	PPC-5190A-H61	PPC-5190A/9455	PPC-5190A-G41
Display	**LCD Size**	**17 "**	**17 "**	**17 "**	**19 "**	**19 "**	**19 "**
	Max Resolution	1280(W) x 1024(H)	1280(W) x 1024(H)	1280(W) x 1024(H)	1280(W) x 1024(H)	1280(W) x 1024(H)	1280(W) x 1024(H)
	Brightness (cd/m²)	350	300	380	350	300	450
	Contrast Ratio	800 : 1	800 : 1	1000 : 1	1000 : 1	700 : 1	1000 : 1
	LCD Color	16.7M	16.7M	16.7M	16.7M	16.7M	16.7M
	Pixel Pitch (mm) (HxV)	0.264(H) x 0.264(V)	0.264(H) x 0.264(V)	0.264(H) x 0.264(V)	0.294(H) x 0.294(V)	0.294(H) x 0.294(V)	0.294(H) x 0.294(V)
	Viewing Angle (V/H)	160°/ 160°	160°/ 160°	160°/170°	160°/ 170°	160°/ 170°	160°/ 170°
	Backlight MTBF (hrs)	50000	50000	50000	50000	50000	50000
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	DMC 9000	DMC 9000	DMC 9000	DMC 9000	DMC 9000	DMC 9000
Motherboard	CPU	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor	LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz	LGA 775 Intel® Core™ 2 Extreme/Quad/ Duo, Celeron with a 1333/1066/800MHz FSB support	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor	LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz	LGA 775 Intel® Core™ 2 Extreme/Quad/ Duo, Celeron with a 1333/1066/800MHz FSB support
	Chipset	Intel® H61	Intel® 945G + ICH7R	Intel® G41 + Intel® ICH7	Intel® H61	Intel® 945G + ICH7R	Intel® G41 + Intel® ICH7
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16G)	Two 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules (Max. 4G)	2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB	Two 204-pin DDR3 SO-DIMM slots (Max. 16G)	Two 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules (Max. 4G)	2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111CP GbE controller	Realtek RTL8111CP GbE controller	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111CP GbE controller	Realtek RTL8111CP GbE controller
	Audio Codec	Realtek ALC662 audio codec	Realtek ALC888 audio codec	Realtek ALC888 audio codec	Realtek ALC662 audio codec	Realtek ALC888 audio codec	Realtek ALC888 audio codec
I/O Ports and Switches		1 x RS-232/422/485	4 x RS-232	4 x RS-232	4 x RS-232	4 x RS-232	4 x RS-232
		2 x RJ-45 for LAN Port	1 x RS-232/422/485 Port	1 x RS-232/422/485 Port	1 x RS-232/422/485 Port	1 x RS-232/422/485 Port	1 x RS-232/422/485 Port
		4 x USB 2.0, 2 x USB 3.0 on rear	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port
		1 x VGA Port	4 x USB 2.0	4 x USB 2.0	6 x USB 2.0, 2 x USB 3.0 on rear	6 x USB 2.0	6 x USB 2.0
		1 x Audio (Line-out, MIC-in)	1 x VGA Port	1 x VGA Port	1 x VGA Port	1 x VGA Port	1 x VGA Port
		2 x SFP Fiber LAN	1 x Line-in, 1 x Line-out, 1 x Mic-in	1 x Line-in, 1 x Line-out, 1 x Mic-in	1 x Audio (Line-out, MIC-in)	1 x Line-in, 1 x Line-out, 1 x Mic-in	1 x Line-in, 1 x Line-out, 1 x Mic-in
		1 x Power Switch	2 x PS/2 mouse and keyboard interface	2 x PS/2 mouse and keyboard interface	2 x SFP Fiber LAN	2 x PS/2 mouse and keyboard interface	2 x PS/2 mouse and keyboard interface
		1 x AT / ATX Switch	1 x Power Switch	1 x Power Switch	1 x Power Switch	1 x Power Switch	1 x Power Switch
		1 x PCI/PCIe Slot	AT / ATX Switch	AT / ATX Switch	1 x AT / ATX Switch	AT / ATX Switch	AT / ATX Switch
			1 x LPT	1 x LPT	1 x PCI/PCIe Slot	1 x LPT	1 x LPT
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook	1 x 2.5" SATA HDD bay with anti-shock	1 x 2.5" SATA HDD bay with anti-shock	1 x 2.5" SATA HDD bay with anti-shook	1 x 2.5" SATA HDD bay with anti-shock	1 x 2.5" SATA HDD bay with anti-shock
	SSD	CF Type II, mSATA	CF Type II	CF Type II	CF Type II, mSATA	CF Type II	CF Type II
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay	Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot	Either 1 x PCI or PCIe x 1 expansion slot	Either 1 x PCI or PCIe x 1 expansion slot (optional)	Either 1 x PCI slot or 1 x PCIe slot	Either 1 x PCI or PCIe x 1 expansion slot (optional)	Either 1 x PCI or PCIe x 1 expansion slot (optional)
		1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card
System Cooling		Active with Fan	Active with Fan	Active with Fan	Active with Fan	Active with Fan	Active with Fan
Environment	Operation Temperature	-20°C ~ 60°C	-10°C~50°C	-10°C~50°C	-10°C ~ 50°C	-10°C~50°C	-10°C~50°C
	Storage Temperature	-30°C ~ 70°C	-20°C~60°C	-20°C~60°C	-20°C ~ 60°C	-20°C~60°C	-20°C~60°C

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

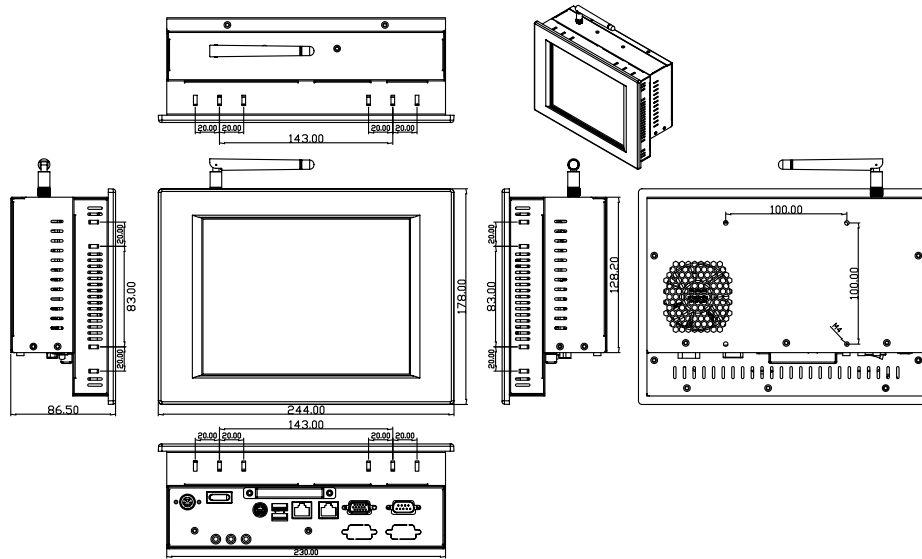**4** PACSmate Medical Solutions

5 Optional Peripherals

8.4" Industrial Panel PC

PPC-3708A-N26
Intel® Atom™ N2600 Dual-Core Processor *Fanless* **New**

PPC-3708A-N270
Intel® Atom™ N270 Processor *Fanless*

PPC-3708GS-945
Intel® Core™2 Duo Processor with Intel® 945GME Platform

Features

1. 8.4" 450 nits high brightness TFT LCD with LED backlight
2. Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
3. One internal 2.5" SATA HDD and CF slot
4. Robust aluminum front bezel and metal casing
5. IP 65 compliant front panel
6. IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity suggested)

IP 65 | High Brightness | -10°C~50°C | MOUNT | One Key Recovery IEI symantec.

Specifications

Model		PPC-3708A-N26	PPC-3708A-N270	PPC-3708GS-945
Display	LCD Size	8.4 "		
	Max Resolution	800(W) x 600(H)		
	Brightness (cd/m²)	450		
	Contrast Ratio	600:1		
	LCD Color	262K		
	Pixel Pitch (mm) (HxV)	0.213(H) x 0.213(V)		
	Viewing Angle (V/H)	140°/160°		
	Backlight MTBF (hrs)	50000 (LED Backlight)		
Touch	Touch screen	Resistive Type 4-Wire with RS-232 interface		
	Touch controller	EETI MBMER4040CPBG		
Motherboard	SBC	NANO-CV-N26001	NANO-945GSE-N270	NANO-9452
	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ process N270 1.6GHz CPU	Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB
	Chipset	Intel® NM10	Intel® 945GSE + ICH7M	Intel® 945GME + ICH7M
	RAM	One 200-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC'97 audio codec	Realtek ALC655 AC'97 audio codec
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD Bay		
	SSD	1 x mSATA	CF Type II	
Expansion Slot		1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card
Connectivity	Wireless	IEEE 802.11b/g/n 2T2R module (WIFI-RT5392-SB-R10) Optional		
Physical	Construction Front Panel	Aluminum Die-casting		
	Chassis Construction	Heavy-duty Steel (SECC)		
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm		
	Front Panel Color	Silver (Pantone 8001C)		
	Dimensions (WxHxD) (mm)	244 x 175 x 86.5	244 x 178 x 80.2	244 x 178 x 80.2
	Cut Out Dimensions (WxH) (mm)	233 x 167	233 x 167	233 x 167
	Net /Gross Weight	2.2Kg/ 4.4Kg	2.2 Kg / 4.4 Kg	2.2 Kg / 4.4 Kg
System Cooling		Fanless	Fanless	Active with Fan
Environment	Operation Temperature	-10°C ~ 50°C	-10°C~50°C	-10°C~50°C
	Storage Temperature	-20°C~60°C		
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak		
	Shock	10G acceleration part to part (11ms)		
Power Supply	Power Adapter	P/N: 63040-010060-050-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP060DBAB1554-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP084DMBA1308-RS 84W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Versatile Mounting Method

Wall Mount

Stand

Panel Mount

Rack Mount

Ordering Information

Part No.		Description
Intel® Atom™ N2600	PPC-3708A-N26/R/2G-R10	8.4" 450 cd/m² SVGA Panel PC with Intel® Atom™ N2600 1.6GHz processor,2GB DDR3 RAM, and touch screen, 9~28VDC input, RoHS
Intel® Atom™ N270	PPC-3708A-N270/R/1G-R21	8.4" 450 cd/m² SVGA Panel PC with Intel® Atom™ N270 1.6GHz/ 512KB L2 cache processor, 1GB DDR2 RAM, touch screen, 12VDC iput. R30, RoHS
Intel® 945GME	PPC-3708GS-945-C4/R/1G-R30	8.4" 450 cd/m² SVGA TFT Panel PC with NANO-9452, C-M 1.86GHz, Silver color, T/S,1GB DDR2 RAM, R30, RoHS
	PPC-3708GS-945-T5/R/1G-R30	8.4" 450 cd/m² SVGA TFT Panel PC with NANO-9452, Intel® Core™ Duo 1.66GHz T5500, Silver color, T/S, 1GB DDR2 RAM, R30, RoHS

Packing List

Item	Part No.	Description
Fan Module	19FRDL5010B5-000001-RS	+5V, 50*50*10MM, FOR PPC-2708GS-LX800 (Please install the fan under -10ºC~50ºC with HDD operating environment)
Screw Kit	19600-000205-RS	
Power Cord	63040-010060-040-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR (10A 250V)
Power Adapter	63040-010060-050-RS	84W, 90VAC~264VAC for PPC-3708GS-945
	63000-FSP060DBAB1554-RS	60W, 90VAC~264VAC , DIN 4 PIN for PPC-3708A-N270
PS/2 Cable	32006-000300-100-RS	1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE
Panel Mounting Kit	19Z00-000026-RS	
Wall Mounting Kit	41014-057602-00-RS	ULTRA SET PLATE
	41020-016102-00-RS	WALL MOUNT BRACKET
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Screen Driver CD / Touch Pen		
User Manual & Driver CD		

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-084MS-R10
ARM	ARM-11-RS
STAND	STAND-100-RS

Options

Item	Part No.	Description
RS-422/485 Cable	32200-075202-RS	(A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE
HDD IDE Cable	32221-000200-100-RS	100MM, IDE 44-pin
Wi-Fi module	PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-37xxA-N26 series

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

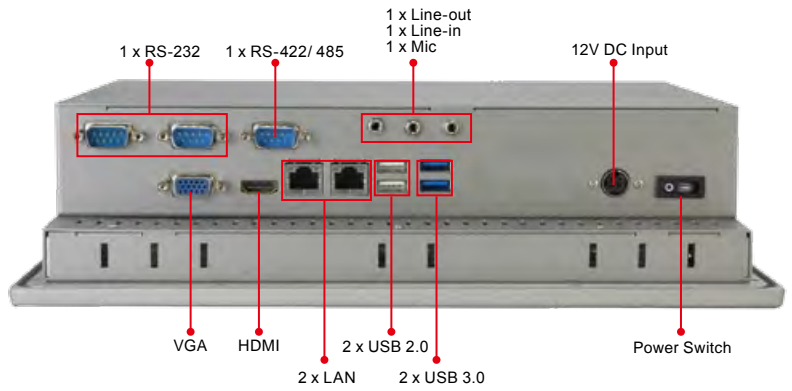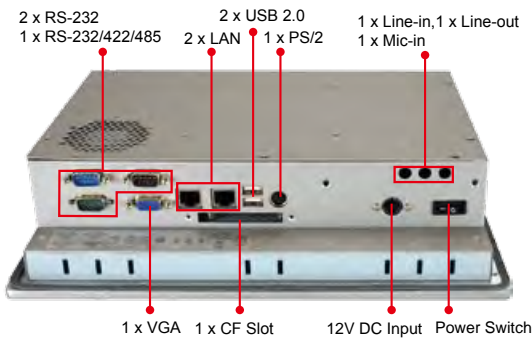**4** PACSmate Medical Solutions

5 Optional Peripherals

PPC-3708A / PPC-3708GS
Fully Integrated I/O

2 x RS-232
1 x RS232/422/485

1 x PS/2

2 x LAN

1 x Line-in,1 x Line-out,1 x Mic-in

1 x VGA

2 x USB 2.0

12V DC Input

1 x CF Slot

Power Switch

PPC-3708A-N26
Fully Integrated I/O

1 x RS-232

1 x RS-422/ 485

1 x Line-out
1 x Line-in
1 x Mic

12V DC Input

VGA

HDMI

2 x USB 2.0

2 x LAN

2 x USB 3.0

Power Switch
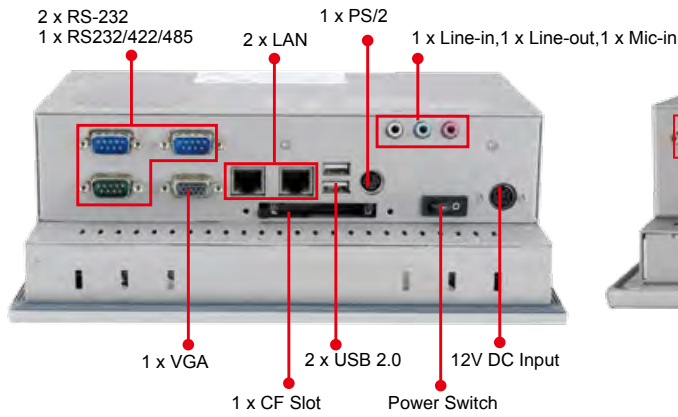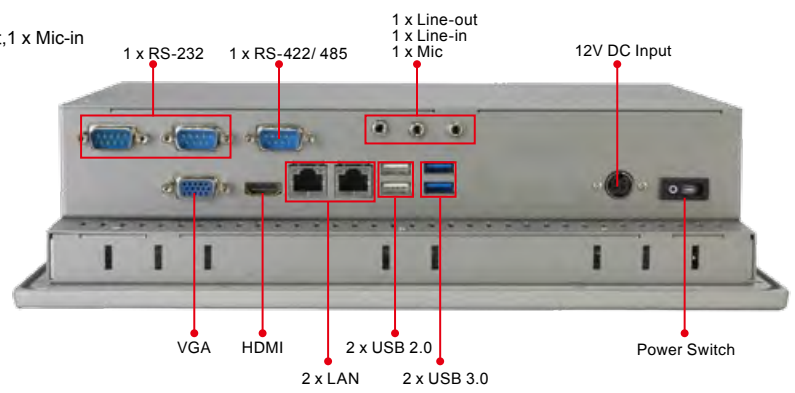
PPC-3708A / PPC-3708GS
Dimensions
(Unit: mm)

20.00 20.00   143.00   20.00 20.00

83.00

178.00

86.50

244.00

143.00

20.00 20.00   20.00 20.00

128.20

83.00

100.00

100.00

230.00

PPC-3708A-N26
Dimensions
(Unit: mm)
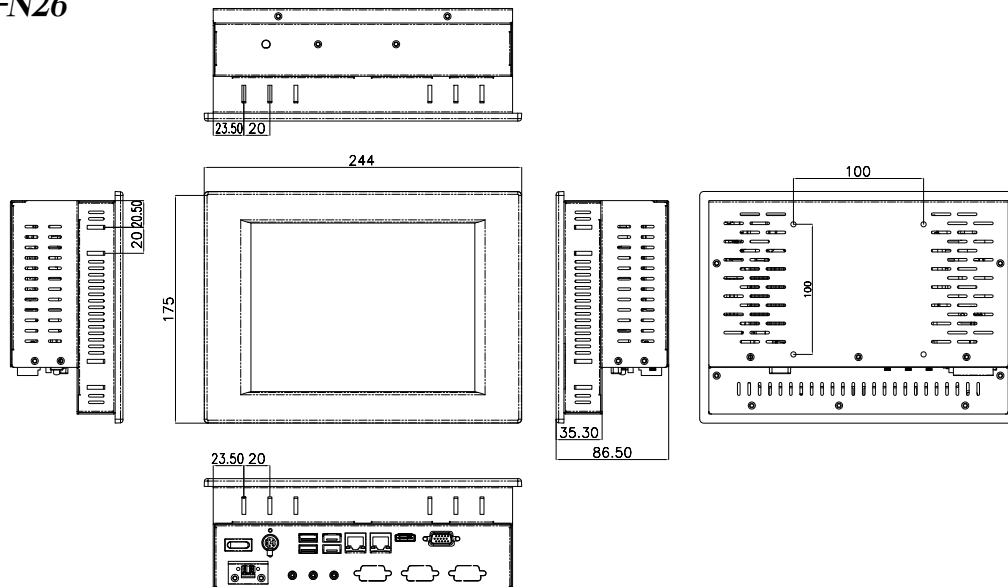
23.50 20

244

20 20.50

175

35.30

86.50

100

100

23.50 20

10.4" Industrial Panel PC

PPC-3710A-N26	Intel® Atom™ N2600 Dual-Core Processor — Fanless *New*
PPC-3710A-N270	Intel® Atom™ N270 Processor — Fanless
PPC-3710GS-945	Intel® Core™2 Duo Processor with Intel® 945GM Platform

Features

1. 10.4" 400 nits high brightness TFT LCD with LED backlight
2. Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
3. One internal 2.5" SATA HDD and CF slot
4. Robust aluminum front bezel and metal casing compliant front panel
5. IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

IP 65 | -10°C~50°C | MOUNT | One Key Recovery iEi symantec.

Specifications

	Model	PPC-3710A-N26	PPC-3710A-N270	PPC-3710GS-945
Display	LCD Size	10.4 "		
	Max Resolution	800(W) x 600(H)		
	Brightness (cd/m²)	400		
	Contrast Ratio	700:1		
	LCD Color	262K		
	Pixel Pitch (mm) (HxV)	0.264(H) x 0.264(V)		
	Viewing Angle (V/H)	140°/160°		
	Backlight MTBF (hrs)	50000 (LED Backlight)		
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface		
	Touch controller	EETI MBMER4050CMBG		
Motherboard	SBC	NANO-CV-N26001	NANO-945GSE-N270	NANO-9452
	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ N270 1.6GHz CPU	Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB
	Chipset	Intel® NM10	Intel® 945GSE + ICH7M	Intel® 945GME + ICH7M
	RAM	One 200-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0		
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC'97 audio codec	Realtek ALC655 AC'97 audio codec
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD Bay		
	SSD	1 x mSATA	CF Type II	
Expansion Slot		1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card
Physical	Construction Front Panel	Aluminum Die-casting		
	Chassis Construction	Heavy-duty Steel (SECC)		
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm		
	Front Panel Color	Silver (Pantone 8001C)		
	Dimensions (WxHxD) (mm)	311 x 242 x 77.8	311.5 x 242 x 77.8	311.5 x 242 x 77.8
	Cut Out Dimensions (WxH) (mm)	291 x 221	291 x 221	291 x 221
	Net /Gross Weight	3.4Kg / 5.8Kg	3.4 Kg / 5.8 Kg	3.4 Kg / 5.8 Kg
System Cooling		Fanless	Fanless	Active with Fan
Environment	Operation Temperature	-10°C~50°C		
	Storage Temperature	-20°C~60°C		
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak		
	Shock	10G acceleration part to part (11ms)		
Power Supply	Power Adapter	P/N: 63040-010060-050-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63040-010060-050-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP084DMBA1308-RS 84W Power Adapter Input: 90VAC~264VAC,50/60Hz Output: 12VDC

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

802.11 b/g/n Wireless LAN Module

The PPC 37 series is equipped with a high speed wireless module that enables larger data transmission in real time. The Wireless LAN facilitates applications that require data transmission over large distances, such as in a large warehouse.
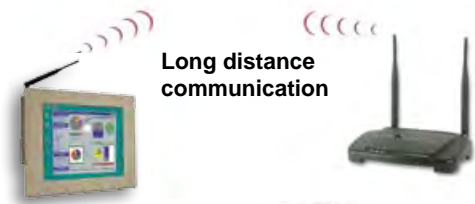
Long distance communication

Fanless System

The PPC-3710A are designed with a low power consumtion platform featuring an Intel® ATOM™ N270 and N2600 platform. The fanless system generates less heat while maintaining above-average performance. A fanless design eliminates the possibility of fan failure and extends the operation life of the device.

Ordering Information

Part No.		Description
Intel® Atom™ N2600	PPC-3710A-N26/R/2G-R10	10.4" 400 cd/m² SVGA Panel PC with Intel® Atom™ N2600 1.6GHz processor,2GB DDR3 RAM, and touch screen, 9~28VDC input, RoHS
Intel® Atom™ N270	PPC-3710A-N270/R/1G-R21	10.4" 400 cd/m² SVGA TFT Fanless Panel PC,Intel® Atom™ N270 1.6GHz/ 512KB,1GB DDR2,Res T/S,Sliver Color,R30,RoHS
Intel® 945GME	PPC-3710GS-945-C4/R/1G-R30	10.4" 400 cd/m² SVGA TFT Panel PC with NANO-9452,C-M 1.86GHz,Silver color,T/S,1GB DDR2 RAM,R30,RoHS
	PPC-3710GS-945-T5/R/1G-R30	10.4" 400 cd/m² SVGA TFT Panel PC with NANO-9452,Intel® Core™ Duo 1.66GHz T5500,Silver color,T/S,1GB DDR2 RAM,R30,RoHS

Packing List

Item	Part No.	Description
Screw Kit	19600-000205-RS	
Power Cord	32702-000200-100-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V)
Power Adapter	63040-010060-050-RS	60W, 90VAC~264VAC for PPC-3710A-N270, PPC-3710-N26
	63000-FSP084DMBA1308-RS	84W, 90VAC~264VAC for PPC-3710GS-945 Socket Type
PS/2 Cable	32006-000300-100-RS	1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE
Panel Mounting Kit	19Z00-000026-RS	
Wall Mounting Kit	41014-057602-00-RS	ULTRA SET PLATE
	41020-016102-00-RS	WALL MOUNT BRACKET
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Screen Driver CD / Touch Pen		
User Manual & Driver CD		

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-104MS-R10
ARM	ARM-11-RS
STAND	STAND-100-RS

Options

Item	Part No.	Description
RS-422/485 Cable	32200-075202-RS	(A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE
Wi-Fi module	PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-37xxA-N26 series

1
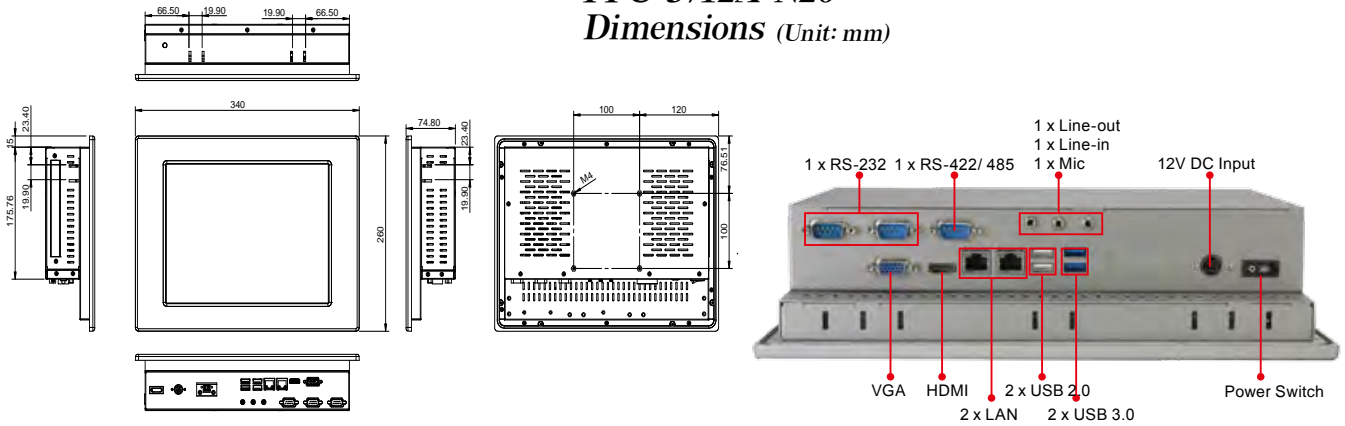IEI Mobile Solutions

2
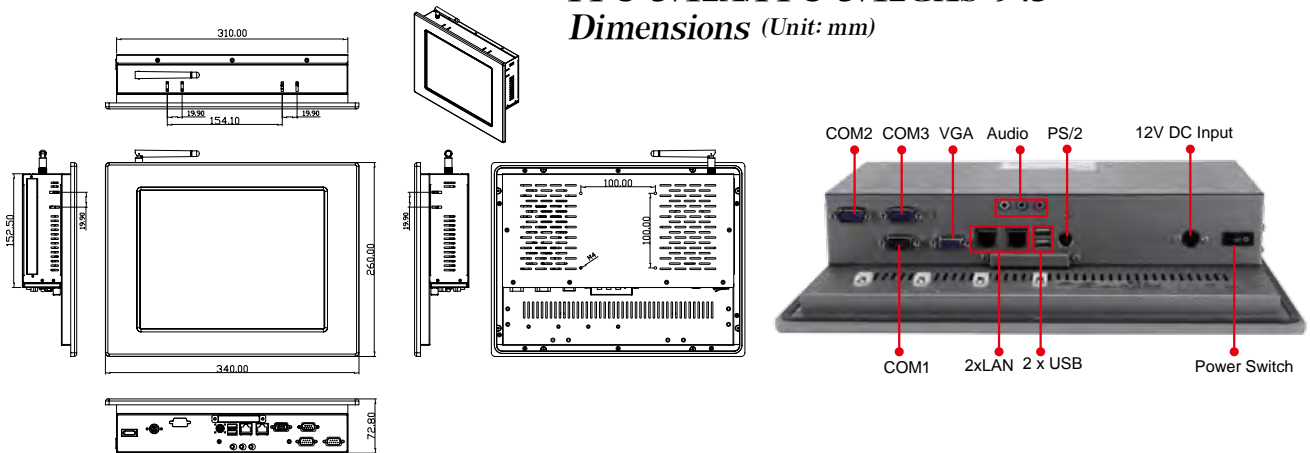Automation Panel Solutions

3
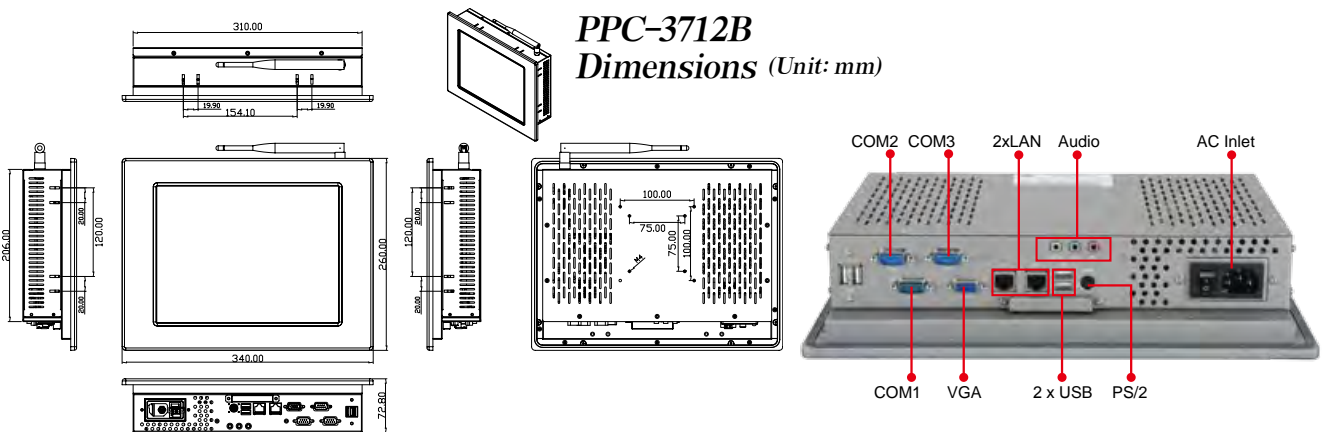RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

PPC-3710A / PPC-3710GS
Fully Integrated I/O

PPC-3708A-N26
Fully Integrated I/O

2 x RS-232
1 x RS-232/422/485

2 x USB 2.0
2 x LAN   1 x PS/2

1 x Line-in,1 x Line-out
1 x Mic-in

1 x VGA   1 x CF Slot   12V DC Input   Power Switch

1 x Line-out
1 x Line-in
1 x Mic

1 x RS-232   1 x RS-422/ 485   12V DC Input

VGA   HDMI   2 x USB 2.0   Power Switch

2 x LAN   2 x USB 3.0

PPC-3710A / PPC-3710GS
Dimensions *(Unit: mm)*

77.80

20.00 20.00 20.00 20.00 20.00

261.70

242.00

148.00 185.80 195.00

100.00
100.00

311.50

20.00 20.00 20.00 20.00 20.00

288.00
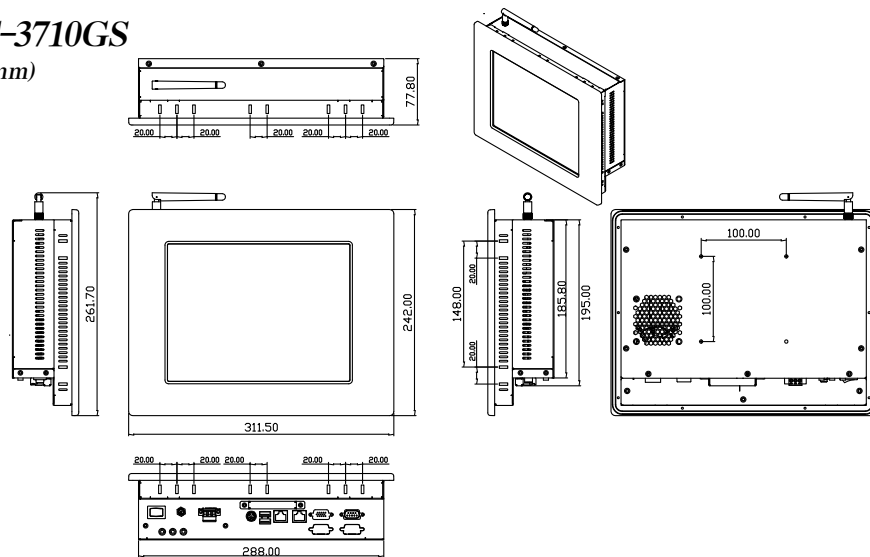
PPC-3710A-N26
Dimensions
(Unit: mm)
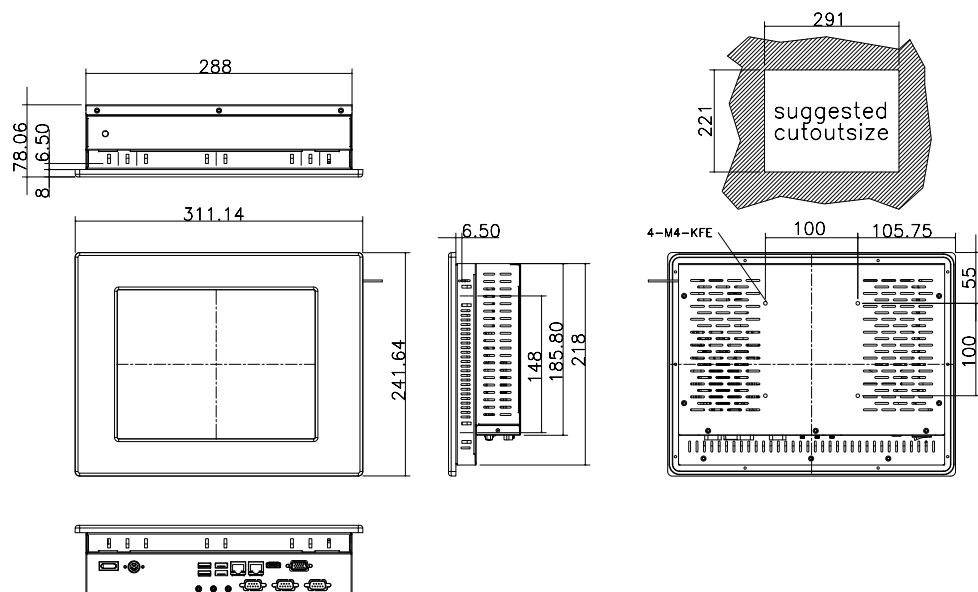
288

78.06 6.50 8

311.14

241.64

6.50

148 185.80 218

291

221   suggested cutoutsize

4-M4-KFE   100   105.75

55 100

12.1" Industrial Panel PC

PPC-3712A-N26
Intel® Atom™ N2600 Dual-Core Processor *Fanless* **New**

PPC-3712A-N270
Intel® Atom™ N270 Processor *Fanless*

PPC-3712GXS-945
Intel® Core™2 Duo Processor with Intel® 945GM Platform

Features

1. 12.1" 500 nits high brightness TFT LCD with LED backlight
2. Dual Gigabit Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
3. Optional 802.11 b/g/n wireless kit
4. One slim type CD-ROM drive bay
5. One internal 2.5" SATA HDD and CF slot
6. Robust aluminum front bezel and metal casing
7. IP 65 compliant front panel

IP 65 **-10°C~50°C** **MOUNT** **One Key Recovery** iEi symantec.

Specifications

Model		PPC-3712A-N26	PPC-3712A-N270	PPC-3712GXS-945
Display	LCD Size	12.1"		
	Max Resolution	1024(W) x 768(H)		
	Brightness (cd/m²)	500		
	Contrast Ratio	700:1		
	LCD Color	262K		
	Pixel Pitch (mm) (HxV)	0.3075(H) x 0.3075(V)		
	Viewing Angle (V/H)	160°/160°		
	Backlight MTBF (hrs)	50000 (LED Backlight)		
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface		
	Touch controller	EETI MBMER4050CMBG		
Motherboard	SBC	NANO-CV-N26001	NANO-945GSE-N270	NANO-9452
	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ N270 1.6GHz CPU	Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB
	Chipset	Intel® NM10	Intel® 945GSE + ICH7M	Intel® 945GME + ICH7M
	RAM	One 200-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0		
	Audio codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC'97 audio codec	Realtek ALC655 AC'97 audio codec
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD Bay		
	SSD	1 x mSATA	CF Type II	
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay
Expansion Slot		1 x PCIe mini card	1 x PCIe Mini card	1 x PCIe Mini card
Physical	Construction Front Panel	Aluminum Die-casting		
	Chassis Construction	Heavy-duty Steel (SECC)		
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm		
	Front Panel Color	Silver (Pantone 8001C)		
	Dimensions (WxHxD) (mm)	340 x 260 x 74.8	340 x 277 x 73.4	340 x 277 x 73.4
	Cut Out Dimensions (WxH) (mm)	313 x 233	313 x 233	313 x 233
	Net/Gross Weight	6 Kg / 8 Kg	6 Kg / 8 Kg	6 Kg / 8 Kg
System Cooling		Fanless	Fanless	Active with Fan
Environment	Operation Temperature	-10°C~50°C		
	Storage Temperature	-20°C~60°C		
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak		
	Shock	10G acceleration part to part (11ms)		
Touch Screen		Resistive Type 5-Wire with RS-232 interface		
Power Supply	Power Adapter	P/N:63040-010060-050-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N:63040-010060-050-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63000-FSP084DMBA1308-RS 84W Power Adapter Input: 90VAC~264VAC,50/60Hz Output: 12VDC

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

**4** PACSmate Medical Solutions

5 Optional Peripherals

Ordering Information

Part No.		Description
Intel® Atom™ N2600	PPC-3712A-N26/R/2G-R10	12.1" 500 cd/m² XGA Panel PC with Intel® Atom™ N2600 1.6GHz processor,2GB DDR3 RAM, and touch screen, 9~28VDC input, RoHS
Intel® Atom™ N270	PPC-3712A-N270/R/1G-R21	12.1" 500 cd/m² XGA fanless panel PC,Intel® Atom™ N270 1.6GHz/ 512KB, 1GB DDR2, Res T/S, Sliver Color, R30, RoHS
Intel® 945GME	PPC-3712GXS-945-C4/R/1G-R30	12.1" 500 cd/m² XGA TFT panel PC with NANO-9452, C-M 1.86GHz,Silver color, T/S, 1GB DDR2 RAM, R30, RoHS
	PPC-3712GXS-945-T5/R/1G-R30	12.1" 500 cd/m² XGA TFT panel PC with NANO-9452, Intel® Core Duo 1.66GHz T5500, Silver color, T/S,1GB DDR2 RAM, R30, RoHS

Packing List

Item	Part No.	Description
Screw Kit	19600-000207-RS	
SATA CD-ROM Cable	32801-006300-100-RS	SATA 7+6P FEMALE 180°;SATA 7P FEMALE 90°+LOCK;DU PONT 2*4P P=2.54 FEMALE
Power Cord	32702-000200-100-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V)
Power Adapter	63000-FSP060DBAB1554-RS	60W, 90VAC~264VAC for PPC-3712A
	63000-FSP084DMBA1308-RS	84W, 90VAC~264VAC for PPC-3712G
PS/2 Cable	32006-000300-100-RS	1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE
Panel Mounting Kit	19Z00-000024-RS	
Wall Mounting Kit	41014-057602-00-RS	ULTRA SET PLATE
	41020-016102-00-RS	WALL MOUNT BRACKET
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Screen Driver CD / Touch Pen		
User Manual & Driver CD		

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-121MS-R10
ARM	ARM-11-RS
STAND	STAND-100-RS
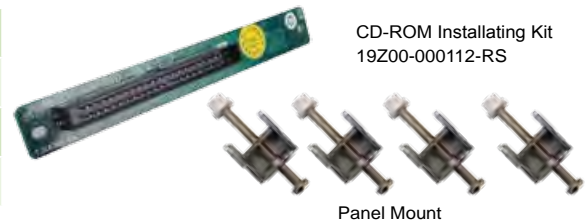
CD-ROM Installating Kit
19Z00-000112-RS

Panel Mount

Options

Item	Part No.	Description
RS-422/485 Cable	32200-075202-RS	(A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE
IDE CD-ROM Installating Kit	19Z00-000112-RS	50-pin CD ROM connector to 44-pin IDE connector transfer board
HDD IDE Cable	32200-000037-RS	250MM, IDE 44-pin
Wi-Fi module	PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-37xxA-N26 series

PPC-3712A-N26
Dimensions *(Unit: mm)*

340
260
100 120
66.50 19.90 19.90 66.50
74.80 23.40
23.40
5
175.76
19.90
19.90
19.90
76.51
76.51
100
M4

1 x RS-232 | 1 x RS-422/ 485
1 x Line-out
1 x Line-in
1 x Mic
12V DC Input

VGA | HDMI | 2 x USB 2.0 | Power Switch
2 x LAN | 2 x USB 3.0

PPC-3712A/PPC-3712GXS-945
Dimensions *(Unit: mm)*

310.00
154.10
19.90 19.90
152.50
19.90
19.90
260.00
340.00
72.80
100.00
100.00
M4

COM2 | COM3 | VGA | Audio | PS/2 | 12V DC Input

COM1 | 2xLAN | 2 x USB | Power Switch

PPC-3712B
Dimensions *(Unit: mm)*

310.00
154.10
19.90 19.90
206.00
120.00
120.00
120.00
260.00
72.80
340.00
100.00
75.00
75.00
100.00
M4

COM2 | COM3 | 2xLAN | Audio | AC Inlet

COM1 | VGA | 2 x USB | PS/2

1
IEI Mobile
Solutions

2
Automation
Panel
Solutions

3
RISC-
based
Solutions

4
PACSmate
Medical
Solutions

5
Optional
Peripherals

PPC-5152-D525

15" Flat-bezel Industrial Panel PC

Combo Gigabit LAN (SFP Fiber/RJ-45)

Features:

- Robust aluminum with IP 64 compliant front bezel design
- 5-wire resistive touch
- Intel® Atom™ D525 1.8GHz dual-core with fan-less design
- 15'' 400 nits LED backlight panel with 1024 x 768 resolution
- Two USB 3.0, two USB 2.0 and five COM ports available
- Flexible expansion interface (two PCI slots or one PCI slot + one PCIe slot)
- Optional 4-channel video/audio capture card and Wi-Fi (802.11 b/g/n) available
- Built-in 1.3M pixels webcam with autofocus and auto enhancement and auto white balance
- Dual combo (10/100/1000 baseT(X) or 1000 baseSFP slot) gigabit LAN ports

| Wi-Fi | Fanless | Camera | IP 64 | Touch Screen | USB 3.0 | SFP Fiber | PCI/PCIe Expansion |

Flexible Expansion Interface

Compared to the PPC-5150, the PS2 power supply unit has been removed in order to maximize. expansion ability for customers who need rich I/O connect feasibility for their using scenarios. By out a PS2, this system is able to provide three more extended connections for customers.
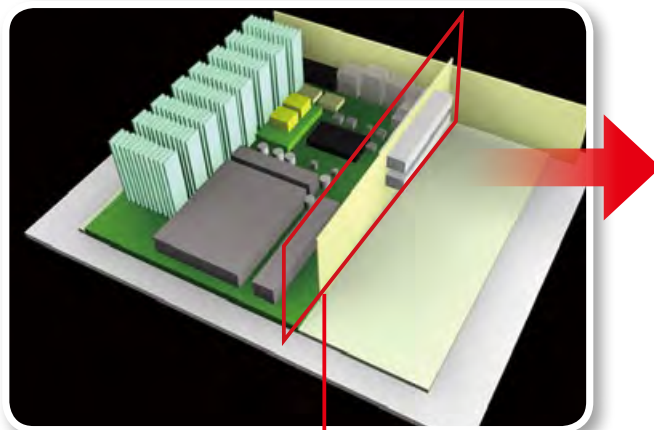
1. One PCI and One PCIe x1 + One PCIe Mini card slot.

PCIe Mini slot on the other side

PCI ←
PCIe x1 ←

2. Two PCI slots + One PCIe Mini card slot

PCIe Mini slot on the other side

PCI ←
PCI ←

PCIe Mini card slot

1 x 4-channel audio/video capture (optional)

1. 2. 3. 4.

1. 2.
3. 4.
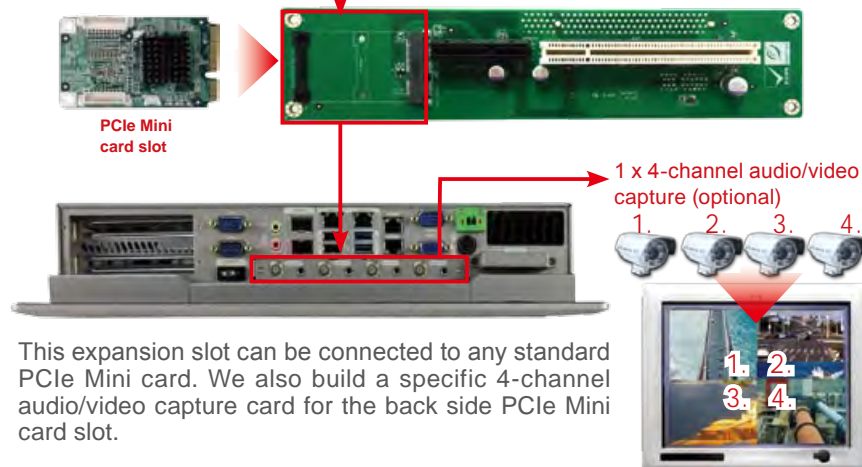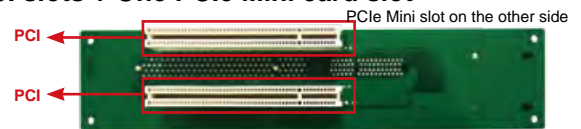
This expansion slot can be connected to any standard PCIe Mini card. We also build a specific 4-channel audio/video capture card for the back side PCIe Mini card slot.

- The two types of backplanes support standard PCI/PCIe cards with maximum dimensions (WxHxD): 200mm x 100mm x 20 mm
- System default power is 90W, the max. total power of the backplane to support expansion cards is 35W, so the power consumption of selected expansion cards can't exceed 35W, otherwise, the system may be unstable. The length of IO on PCI/PCIe cards should not longer than 73.8mm

73,8   10,2
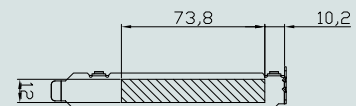
Voltage	Current
+5V	5A
+12V	2.4A
-12V	0.1A
+3.3V	8A
Max. power supported by the backplane: < 35W	

Rich I/O Interface with User-Friendly Design

A.1.3M Webcam and 3W Speakers

- SXGA resolution image sensor
- Frame rate: 1280x1024@ 7.5fps max. 640x480@ 24~30fps
- Auto white balance
- Auto exposure
- Auto compensation
- Focus range from 25 cm to infinity
- Flip control option
- High speed USB 2.0 interface
- Storage format of image: AVI
- Storage format of photograph: BMP, JPEG
- Video resolution: 1280 x 1024, 800 x 600, 640 x 480, 352 x 288, 320 x 240, 176 x 144, 160 x 120.

High resolution video camera

Built-in stereo speakers
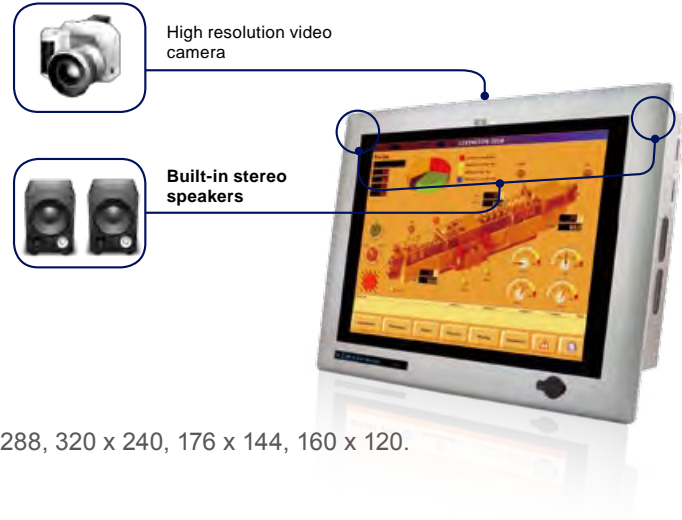
B.Super Speed USB 3.0

The SuperSpeed USB 3.0 technology supports data transfer rates up to 10 times faster than USB 2.0 with the optimized power efficiency.

SUPERSPEED USB

USB 3.0
2 x USB 3.0

Combo LAN

C.Expansion area
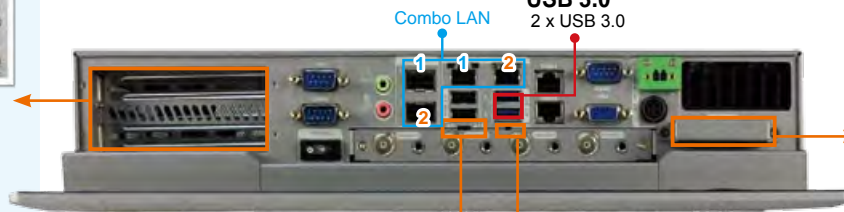
F.User-accessible CF

The PPC has a CF slot on the I/O side that makes it easy to install and replace the CF card.

ATX — AT

RESET
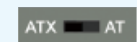
D.Selectable AT/ATX mode switch

AT power mode allows multiple panel PCs automatically start when the central power unit is connected. Applications:
- ATM
- Factory automation platfrom
- Self-service Kiosk

ATX power mode allows the panel PCs to be turned on/off remotely via network. Applications:
- Security surveillance
- Advertising terminal
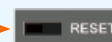
E.Reset button

The reset button forces the system to be reset when the system hangs up.
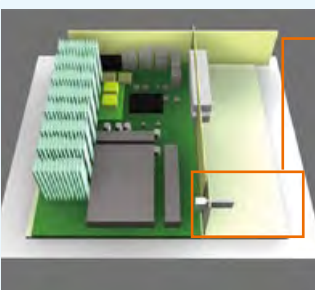
G.Reserved internal USB

The PPC has a internal USB port reserved for an encryption card for software developers to provide intelligent software protection. The purpose of using software protection is to prevent intellectual properties from being illicitly used.

H.Front-accessible waterproof USB

The PPC provides a convenient front-accessible USB port protected with a waterproof cover for easy data update.

1 IEI Mobile Solutions

2 **Automation Panel Solutions**

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

I.Dual Combo (SFP/RJ-45) Gigabit LAN

The PPC-5152 provides dual combo (SFP / RJ-45) gigabit LAN. For each pair of combo LAN, only one LAN port works at a time, and the SFP Fiber port works prior to the RJ-45 port. When a LAN port is working, the corresponding LED indicator lights up.

Flat-Bezel Touch Screen with IP 64 Protection

-Consumer outlook
-Industrial protection
-Flat design is easy to clean

Indicators

Power Switch

1. Press and hold 3 sec to power on
2. Press and hold 6 sec to power off

Power   AT Mode   Wi-Fi   CPU Temperature Alert

ATX Mode   HDD   LAN-1   LAN-2   SFP-1   SFP-2

CPU Temperature Alert LED

The LED turns red to alert users that the CPU temperature is too high. Users at this time can lower the environment temperature or close some running programs to cool down the CPU.

Auto Dimming

Auto dimming provides more comfortable viewing, less power consumption and extends lamp life.

IR Remote Controller

Easy-to-use remote control for adjusting screen brightness and volume.
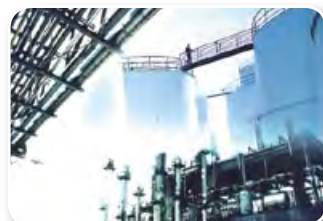
System On/Off
Volume Up/Down
LCD On/Off
Auto Dimming On/Off
Brightness Up/Down

Applications

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Rich I/O Interface

Line-out
Mic

2 x RS-232

Combo LAN

2 x RS-422/485

RS-232/422/485

VGA

DC input
(terminal block)

Power switch

2 x USB 2.0

2 x USB 3.0

4-channel audio / video capture (optional)

DC input (DC jack)
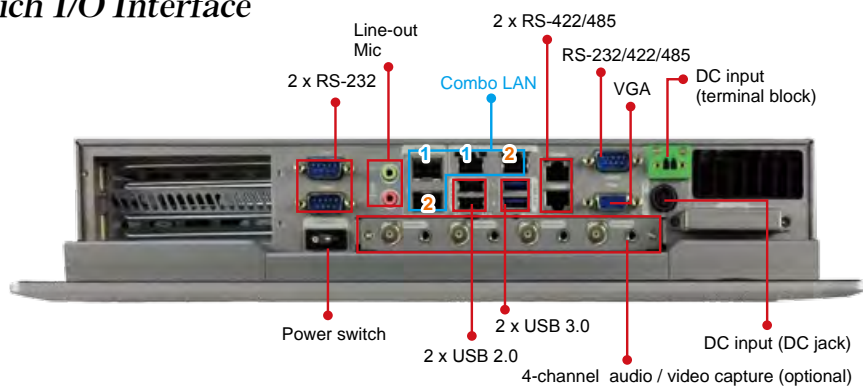
Specifications

Model Name		PPC-5152-D525-R10
Display	LCD Size	15 "
	Max Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	400
	Contrast Ratio	500:1
	LCD Color	16.2M
	Pixel Pitch (mm) (HxV)	0.1095(H) x 0.1095(V)
	Viewing Angle (V/H)	160° / 140°
	Backlight MTBF (hrs)	50000
	Touch screen	Resistive Type 5-Wire with RS-232 interface
	Touch controller	DMC 9000
Motherboard	SBC	PPCMB-5152A-D525
	CPU	Intel® Atom™ D525 1.8GHz dual core processor
	Chipset	Intel® ICH8M
	RAM	One 204-pin DDR3 SO-DIMM slot (Max.4GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC888 audio codec
I/O ports and switches		2 x RS-232 (DB-9 connector)
		1 x RS-232 or RS-422/485 (DB-9 connector)
		2 x RS-422/485 (RJ-45 connector)
		2 x USB 2.0 connector
		VGA port (DB-15 connector)
		2 x Audio jacks (line-out, Mic)
		2 x USB 3.0 connector
		AT/ATX switch
		2 x Combo (SFP / RJ-45) Gigabit LAN
		4-channel video / audio capture (optional)
Drive Bay	HDD Drive Bay	2.5" SATA HDD bay
	SSD	CF Type II socket
	CD-ROM Drive Bay	N/A
Physical	Construction Front Panel	Aluminum
	Chassis Construction	Heavy duty steel (SECC)
	Mounting	Panel, Wall, Rack, Stand and Arm (VESA 100 mm x 100 mm)
	Front Panel Color	Silver, Paint Tone PMS 8401C
	Dimensions (WxHxD) (mm)	422 x 331 x 80
	Cut Out Dimensions (WxH) (mm)	390 x 290
	Net / Gross Weight	6.5 kg/ 8.8 kg
Expansion Slot		Two PCI slots or one PCI slot plus one PCIe x1 slot
		Burglar-proof internal USB 2.0 port
System Cooling		Fanless
Environment	Operating Temperature	-20°C ~ 50°C
	Storage Temperature	-20°C ~ 70°C
	Vibration	MIL-STD-810F 514.5C-2 (with CF card or SSD)
	Shock	Half-sine wave shock 3G; 11ms; 3 shocks per axis
	IP level	Front Panel IP 64
	Safety & EMC	CE / FCC
Power	Power Adapter	90W power adapter
		Input: 100VAC~240VAC, 50/60Hz
		Output: 19V DC
	Power Requirement	9~36V DC Jack 9~36V Terminal Block
	Consumption	50W without add-on card

Ordering Information

	Part No.	Description
Converter card (HPE-2S1)	PPC-5152-D525/R/1G/2P-R11	15" 400 cd/m² XGA Fanless Panel PC with two PCI expansion slots, Intel® Atom™ D525 1.8GHz CPU, 1GB DDR3 RAM, 2M camera, microphone, touch screen, R11
Converter card (HPE-2S2)	PPC-5152-D525/R/1G/1P1E-R11	15" 400 cd/m² XGA Fanless Panel PC with one PCI and one PCIe x1 expansion slot, Intel® Atom™ D525 1.8GHz CPU, 1GB DDR3 RAM, 2M camera, microphone, touch screen, R11

Options

Item	P/N	Description
Panel Mounting Kit	PK-170M	
Wall Mounting Kit	WK-190MS-R10	
Rack Mounting Kit	RK-150MS2-R10	
ARM	ARM-11-RS/ARM-31-RS	
Stand	STAND-A19/STAND-B19/STAND-210-R11	
Wi-Fi Module Kit	PPC-WL-KIT01-R10	Wi-Fi module with RF cable and antennas, 2T2R, 802.11 b/g/n.
Capture Card Kit	PPC-CP-KIT01-R10	4-channel video/audio capture card with input panel and cable, PCIe Mini interface, NTSC/PAL
Gigabit Ethernet SFP Module	SFP1G-SX/-I	1Gbps SFP optical transceiver, multi-mode / 550m, 850nm (0 ~ 70°C) /industrial grade (-20 ~ 85°C)
	SFP1G-MLX/-I	1Gbps SFP optical transceiver, multi-mode / 2Km, 1310nm (0 ~ 70°C) /industrial grade (-40 ~ 85°C)
	SFP1G-LX10/-I	1Gbps SFP optical transceiver, single-mode / 10Km, 1310nm (0 ~ 70°C) /industrial grade (-40 ~ 85°C)
	SFP1G-XD70/-I	1Gbps SFP optical transceiver, single-mode / 50Km, 1550nm (0°C ~ 70°C) / industrial grade (-40°C ~ 85°C)
Fiber Cord	FPC-LCLC-MM3M	Optical connector LC/LC, multi-mode, diameter 62.5/125 µm, length 3m.
	FPC-LCLC-SS3M	Optical connector LC/LC, single-mode, diameter 9/125 µm, length 3m.
OS: Win CE 6.0 (128MB CF Card)	PPCCF-5152-D525-CE060-128M-R10	
OS: Win XPE (2GB CF Card)	PPCCF-5152-D525-XPE-2G-R10	
OS: Win XPE (4GB CF Card)	PPCCF-5152-D525-XPE-4G-R10	
OS: Linux (2GB CF Card)	PPCCF-5152-D525-LNX-2G-R10*	
OS: Win 7 Embedded (4GB CF Card)	PPCCF-5152-D525-WES7E-4G-R10	

(*it doesn't include video/audio capture card's driver)

Packing List

Item	P/N	Q'ty	Description
Utility CD	7B000-000732-RS	1	Drivers and user manual
One Key Recovery CD		1	
VESA Mounting Screw	44033-040062-RS	4	M4*6 for securing stand bracket
Chassis Screw	44013-030041-RS	4	M3*4 chassis screw for backup
Capture Card Screw	44003-030062-RS	4	M3*5 capture card screw for backup
VESA Fastener	19Z00-000024-RS	6	
HDD Screw	44043-030051-RS	4	
Pluggable DC-in Terminal Block	33101-000897-RS	1	
RJ-45 to DB9 COM port Cable	32005-000700-100-RS	2	
Touch pen	43125-0002C0-00-RS	1	
IR Romote Controller	7Z000-SLPCB005-RS	1	
Power Adapter	63040-010090-020-RS	1	FSP090-D2BA1;90~264VAC input;90W;19VDC output
Power Cord	32702-000401-100-RS	1	1500 mm, European Standard
Power Transfer Cord	32702-000300-100-RS	1	

Dimensions (Unit: mm)

1
IEI Mobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

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PACSmate Medical Solutions

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Optional Peripherals
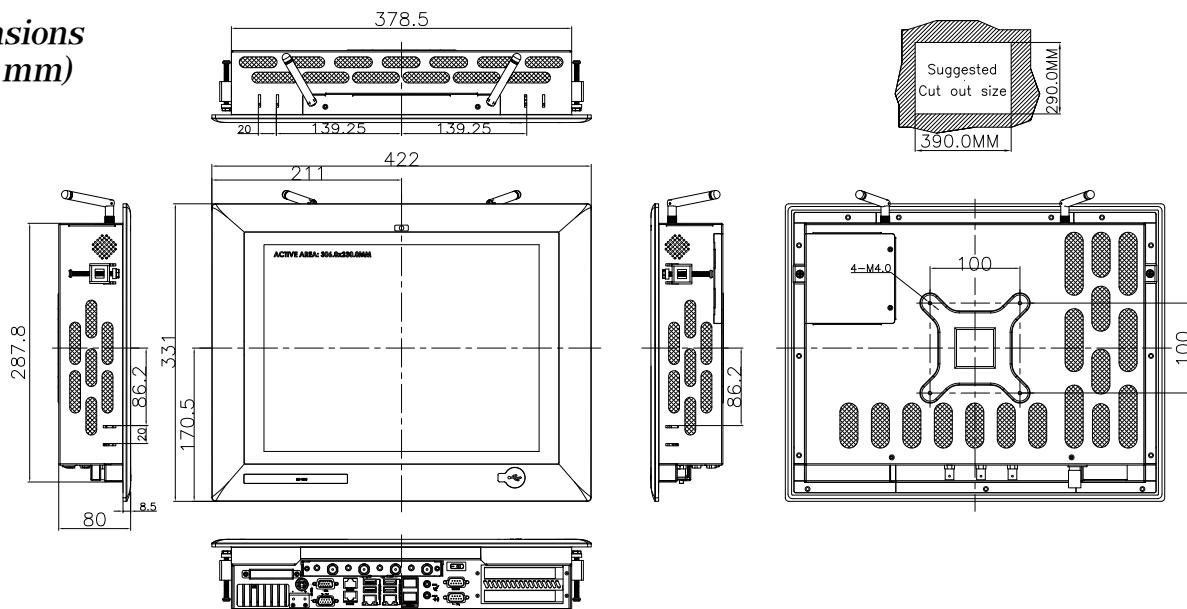
15" Industrial Panel PC

PPC-5150A-H61	Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor	**New**
PPC-5150A/9455	Intel® Core™ 2 Duo Processor with Intel® 945G Platform	
PPC-5150A-G41	Intel® Core™ 2 Extreme Processor with Intel® G41 Platform	

- Intel® H61 Express Chipset with 2nd/3rd generation Intel® Core™, Pentium® and Celeron® processor
- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCIe Mini 802.11b/g/n wireless module
- Optional PCI / PCIe by 1 expansion slot
- Optional Slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel for PPC-5150A-H61
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

Wireless 802.11 b/g/n | Intel® H61 | IP66 | SFP Fiber | MOUNT | One Key Recovery iEi symantec.

Specifications

Model		PPC-5150A-H61	PPC-5150A/9455	PPC-5150A-G41
Display	LCD Size	15 "		
	Max Resolution	1024(W) x 768(H)		
	Brightness (cd/m²)	400	350	350
	Contrast Ratio	700 : 1		
	LCD Color	16.2M		
	Pixel Pitch (mm) (HxV)	0.297(H) x 0.297(V)		
	Viewing Angle (V/H)	140°/160°	125°/ 140°	125°/ 140°
	Backlight MTBF (hrs)	50000		
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	DMC 9000	DMC 9000	DMC 9000
Motherboard	SBC	POS-H61	POS-9455	POS-G41
	CPU	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor	LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz	LGA 775 Intel® Core™ 2 Extreme/Quad/Duo, Celeron with a 1333/1066/800MHz FSB support
	Chipset	Intel® H61	Intel® 945G + ICH7R	Intel® G41 + Intel® ICH7
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16G)	Two 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules (Max. 4G)	2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111CP GbE controller	Realtek RTL8111CP GbE controller
	Audio Codec	Realtek ALC662 audio codec	Realtek ALC888 audio codec	Realtek ALC888 audio codec
I/O Ports and Switches		4 x RS-232 COM Port / 1 x Audio (Line-out, MIC-in) / 1 x RS-232/422/485 Port / 2 x SFP Fiber LAN / 2 x RJ-45 for LAN Port / 1 x Power Switch / 4 x USB 2.0, 2 x USB 3.0 on rear / 1 x AT / ATX Switch / 1 x VGA Port / 1 x PCI/PCIe Slot	4 x RS-232 / 2 x PS/2 mouse and keyboard interface / 1 x RS-232/422/485 / 2 x RJ-45 for LAN Port / 1 x LPT / 4 x USB 2.0 / 1 x Power Switch / 1 x VGA Port / 1 x AT / ATX Switch / 1 x Line-in, 1 x Line-out, / 1 x CMOS reset button / 1 x Mic-in	4 x RS-232 / 2 x PS/2 mouse and keyboard interface / 1 x RS-232/422/485 / 2 x RJ-45 for LAN Port / 1 x LPT / 4 x USB 2.0 / 1 x Power Switch / 1 x VGA Port / 1 x AT / ATX Switch / 1 x Line-in, 1 x Line-out, / 1 x CMOS reset button / 1 x Mic-in
Drive Bay	HDD Driver Bay	1 x 2.5" SATA/IDE HDD bay with anti-shock		
	SSD	CF Type II, mSATA (optional)	CF Type II	CF Type II
	CD-ROM Driver Bay	SATA Slim Type CD-ROM Bay		
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot,	Either 1 x PCI or PCIe x1 expansion slot (PCI riser card built-in, optional PCIe x1 riser card)	Either 1 x PCI or PCIe x1 expansion slot (PCI riser card built-in, optional PCIe x1 riser card)
		1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card
Physical	Construction Front Panel	Aluminum	Aluminum die-casting	Aluminum die-casting
	Chassis Construction	Heavy-duty Steel	Heavy-duty steel (SECC)	Heavy-duty steel
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm
	Front Panel Color	Silver (Pantone 8001C)		
	Dimensions (WxHxD) (mm)	410 x 309 x 110.5	410 x 309 x 110.5	410 x 309 x 110.5
	Cut Out Dimensions (WxH) (mm)	387 x 286	387 x 286	387 x 286
	Net Gross Weight	7 Kg / 11 Kg		
Environment	Operation Temperature	-20°C ~ 60°C	-10°C~50°C	-10°C~50°C
	Storage Temperature	-30°C ~ 70°C	-20°C~60°C	-20°C~60°C
	System Cooling	Active with Fan		
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak		
	Shock	10G acceleration part to part (11ms)		
	IP Rating	Front IP66 Compliant	Front IP65 Compliant	Front IP65 Compliant
Power Supply	AC Input	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A	P/N: 63000-ACEA618APPC-RS -180W Power Supply - Input: 90VAC~264VAC,50/60Hz - Output(max.): 3.3A@14A, 5V@16A,12V@14A, 12V@0.5A	P/N: ACE-A622A-RS-R11 - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A,12V@10A, -12V@0.8A
	DC Input	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A	P/N: ACE-4520C-RS,200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A	P/N: ACE-4520C-RS,200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A

Sidebar

1 — IEI Mobile Solutions
2 — Automation Panel Solutions
3 — RISC-based Solutions
4 — PACSmate Medical Solutions
5 — Optional Peripherals

Ordering Information

Part No.		Description
Intel® H61 Platform	PPC-5150A-H61-P/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5150AD-H61-P/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C , touch screen, RoHS
	PPC-5150A-H61-i3/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5150AD-H61-i3/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS
	PPC-5150A-H61-i5/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5150AD-H61-i5/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C , touch screen, RoHS
Intel® 945G Platform	PPC-5150A-R11/9455-E2160/A618A/T-R/1GB	15" 350 cd/m² XGA Panel PC with POS-9455 R11 version,Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, Silver color,PSU ACE-A618AP, touch screen, RoHS
	PPC-5150A-R11/9455-E2160/4520C/T-R/1GB	15" 350 cd/m² XGA Panel PC with POS-9455 R11 version, Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM,Silver color, PSU ACE-4520C, touch screen, RoHS
Intel® G41 Platform	PPC-5150A-G41-E15/R/1G-R10	15" 350 cd/m² XGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
	PPC-5150A-G41-Q94/R/1G-R10	15" 350cd/m² XGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
	PPC-5150AD-G41-E15/R/1G-R10	15" 350 cd/m² XGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card
Riser Card	PCIR-01H-R10	1-Slot PCI riser card
	PCIER-101H-R10	1-Slot PCIe x 1 riser card

Packing List

Item	Part No.	Description
SATA CD-ROM Cable	32803-000300-100-RS	SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER ,L=200/150mm.
Power Cord	32000-000002-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V)
Panel Mount Kit	19Z00-000024-RS	
Wall Mount Kit	41020-016102-00-RS	
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Pen		
User's Manual CD-ROM		

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-150MS-R10 (for PPC-5150A series)
ARM	ARM-31-RS
STAND	STAND-210-R11

Options

Part Number	Description
19Z00-000112-RS	IDE CD-ROM Installation Kit (W/O IDE cable)
41019-0393C0-00-RS	IDE HDD Bracket
32200-000037-RS	25cm HDD IDE Cable
PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-5150A-H61, PPC-5170A-H61
73400-AD7760H01-RS	Slim type SATA DVD-ROM

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

PPC-5150A Dimensions *(Unit: mm)*

1 x PS/2 for keyboard
1 x PS/2 for mouse
Either 1 x PCI slot
or 1 x PCIe x 1 slot
(Optional riser card)
Power switch
1 x RS-232/422/485
AT/ATX switch
1 x LPT
AC Inlet   4 x USB 2.0
4 x RS-232
2 x LAN
1 x CF slot
1 x VGA
1 x Line-in, 1 x Line-out
1 x Mic-in
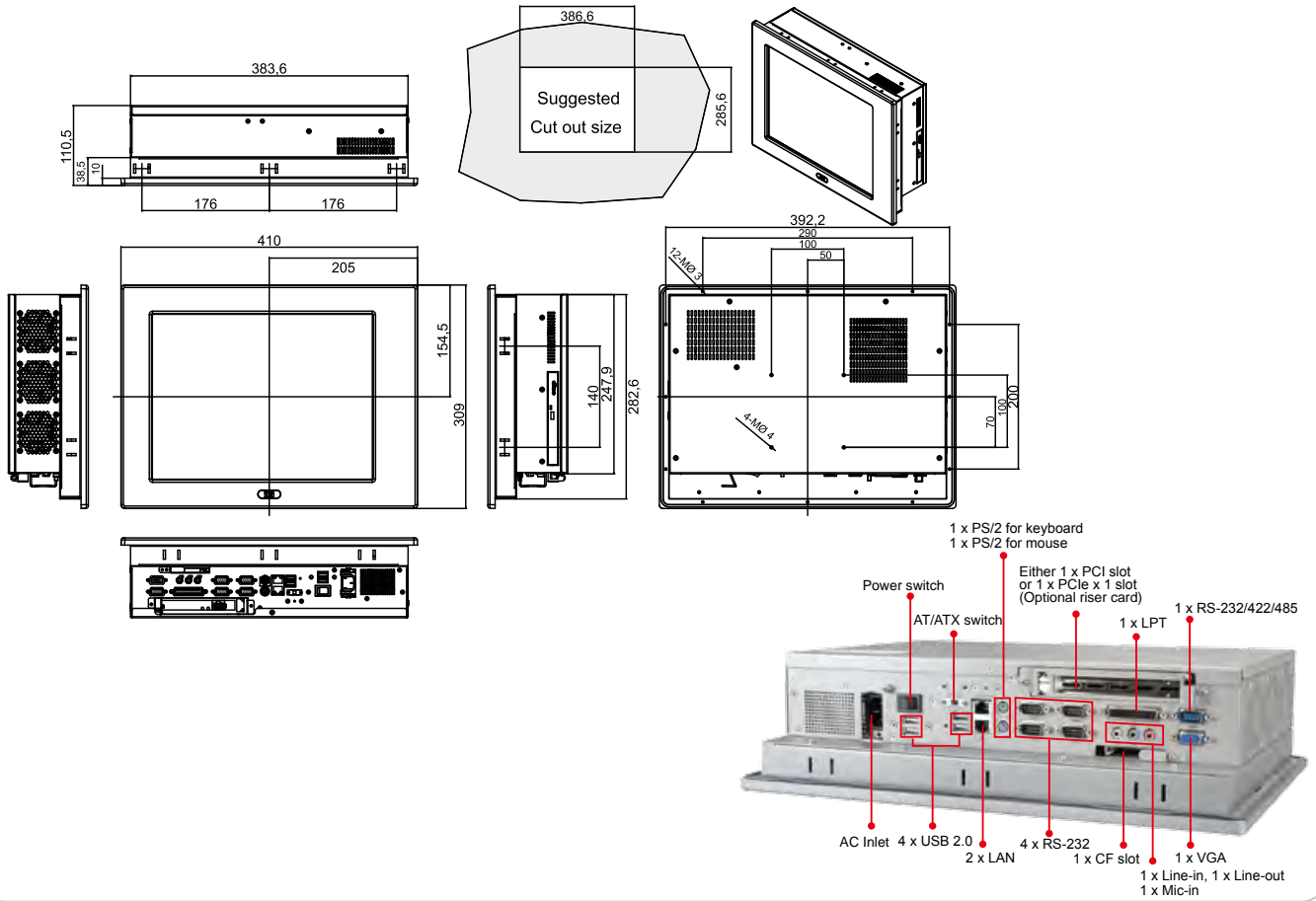
PPC-5150A-H61 Dimensions *(Unit: mm)*
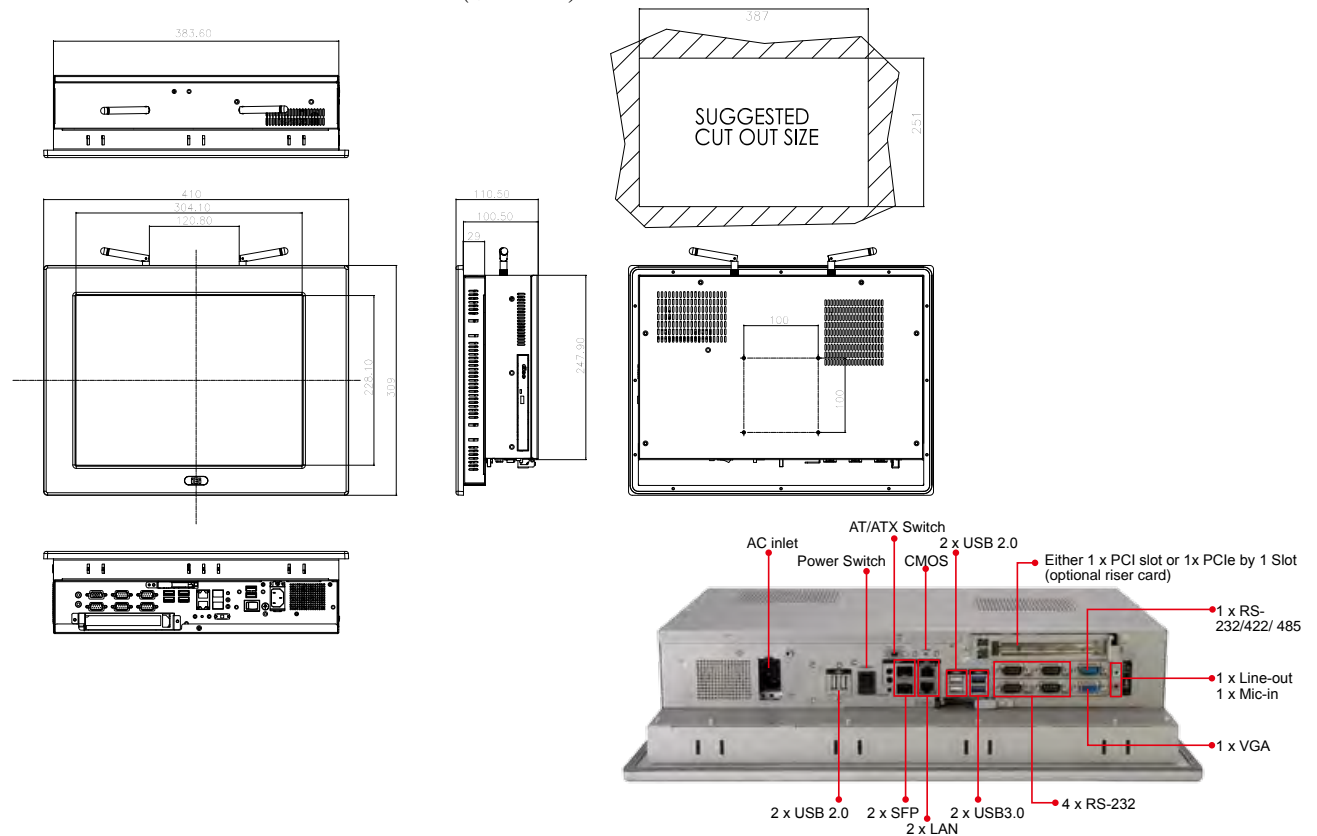
SUGGESTED CUT OUT SIZE

AC inlet
AT/ATX Switch
2 x USB 2.0
Power Switch   CMOS
Either 1 x PCI slot or 1x PCIe by 1 Slot
(optional riser card)
1 x RS-232/422/ 485
1 x Line-out
1 x Mic-in
1 x VGA
2 x USB 2.0   2 x SFP   2 x USB3.0   4 x RS-232
2 x LAN

17" Industrial Panel PC

PPC-5170A-H61	Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor	**New**
PPC-5170A/9455	Intel® Core™2 Duo Processor with Intel® 945G Platform	
PPC-5170A-G41	Intel® Core™ 2 Extreme Processor with Intel® G41 Platform	

- Intel® H61 Express Chipset with 2nd/3rd generation Intel® Core™, Pentium® and Celeron® processor
- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCIe Mini 802.11b/g/n wireless module
- Optional PCI / PCIe by 1 expansion slot
- Optional Slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel for PPC-5170A-H61
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

Wireless 802.11 b/g/n · Intel® H61 · IP66 · SFP Fiber · MOUNT · One Key Recovery F3 iEi symantec.

Specifications

Model		PPC-5170A-H61	PPC-5170A/9455	PPC-5170A-G41
Display	LCD Size	17"		
	Max Resolution	1280(W) x 1024(H)		
	Brightness (cd/m²)	350	300	380
	Contrast Ratio	800 : 1		1000 : 1
	LCD Color	16.7M		
	Pixel Pitch (mm) (HxV)	0.264(H) x 0.264(V)		
	Viewing Angle (V/H)	170°/ 160°	160°/ 160°	160°/170°
	Backlight MTBF (hrs)	50000		
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	DMC 9000	DMC 9000	DMC 9000
Motherboard	SBC	POS-H61	POS-9455	POS-G41
	CPU	2nd/3rd Generation Intel® Core™ Core i7/ i5/ i3, Pentium® and Celeron® processor	LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz	LGA 775 Intel® Core™ 2 Extreme/Quad/Duo, Celeron with a 1333/1066/800MHz FSB support
	Chipset	Intel® H61	Intel® 945G + ICH7R	Intel® G41 + Intel® ICH7
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16G)	Two 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules (Max. 4G)	2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111CP GbE controller	Realtek RTL8111CP GbE controller
	Audio Codec	Realtek ALC662 audio codec	Realtek ALC888 audio codec	Realtek ALC888 audio codec
I/O Ports and Switches		4 x RS-232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot	4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface 1 x Power Switch 1 x AT / ATX Switch 1 x LPT 1 x CMOS reset button	4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface Power Switch AT / ATX Switch 1 x LPT CMOS reset button
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shock		
	SSD	CF Type II, mSATA	CF Type II	CF Type II
	CD-ROM Driver Bay	SATA Slim Type CD-ROM Bay		
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot	Either 1 x PCI or PCIe x1 expansion slot (PCI riser card built-in, optional PCIe x1 riser card)	Either 1 x PCI or PCIe x1 expansion slot / Either 1 x PCI or PCIe x1 expansion slot
		1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card / 1 x PCIe Mini card
Physical	Construction Front Panel	Aluminum	Aluminum Die-casting	Aluminum Die-casting
	Chassis Construction	Heavy-duty Steel	Heavy-duty steel (SECC)	Heavy-duty steel (SECC)
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm		
	Front Panel Color	Silver (Pantone 8001C)		
	Dimensions (WxHxD) (mm)	452 x 356 x 115	452 x 356 x 115	452 x 356 x 115
	Cut Out Dimensions (WxH) (mm)	426 x 331	425 x 331	424.5 x 330.5
	Net /Gross Weight	8 Kg / 12 Kg		
	IP Rating	Front IP66 Compliant	Front IP 65 Compliant	Front IP 65 Compliant
Environment	Operation Temperature	-20°C ~ 50°C	-10°C~50°C	-10°C~50°C
	Storage Temperature	-30°C ~ 70°C	-20°C~60°C	-20°C~60°C
	System Cooling	Active with Fan		
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak		
	Shock	10G acceleration part to part (11ms)		
Power Supply	AC Input	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A	P/N: 63000-ACEA618APPC-RS -180W Power Supply - Input: 90VAC~264VAC,50/60Hz - Output (max.): 3.3A@14A, 5V@16A,12V@14A, -12V@0.5A	P/N: ACE-A622A-RS-R11 -220W power supply -Input: 90VAC~264VAC, 50/60Hz -Output (max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A
	DC Input	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A	P/N: ACE-4520C-RS -200W power supply -Input: 24 VDC(18~36 VDC) -Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A	P/N: ACE-4520C-RS -200W power supply -Input: 24 VDC(18~36 VDC) -Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Ordering Information

Part No.		Description
Intel® H61 Platform	PPC-5170A-H61-P/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5170AD-H61-P/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C, touch screen, RoHS
	PPC-5170A-H61-i3/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5170AD-H61-i3/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C, touch screen, RoHS
	PPC-5170A-H61-i5/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5170AD-H61-i5/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C, touch screen, RoHS
Intel® 945G Platform	PPC-5170A-R11/9455-E2160/A622A/T-R/1GB	17" 300 cd/m² SXGA panel PC with POS-9455 R11 version,Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, Silver color,PSU ACE-A622A, touch screen, RoHS
	PPC-5170A-R11/9455-E2160/4520C/T-R/1GB	17" 300 cd/m² SXGA panel PC with POS-9455 R11 version,Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, Silver color, PSU ACE-4520C, touch screen, ,RoHS
Intel® G41 Platform	PPC-5170A-G41-E15/R/1G-R10	17" 380 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
	PPC-5170A-G41-Q94/R/1G-R10	17" 380 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
	PPC-5170AD-G41-E15/R/1G-R10	17" 380 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card
	PPC-5170AD-G41-Q94/R/1G-R10	17" 380 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card
Riser Card	PCIR-01H-R10	1-Slot PCI riser card
	PCIER-101H-R10	1-Slot PCIe x 1 riser card

Packing List

Item	Part No.	Description
SATA CD-ROM Cable	32803-000300-100-RS	SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER , L=200/150mm.
Power Cord	32000-000002-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR (10A 250V)
Panel Mount Kit	19Z00-000024-RS	
Wall Mount Kit	41020-016102-00-RS	
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Pen		
User's Manual CD-ROM		

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-170MS-R10 (for PPC-5170A series)
ARM	ARM-31-RS
STAND	STAND-210-R11

Options

Part Number	Description
19Z00-000112-RS	IDE CD-ROM Installation Kit (W/O IDE cable)
41019-0393C0-00-RS	IDE HDD Bracket
32200-000037-RS	25cm HDD IDE Cable
PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-5150A-H61, PPC-5170A-H61
73400-AD7760H01-RS	Slim type SATA DVD-ROM

PPC-5170A Dimensions *(Unit: mm)*

- 1 x PS/2 for keyboard
- 1 x PS/2 for mouse
- Either 1 x PCI slot or 1 x PCIex 1 slot (Optional riser card)
- Power switch
- AT/ATX switch
- 1 x LPT
- 1 x RS-232/422/485
- AC Inlet
- 4 x USB 2.0
- 2 x LAN
- 4 x RS-232
- 1 x CF slot
- 1 x VGA
- 1 x Line-in, 1 x Line-out
- 1 x Mic-in
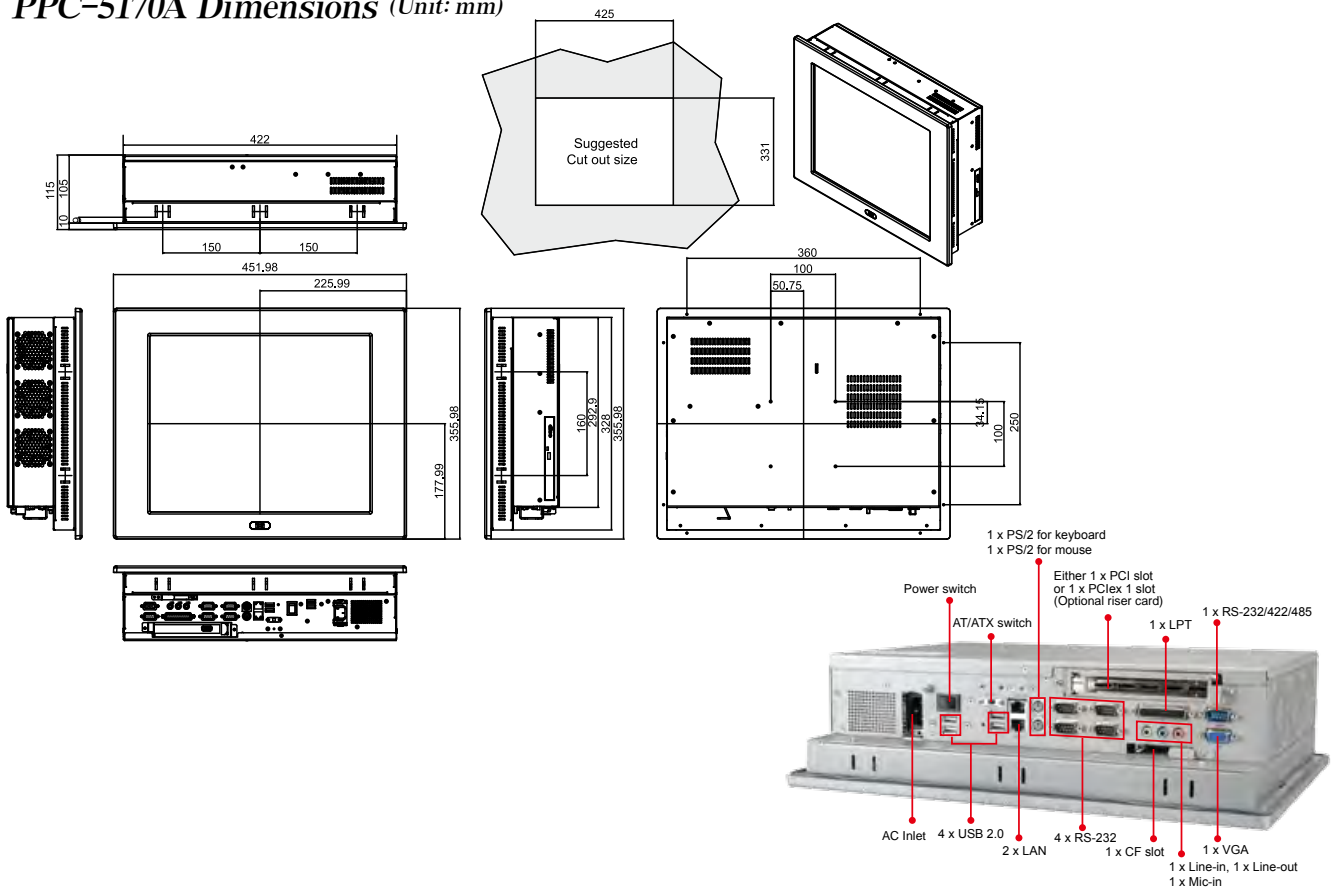
PPC-5170A-H61 Dimensions *(Unit: mm)*
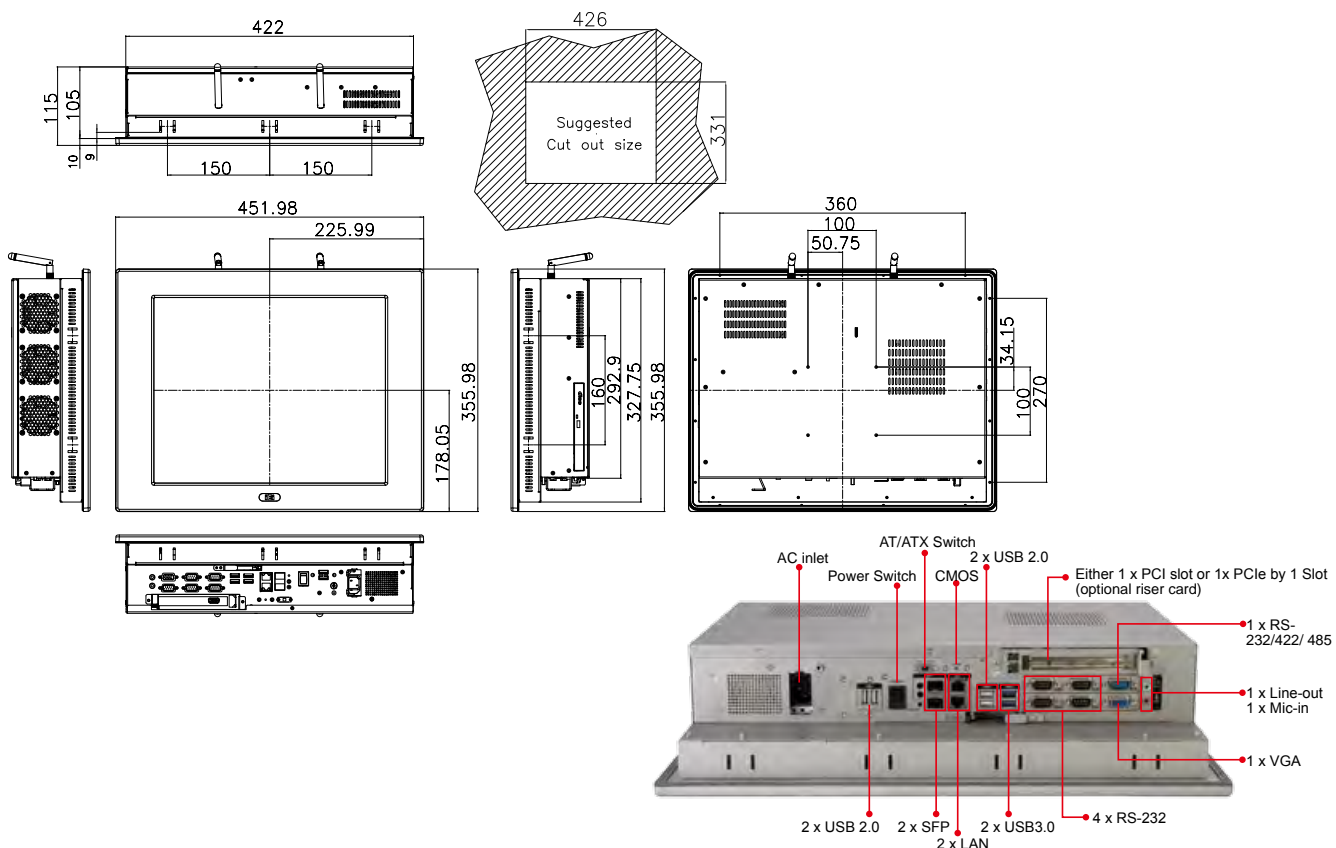
- AC inlet
- AT/ATX Switch
- Power Switch
- CMOS
- 2 x USB 2.0
- Either 1 x PCI slot or 1x PCIe by 1 Slot (optional riser card)
- 1 x RS-232/422/ 485
- 1 x Line-out
- 1 x Mic-in
- 1 x VGA
- 2 x USB 2.0
- 2 x SFP
- 2 x LAN
- 2 x USB3.0
- 4 x RS-232

19" Industrial Panel PC

PPC-5190A-H61
Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor

New

PPC-5190A/9455
Intel® Core™2 Duo Processor with Intel® 945G Platform

PPC-5150A-G41
Intel® Core™ 2 Extreme Processor with Intel® G41 Platform

- Intel® H61 Express Chipset with 2nd/3rd generation Intel® Core™, Pentium® and Celeron® processor
- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCIe Mini 802.11b/g/n wireless module
- Optional PCI / PCIe by 1 expansion slot
- Optional Slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel for PPC-5190A-H61
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

Wireless 802.11 b/g/n · Intel® H61 · IP66 · SFP Fiber · MOUNT · F3 One Key Recovery iEi symantec.

Specifications

Model		PPC-5190A-H61	PPC-5190A/9455	PPC-5190A-G41
Display	LCD Size	19"		
	Max Resolution	1280(W) x 1024(H)		
	Brightness (cd/m²)	350	300	380
	Contrast Ratio	1000 : 1	700 : 1	1000 : 1
	LCD Color	16.7M		
	Pixel Pitch (mm) (HxV)	0.294(H) x 0.294(V)		
	Viewing Angle (V/H)	160°/ 170°		
	Backlight MTBF (hrs)	50,000		
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	DMC 9000	DMC 9000	DMC 9000
Motherboard	SBC	POS-H61	POS-9455	POS-G41
	CPU	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor	LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz	LGA 775 Intel® Core™ 2 Extreme/Quad/Duo, Celeron with a 1333/1066/800MHz FSB support
	Chipset	Intel® H61	Intel® 945G + ICH7R	Intel® G41 + Intel® ICH7
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16G)	Two 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules (Max. 4G)	2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111CP GbE controller	Realtek RTL8111CP GbE controller
	Audio Codec	Realtek ALC662 audio codec	Realtek ALC888 audio codec700 : 1	Realtek ALC888 audio codec
I/O Ports and Switches		4 x RS-232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 6 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port	1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot	4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 6 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in	2 x PS/2 mouse and keyboard interface 1 x Power Switch 1 x AT / ATX Switch 1 x LPT	4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 6 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in	2 x PS/2 mouse and keyboard interface 1 x Power Switch 1 x AT / ATX Switch 1 x LPT
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook	1 x 2.5" SATA HDD bay with anti-shock	1 x 2.5" SATA HDD bay with anti-shock
	SSD	CF Type II, mSATA	CF Type II	CF Type II
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot	Either 1 x PCI or PCIe x1 expansion slot (optional)	Either 1 x PCI or PCIe x1 expansion slot
		1 x PCIe Mini card	1 x PCIe Mini card	1 x PCIe Mini card
Physical	Construction Front Panel	Aluminum		
	Chassis Construction	Heavy-duty Steel		
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm		
	Front Panel Color	Silver (Pantone 8001C)		
	Dimensions (WxHxD) (mm)	482 x 399 x 115	483 x 399 x 115.2	483 x 399 x 115.2
	Cut Out Dimensions (WxH) (mm)	450 x 363	450 x 363	450 x 363
	Net / Gross Weight	12.6 Kg / 18.2 Kg	12.6 Kg / 18.2 Kg	12.6 Kg / 18.2 Kg
Environment	Operation Temperature	-10°C ~ 50°C	-10°C ~ 50°C	-10°C~50°C
	Storage Temperature	-20°C ~ 60°C	-20°C ~ 60°C	-20°C~60°C
	System Cooling	Active with Fan		
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak		
	Shock	10G acceleration part to part (11ms)		
	IP Rating	Front IP66 Compliant	Front IP 65 Compliant	Front IP 65 Compliant
Power Supply	AC Input	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A	P/N: 63000-ACEA622APPC-RS- 220W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A	P/N: ACE-A622A-RS-R11 - 220W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A
	DC Input	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A	P/N: ACE-4520C-RS - 200W Power Supply - Input: 24VDC, 50/60Hz - Output (max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A	P/N: ACE-4520C-RS - 200W Power Supply - Input: 24VDC, 50/60Hz - Output (max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A

Sidebar:
1 IEI Mobile Solutions
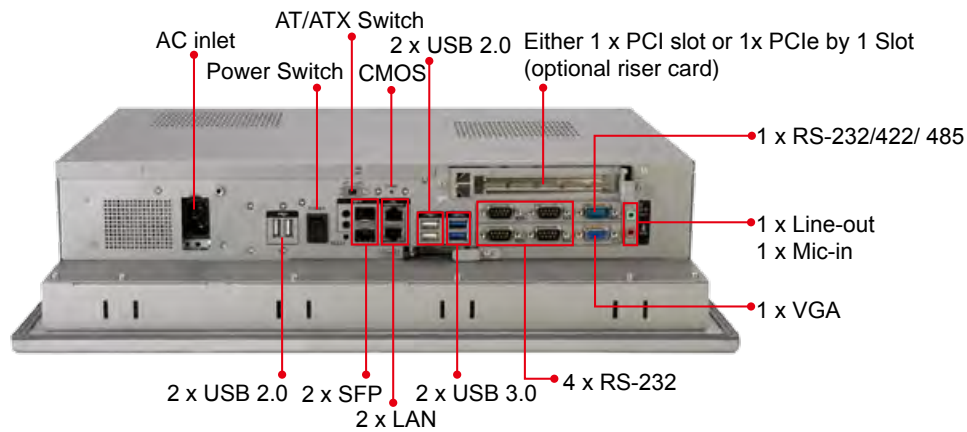2 Automation Panel Solutions
3 RISC-based Solutions
4 PACSmate Medical Solutions
5 Optional Peripherals

Ordering Information

Part No.		Description
Intel® H61 Platform	PPC-5190A-H61-P/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual CoreG6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5190AD-H61-P/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color,PSU ACE-4520C, touch screen, RoHS
	PPC-5190A-H61-i3/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5190AD-H61-i3/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color,PSU ACE-4520C, touch screen, RoHS
	PPC-5190A-H61-i5/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5190AD-H61-i5/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color,PSU ACE-4520C, touch screen, RoHS
Intel® 945G Platform	PPC-5190A-R11/9455-E2160/A622A/T-R/1GB	19" 450 cd/m² SXGA panel PC with POS-9455 R11 version,Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, Silver color,PSU ACE-A622A, touch screen, RoHS
	PPC-5190A-R11/9455-E2160/4520C/T-R/1GB	19" 450 cd/m² SXGA panel PC with POS-9455 R11 version,Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, Silver color, PSU ACE-4520C, touch screen, ,RoHS
Intel® G41 Platform	PPC-5190A-G41-E15/R/1G-R10	19" 450 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
	PPC-5190A-G41-Q94/R/1G-R10	19" 450 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
	PPC-5190AD-G41-E15/R/1G-R10	19" 450 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM,silver color, PSU ACE-4520C, touch screen, w/o riser card
	PPC-5190AD-G41-Q94/R/1G-R10	19" 450 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM,silver color, PSU ACE-4520C, touch screen, w/o riser card
Riser Card	PCIR-01H-R10	1-Slot PCI riser card
	PCIER-101H-R10	1-Slot PCIe x 1 riser card

PCIER-101H-R10

PCIe x4 slot with PCIe x1 signal riser card

PCIR-01H-R10

One Slot PCI riser card

Packing List

Item	Part No.	Description
User's Manual CD-ROM		
SATA CD-ROM Cable	32803-000300-100-RS	SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER ,L=200/150mm.
Power Cord	32000-000002-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V)
Panel Mount Kit	19Z00-000024-RS	
Wall Mount Kit	41020-016102-00-RS	
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Pen		

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-190MS-R10
ARM	ARM-31-RS
STAND	STAND-210-R11

Options

Part Number	Description
19Z00-000112-RS	IDE CD-ROM Installation Kit (W/O IDE cable)
41019-0393C0-00-RS	IDE HDD Bracket
32200-000037-RS	25cm HDD IDE Cable
PPC-WL-KIT03-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-5190A-H61
73400-AD7760H01-RS	Slim type SATA DVD-ROM

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

PPC-5190A
Fully Integrated I/O

1 x PS/2 for keyboard
1 x PS/2 for mouse
Reset button
AT/ATX switch
Either 1 x PCI slot or 1 x PCIex 1 slot (Optional riser card)
1 x LPT
1 x RS-232/422/485
AC Inlet
Power switch
6 x USB 2.0
2 x LAN
4 x RS-232
1 x VGA
1 x Line-in
1 x Line-out
1 x Mic-in
1 x CF slot
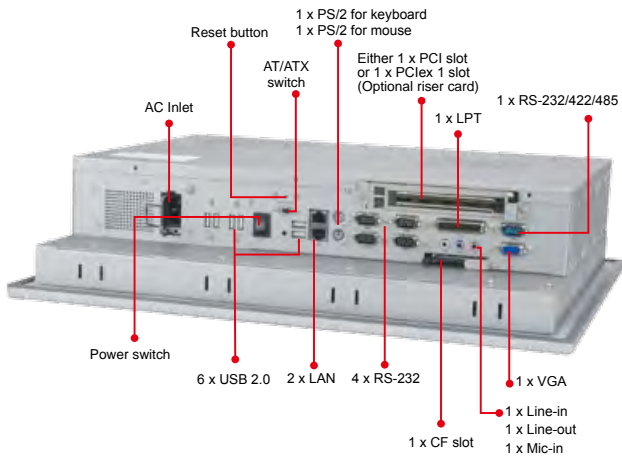
PPC-5190A-H61
Fully Integrated I/O

AT/ATX Switch
2 x USB 2.0
AC inlet
Power Switch
CMOS
Either 1 x PCI slot or 1x PCIe by 1 Slot (optional riser card)
1 x RS-232/422/ 485
1 x Line-out
1 x Mic-in
1 x VGA
2 x USB 2.0
2 x SFP
2 x USB3.0
4 x RS-232
2 x LAN
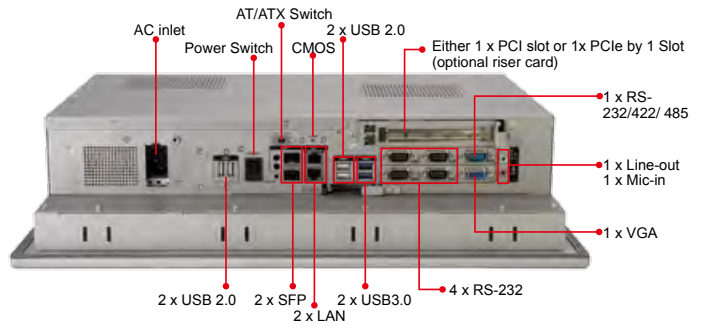
PPC-5190A
Dimensions *(Unit: mm)*

447
115.20
110
342
482.39
241.19
199.54
399.09
240
120
294
360
460
300
100
50
260
363
25.53
100
450
Suggested cut out size
LC
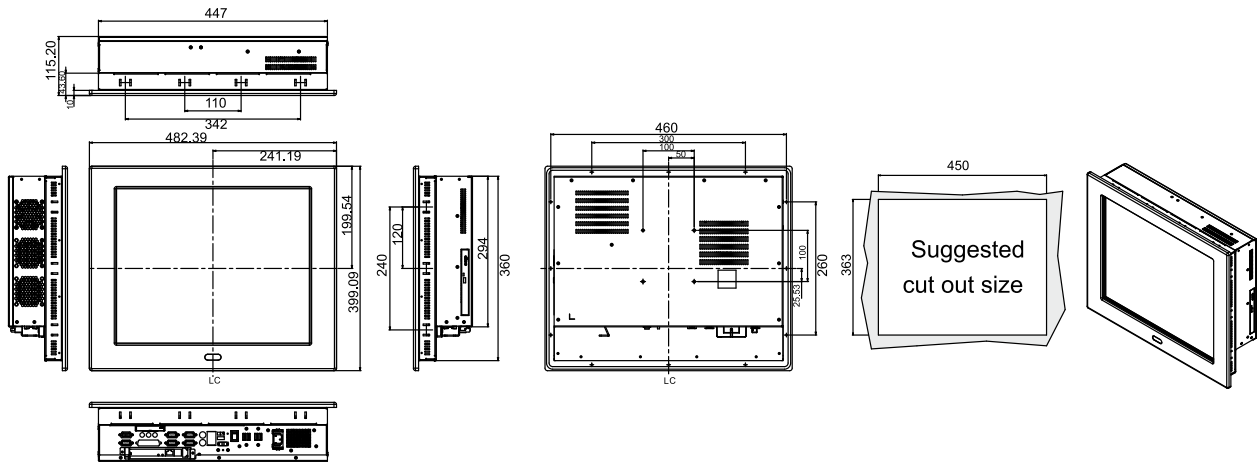
PPC-5190A-H61
Dimensions *(Unit: mm)*
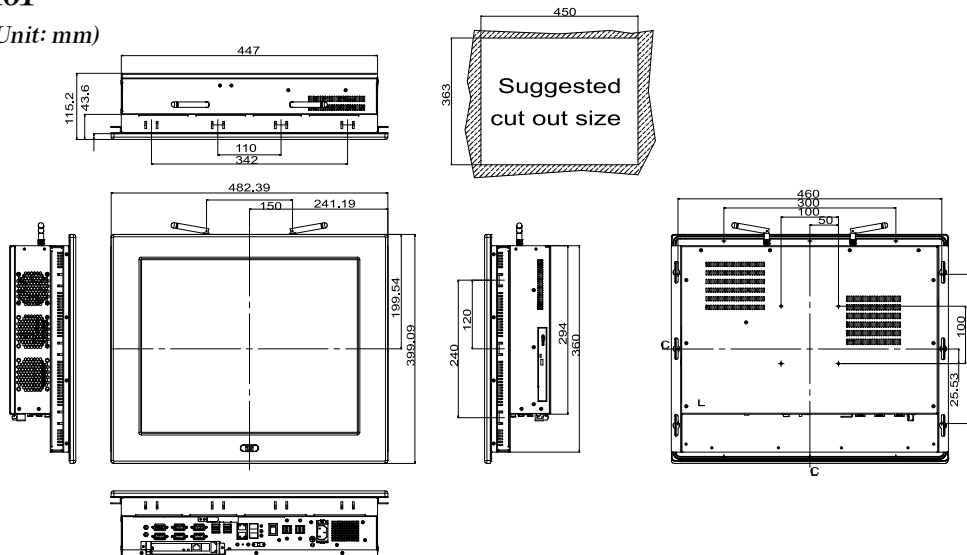
450
363
Suggested cut out size
447
115.2
43.6
110
342
482.39
150
241.19
199.54
399.09
240
120
294
360
460
300
100
50
260
100
25.53

1
IEI Mobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

WIDS Series Selection Guide

LCD Size	15"	17"
Model	**WIDS-515A-H61**	**WIDS-517A-H61**

		15"	17"
Display	LCD Size	15 "	17 "
	Max Resolution	1024(W) x 768(H)	1280(W) x 1024(H)
	Brightness (cd/m²)	400	350
	Contrast Ratio	700:1	800 : 1
	LCD Color	16.2M	16.7M
	Pixel Pitch (mm) (HxV)	0.297(H) x 0.297(V)	0.264(H) x 0.264(V)
	Viewing Angle (V/H)	140°/ 160°	170°/ 160°
	Backlight MTBF (hrs)	50000	50000
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	DMC 9000	DMC 9000
Motherboard	CPU	2nd/3rd Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor
	Chipset	Intel® H61	Intel® H61
	RAM	Support 2 x 204-pin DDR3 SO-DIMM slot (max. 16G)	Support 2 x 204-pin DDR3 SO-DIMM slot (max. 16G)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	IRealtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 2 x SFP Fiber LAN 4 x USB 2.0, 2 x USB3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/ PCIe expansion slot	4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/ PCIe expansion slot
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook	1 x 2.5" SATA HDD bay with anti-shook
	SSD	CF Type II, mSATA (optional)	CF Type II, mSATA (optional)
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	Slim Type CD-ROM Bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot	Either 1 x PCI slot or 1 x PCIe slot
		1 x PCIe Mini card	1 x PCIe Mini card
System Cooling			Active with Fan
Environment	Operation Temperature	-20°C ~ 60°C	-20°C ~ 60°C
	Storage Temperature	-30°C ~ 70°C	-30°C ~ 70°C

1 IEI Mobile Solutions

2 **Automation Panel Solutions**

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

WIDS Industrial Panel PC

WIDS-515A-H61
15" IP65 Heavy Industrial Panel PC with Wi-Fi **New**

WIDS-517A-H61
17" IP65 Heavy Industrial Panel PC with Wi-Fi **New**

- Intel® H61 Express Chipset with 2nd/3rd Generation Intel® Core™, Pentium® and Celeron® processor
- Built-in mini PCIe 802.11b/g/n wireless module for panel mount installation
- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe by 1 expansion slot
- Optional Slim type CD-ROM drive bay
- IP 65 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

Intel® H61 | Wireless 802.11 b/g/n | IP 65 | MOUNT | F3 One Key Recovery iEi symantec.

Specifications

Model		WIDS-515A	WIDS-517A
Display	LCD Size	15"	17"
	Max Resolution	1024(W) x 768(H)	1280(W) x 1024(H)
	Brightness (cd/m²)	400	350
	Contrast Ratio	700:1	800:1
	LCD Color	16.2M	16.7M
	Pixel Pitch (mm)	0.297 x 0.297	0.264 x 0.264
	Viewing Angle (V-H)	140°/160°	170°/160°
	Backlight MTBF (hrs)	50,000	50,000
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	DMC 9000	DMC 9000
Motherboard	SBC Model	POS-H61	POS-H61
	CPU	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor
	Chipset	Intel® H61	Intel® H61
	RAM	Support 2 x 204-pin DDR3 SO-DIMM slot (max. 16G)	Support 2 x 204-pin DDR3 SO-DIMM slot (max. 16G)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	IRealtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 2 x SFP Fiber LAN 4 x USB 2.0 & 2 x USB3.0 on rear 2 x USB 2.0 on front 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/ PCIe expansion slot	4 x RS232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 2 x SFP Fiber LAN 4 x USB 2.0 & 2 x USB3.0 on rear 2 x USB 2.0 on front 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/ PCIe expansion slot
Driver Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook	1 x 2.5" SATA HDD bay with anti-shook
	SSD	CF Type II, mSATA (optional)	CF Type II, mSATA (optional)
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	Slim Type CD-ROM Bay
Wireless		IEEE 802.11b/g/n 2T2R mode WLAN via internal PCIe Mini card interface	IEEE 802.11b/g/n 2T2R mode WLAN via internal PCIe Mini card interface
Extension Slot		Either 1 x PCI slot or 1 x PCIe slot 1 x PCIe mini card	Either 1 x PCI slot or 1 x PCIe slot 1 x PCIe mini card
Physical	Construction Front Panel	Aluminum	Aluminum
	Construction Chasis	Heavy-duty Steel	Heavy-duty Steel
	Mounting Front Panel Color	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm Silver (Pantone 8001C)	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm Silver (Pantone 8001C)
	Dimension (WxHxD) (mm)	410 x 329 x 123	452 x 376 x 123
	Net Gross Weight	7 Kg / 11 Kg	8 Kg / 12 Kg
	Operation Temperature (°C) (Ambient with air flow)	-20°C ~ 60°C	-20°C ~ 60°C
	Environment StorageTemperature (°C)	-30°C ~ 70°C	-30°C ~ 70°C
	Humidity	10% to 95% (non-condensing)	10% to 95% (non-condensing)
	Vibration	5~17Hz, 0.1" double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak	5~17Hz, 0.1" double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak
	Shoock	10G acceleration part to part (11ms)	10G acceleration part to part (11ms)
Power Supply	ATX AC-Input	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A
	DC Input	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

IO Interface

AC inlet
AT/ATX Switch
2 x USB 2.0
Power Switch
CMOS
Either 1 x PCI slot or 1x PCIe by 1 Slot
(optional riser card)

1 x RS-232/422/ 485

1 x Line-out
1 x Mic-in

1 x VGA

4 x RS-232

2 x USB 2.0
2 x SFP
2 x USB 3.0
2 x LAN

Ordering Information

Part No.		Description
15"	WIDS-515A-H61-P/R-R10	15" 400 cd/m2 XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-515AD-H61-P/R-R10	15" 400 cd/m2 XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C , touch screen, RoHS
	WIDS-515A-H61-i3/R-R10	15" 400 cd/m2 XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-515AD-H61-i3/R-R10	15" 400 cd/m2 XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C , touch screen, RoHS
	WIDS-515A-H61-i5/R-R10	15" 400 cd/m2 XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-515AD-H61-i5/R-R10	15" 400 cd/m2 XGA Panel PC with POS-H61, CCore i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C , touch screen, RoHS
17"	WIDS-517A-H61-P/R-R10	17" 350 cd/m2 SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-517AD-H61-P/R-R10	17" 350 cd/m2 SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS
	WIDS-517A-H61-i3/R-R10	17" 350 cd/m2 SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-517AD-H61-i3/R-R10	17" 350 cd/m2 SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS
	WIDS-517A-H61-i5/R-R10	17" 350 cd/m2 SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-517AD-H61-i5/R-R10	17" 350 cd/m2 SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS
Riser Card	PCIR-01H-R10	1-Slot PCI riser card
	PCIER-101H-R10	1-Slot PCIe x1 riser card

Packing List

Item	Part No.	Description
SATA CD-ROM Cable	32803-000300-100-RS	SATA 7+6 P TO SATA 7P /4P POWER
Power Cord	32702-000200-100-RS	EUROPEAN Standard ,1830MM
Panel Mount Kit	19Z00-000024-RS	
Wall Mount Kit	41020-016102-00-RS	WALL MOUNT BRACKET
	41014-057602-00-RS	ULTRA SET PLATE
Touch Pen	43125-0002C0-00-RS	
User's Manual CD-ROM	IEI-7B000-000543-RS	For WIDS-51xA-G41
IEI One Key Recovery CD	IEI-7B000-000478-RS	

IQ Mounting Options

Item	WIDS-515A	WIDS-517A
Panel Mount Kit	PK-170M	
Wall Mount Kit	WK-190MS-R10	
Rack Mount Kits	WIDSRK-150MS-R10	WIDSRK-170MS-R10
Stand	STAND-210-R11	
ARM	ARM-31-RS	

Options

Part Number	Description
73400-AD7760H01-RS	Slim type SATA DVD-ROM
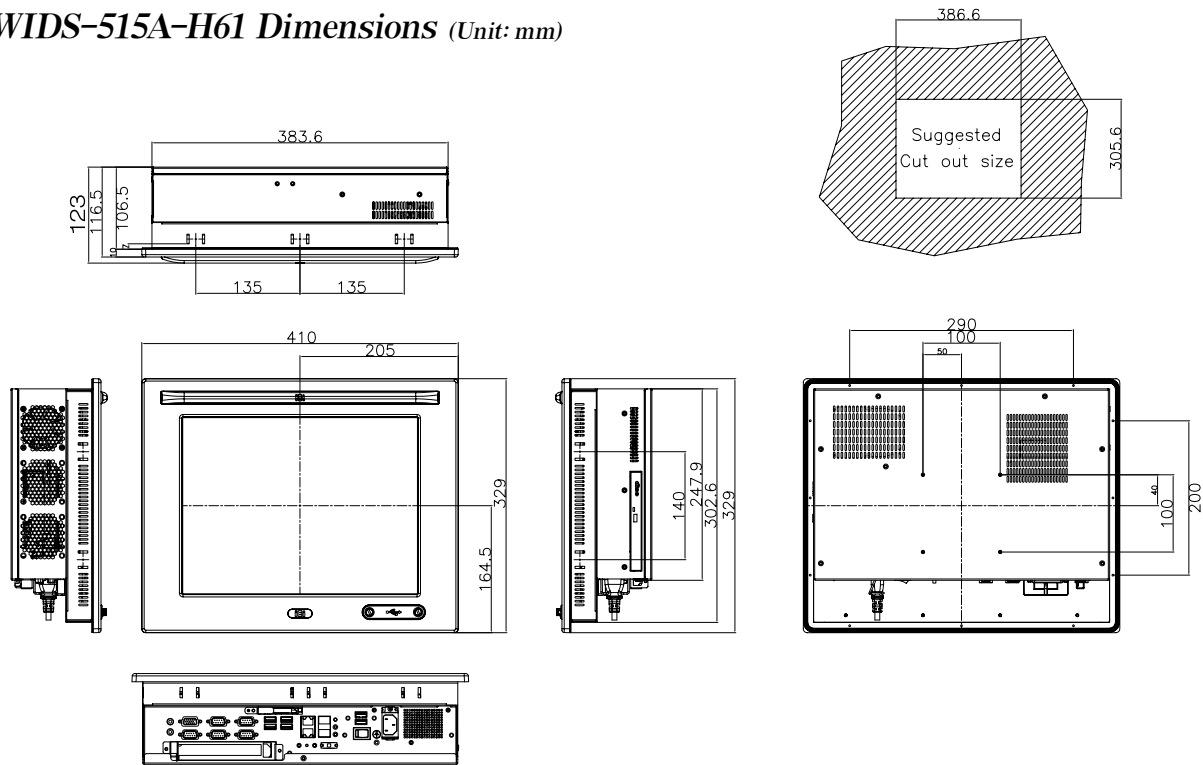
WIDS-515A-H61 Dimensions *(Unit: mm)*

WIDS-517A-H61 Dimensions *(Unit: mm)*
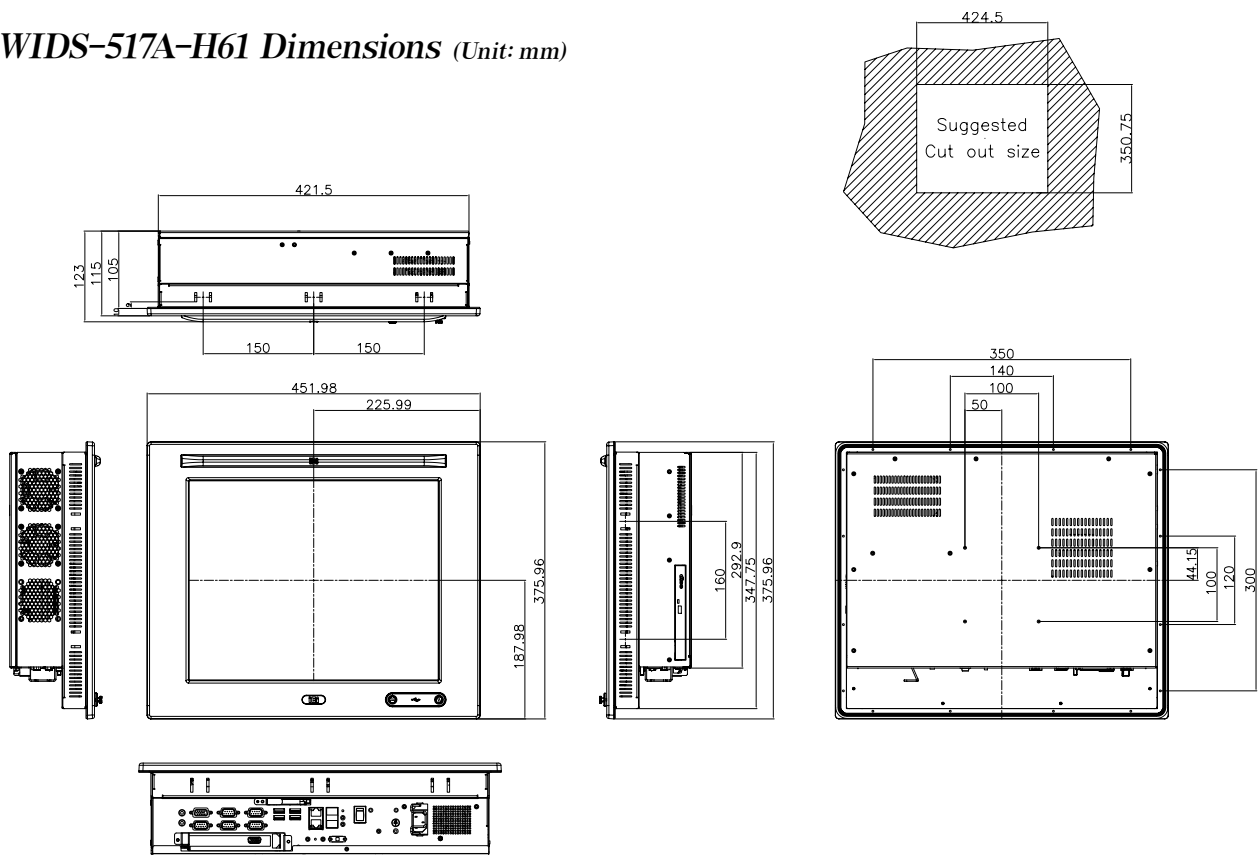
Industrial Vertical Market PPC Selection Guide

Model		S12A(SR)-N270	UPC-V312-D525	UPC-V315-NM70	UPC-V315-QM77	UPC-12AH/GM45
Display	**LCD Size**	12.1"	12.1"	15 "	15 "	12.1"
	Max Resolution	1024 x 768	1024 x 768	1024(W) x 768(H)	1024(W) x 768(H)	1024 x 768
	Brightness (cd/m²)	400 (1000)	600	400	400	450 (1000)
	Contrast Ratio	500 : 1 (700 : 1)	700 : 1	700:1	700:1	700 : 1
	LCD Color	262K	16.2M	16.2M	16.2M	262K
	Pixel Pitch (mm) (HxV)	0.240 (H) x 0.240 (V)	0.240 (H) x 0.240 (V)	0.297(H) x 0.297(V)	0.297(H) x 0.297(V)	0.240 (H) x 0.240 (V)
	Viewing Angle (V/H)	120°/100° (120°/130°)	150° / 130°	125°/ 140°	125°/ 140°	160°/160° (120°/130°)
	Backlight MTBF (hrs)	60000 (50000)	50000	50000	50000	50000
Touch	**Touch screen**	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch controller	PENMOUNT 6000	DMC 9000	DMC 9000	DMC 9000	DMC 9000
Motherboard	**CPU**	Intel® Atom™ N270 1.6GHz CPU	Intel® Atom™ D525 1.8GHz dual core processor	Intel® Celeron® Processor 847	Intel® Core™ i3-3217UE Processor	Intel® Celeron M 575 2.0Ghz CPU/ Intel® Core 2 Duo P8400 2.26 GHz CPU / Intel® Core 2 Duo T9400 2.53GHz CPU
	Chipset	Intel® 945GSE + ICH7M	Intel® ICH8M	Mobile Intel® NM70 Express Chipset	Mobile Intel® QM77 Express Chipset	Intel® GM45+ICH9M
	RAM	Supports one 400/533MHz DDR2 SO-DIMM (2GB Max.)	On-board 1G DDR3 SO-DIMM (System Max. 1GB)	Built in 1*2GB DDRIII memory (System Max. 8GB; on board Max. 4GB socket Max. 4GB)	Built in 1*2GB DDRIII memory (System Max. 8GB; on board Max. 4GB socket Max. 4GB)	Supports two 667/800 MHz DDR2 SO-DIMM (4GB Max.)
	Ethernet	Realtek RTL8111CP PCIe GbE controller	Realtek RTL8111CP PCIe GbE controller	INTELWG82579LM GbE PHY	INTELWG82579LM GbE PHY	Realtek RTL8111CP PCIe GbE controller
	Audio Codec	Realtek ALC892 audio codec	Realtek ALC888 audio codec	Realtek ALC892 HD audio codec	Realtek ALC892 HD audio codec	Realtek ALC888 audio codec
I/O Ports and Switches		1 x 5-pin M12 connector for power adapter 1 x 8-pin M12 connector for two USB 1 x 5-pin M12 connector for CAN bus and Audio line out 1 x 8-pin M12 connector for UART RS-232/422/485 1 x 8-pin M12 connector for UART RS-232 1 x 8-pin M12 connector for GbE LAN	RS-422/485 (4-pin box header) RS-232 (DB-9 connector) CAN-bus (3-pin terminal block) GbE LAN (RJ-45 connector) 4 x USB connector Audio jack (Line out, Mic) VGA port (DB-15 connector DC-IN 1 (terminal block) / DC-IN 2 (DC Jack) Reset button AT/ATX switch	3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-BUS 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB2.0 1 x Reset button 1 x Audio jack (Line out ,MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch	3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-BUS 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB2.0 2 x USB3.0 1 x Reset button 1 x Audio jack (Line out ,MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch	3 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 6 x USB 2.0 (2 waterproof USBs in front Panel) 1 x VGA Port 1 x Power Switch 1 x Audio Jack (Lin-out, Mic-in) 1 x Reset Button 1 x 9~28VDC Power Jack 1 x 9~28VDC Power Input Terminal Block 1 x Networking UPS Management Port by RJ-45 Ethernet 1 x UPS Remote Power Switch (2 pin terminal block)
Drive Bay	**HDD Driver Bay**	1 x 2.5" SATA HDD Bay with anti-shock	N/A	1 x 2.5" SATA HDD bay with anti-shook	1 x 2.5" SATA HDD bay with anti-shook	1 x 2.5" SATA HDD Bay with anti-shock
	SSD	CF Type II	CF Type II socket	mSATA	mSATA	CF Type II
	CD-ROM Driver Bay	-	-	-	-	-
Expansion Slot		Built-in 802.11b/g/n Wireless LAN Module (internal Mini PCIe interface)	Mini PCIe slot for Wi-Fi	-	1 x PCIe Mini Card	Built-in 802.11b/g/n Wireless LAN Module (internal Mini PCIe interface)
		-	-	-	-	Either 1 x PCI or PCIex1 expansion slot
System Cooling		Fanless	Fanless	Fanless	Fanless	Active with Fan
Battery	**Capacity**	-	-	-	-	14.8V, 3800 mAH
	UPS run-time	-	-	-	-	30~40 mins
Environment	**Operation Temperature**	-10°C ~50°C	-20°C~60°C	-20°C ~60°C	-20°C ~60°C	-10°C ~50°C
	Storage Temperature	-20°C~60°C	-40°C~85°C	-30°C ~75°C	-30°C ~75°C	-20°C~60°C
IP Rating		IP 67	6-side IP 65	Full IP 65	Full IP 65	Front IP 65

1 IEI Mobile Solutions

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4 PACSmate Medical Solutions

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S12A

12.1" Full IP 67 Panel PC

Full IP 67 Up to 1 meter of submersion

Features:

- 12.1" 1000 nits super high brightness LED available
- IP 67 (NEMA 6) fully-enclosed aluminum die cast enclosure and IP 67 waterproof lockable I/O
- Fanless system integrated with Intel® Atom™ N270 1.6G processor for ultra low voltage
- Supports one 2.0 GB (max.) 400/533 MHz MHz DDR2 SO-DIMM
- Built-in internal Wi-Fi antenna supports 802.11 b/g/n high standard
- CAN-Bus interface for automotive applications
- Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing.
  (Advanced Deep Dimming to Black for sunlight readable model)
- Standard VESA 75/100 compliance

Fanless | Wireless 802.11 b/g/n | IP 67 | Sunlight Readable | CAN-Bus automotiv applications | BC AWARD | COMPUTEX TAIPEI 2009 BEST CHOICE | DNV | One Key Recovery iEi symantec.

Rugged Panel PC with Fanless Intel® Atom™ Processor

The fanless intelligent display computer, S12A, uses a 45 nm Intel® Atom™ processor with up to 1.6 GHz frequency and can be used in harsh and safety-critical applications in transport, avionics, engineering or industrial automation.
Better graphic performance is excellent for kiosk, self-service terminal, and digital signage applications.

Passmark Performance
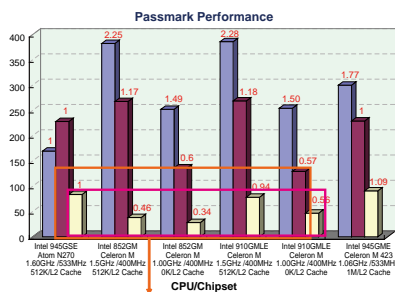
Out Door Control System | National Park Guiding System | Zoo Guide

Evaluating 3D mark performance with different generation CPU and chipset combination, Intel® Atom™ processor is the best solution for low power consumption and better graphic performance choice.

Sunlight Readable

■ Super High Brightness

S12ASR (Sunlight Readable Model) has greatly improved luminance through edge lighting to achieve super high brightness (up to 1000 cd/m²).

■ Low Reflection through AR (Anti-Reflection) Technology

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. S12ASR sunlight readable model offers special AR (anti-reflection) surface treatment to prevent reflection, which ensures excellent visibility in daylight conditions.

Sunlight Sunlight Readable Low Reflection

Reduced Reflection of Light

Super High Brightness: 1000 nits
High Contrast: 700:1
Wide Viewing Angle: 60/60 (R/L) 45/75 (U/D)

IP 67 Fully-Enclosed Design

The S12A is front sealed and tested in the certified house chamber under UL's Witnessed Test Data Program (TDP). IEI follows IP 67 standard testing procedures. This full IP 67 touch monitor provides full IP 67 protection including connectors, cables and screen.

[IP 67] Dust-Tight

First Digit The first digit indicates the level of protection that the enclosure provides against access to hazardous parts

Level		Effective Against
6		No ingress of dust; complete protection against contact

[IP 67] Temporary immersion under water 1m

Second Digit Protection of the equipment inside the enclosure against harmful ingress of water

Level		Effective Against
7		Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1mof submersion)

Sealing enclosure with all sides of IP 67 !

- External Waterproof Rubber
- Waterproof OSD Keypad
- Sealed Back Cover
- IP 67 Connectors
- Internal Waterproof Rubber

■ IP6X Test

• **Test for protection against dust**
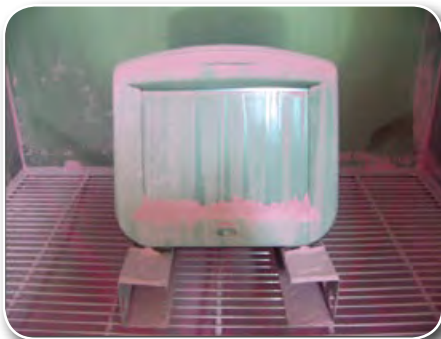
■ IPX7 Test

• **Test for protection against water**
Protected against the effects of temporary immersion between 15 cm and 1m. Duration of test is 30 minutes

Up to 1m of submersion

• **Air Flow Test**
Air pressure measurement is used as the IP 67 test method, the air flow tester is capable of detecting leaks in product and evaluates the pass/fail status of the watertight system.

Uninterrupted Wireless Connection

The S12A series features high speed Wi-Fi IEEE 802.n protocol which builds on previous 802 standards by adding multiple-input multiple-output (MIMO) and 40 MHz operation to the physical (PHY) layer. MIMO uses multiple transmitter and receiver antennas to improve system performance.

802.11 b/g/n ready with invisible antenna

27 times faster data transfer rate compared to 802.11b

Protocol 802.11	Freq. (GHz)	Thru. (Mbit/s)	Data (Mbit/s)	Range indoor (m)	Range outdoor (m)
a	5 GHz	23	54 Mbit/s	~35	~120
b	2.4 GHz	4.3	11 Mbit/s	~38	~140
g	2.4 GHz	19	54 Mbit/s	~38	~140
n	5 GHz and/ or 2.4 GHz	74	300 Mbit/s (2 streams)	~70	~250

802.11b/g Wi-Fi, which gives you up to broadband-speed browsing and connectivity, compared to traditional wired LAN.

The benefits here:
- Simple configuration
- Without hinders worker movement
- Without lessens man-hour productivity
- Without additional purchase of proprietary cables for specific devices
- Without the barrier to space

802.11a	802.11b/g	802.11n
Access to email, instant image and the Internet	Streaming music Streaming video	VoIP /Gaming /NAS
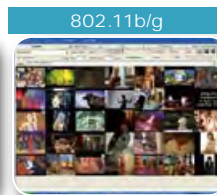
Benefit

PCIe Mini
30 mm

* Half the size of Mini-PCI
* Higher bandwidth interface
* Rigid mechanical spec.

Mini PCI

1 IEI Mobile Solutions

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4 PACSmate Medical Solutions

5 Optional Peripherals

Ambient Light Sensor

The S12A built-in ambient light sensor automatically detects the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

Benefits:
- Provides comfortable viewing and prevents eye strain
- Power saving
- Extended lamp life

Day Mode:
Adjust to maximum 1000 nits
Sunlight Readable automatically

Panel brightness auto-adjustment depends on the ambient light amount to save the system power

Night Mode:
Adjust to acceptable brightness automatically in a insufficient light ambient

CAN-Bus Automotive Applications

The S12A is equipped with automotive applied CAN-Bus interface. The Control Area Network (CAN) is a serial bus system, originally developed by Bosch for use in automobiles, and now is increasingly being used for control in industrial and automotive applications

Controller Area Network

- 1Mb/s data rate
- High reliability bus
- CAN is an open standard with many variants
- Capable of providing real-time communication.

■ CAN in cars and truck engine

- Networking controllers for engine timing, transmission, chassis and brakes.
- Networking components of chassis electronics and electronics which make the vehicle more comfortable. Examples of such multiplex applications are lighting control, air-conditioning, central locking and seat and mirror adjustment.

CAN-Bus automotive applications

Lighting Air Conditioning

Engine Cluster

Brake Locks Windows

Via M12 Connector
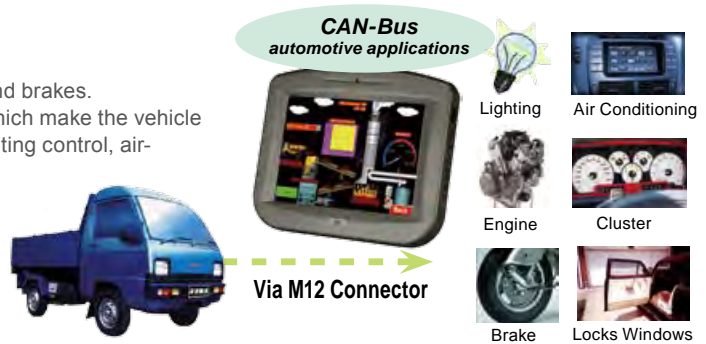
Other Application Fields:

Reliable Die-Cast Aluminum Chassis

These ruggedized LCD products are designed for high reliability, shock and vibration tolerance, survival of high temperature, and corrosive environments. External materials like dust/water can be very destructive to any type of equipment over time.

■ Fanless and Completely Sealed Strong Housing

Sealed housing strictly prevents water invasion while the rugged die-cast aluminum enclosure eliminates the need for a fan as a heat dissipation device.

Fanless and Strong!

Operating Temperature: With on-board Intel® Atom™ Processor N270 1.6GHz
-10°C~50°C

■ Rigorous Shock/Vibration Test

Compliant with MIL-STD-810F shock and vibration protection, as well as offering IP 67 water and dust proof front panel protection.

HDD install with anti-shock buffer rubber enhances protection performance.

Fully Integrated I/O

Invisible Antenna Inside

Ambient Light Sensor

System Power On/Off

VESA100/100

M12 Waterproof Connectors

Panel Mounting Holes

OSD Adjustment:
- LCD On/Off
- Brightness Up
- Brightness Down
- Speaker Volume Up
- Speaker Volume Down
- Ambient Light Sensor On/Off

1 GbE LAN
2 RS-232
3 RS-232/422/485
4 CAN-bus and Audio line out
5 Two USB
6 Power Adapter

Sunlight Readable
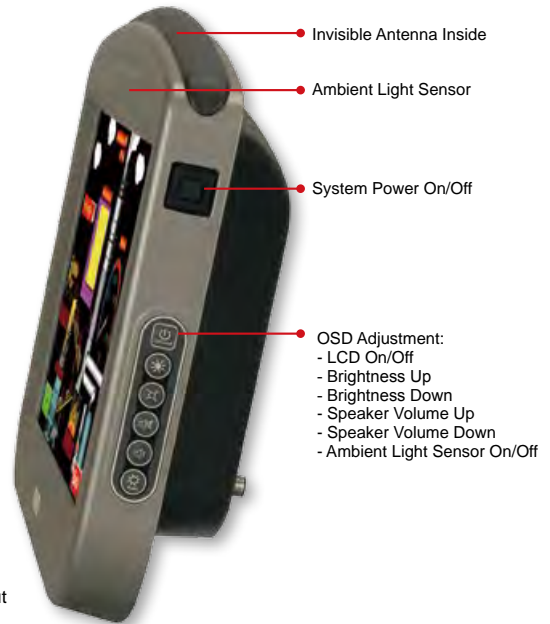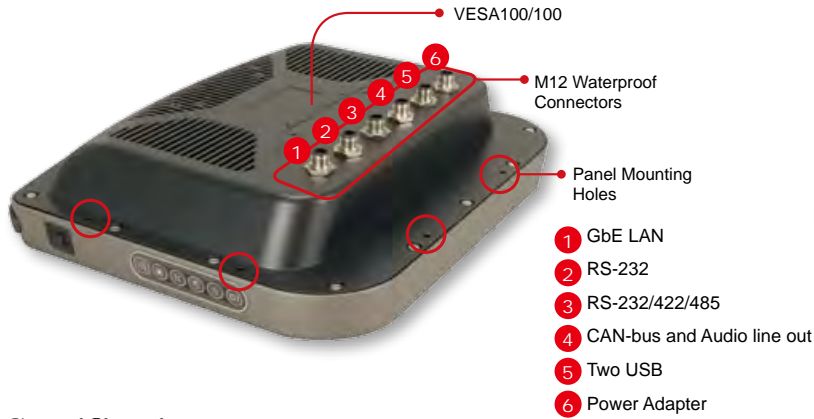
Specifications

Model		S12A-N270	S12ASR-N270
Display	LCD Size	12.1"	
	Max Resolution	1024 x 768	
	Brightness (cd/m²)	500	1000
	Contrast Ratio	700:1	600:1
	LCD Color	16.2M	262K
	Pixel Pitch (mm)	0.3075 (H) x 0.3075 (V)	0.240 (H) x 0.240 (V)
	Viewing Angle (H-V)	160º/160º	130º/120º
	Backlight MTBF (hrs)	50000	60000
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	
	Touch controller	PENMOUNT 6000	
Motherboard	CPU	Intel® Atom™ N270 1.6GHz CPU	
	Chipset	Intel® 945GSE + ICH7M	Intel® 945GSE + ICH7M
	RAM	One 400/533MHz DDR2 SO-DIMM (Max. 2GB)	
	Ethernet	Realtek RTL8111CP PCIe GbE controller	
	Audio Codec	Realtek ALC892 audio codec	
I/O Ports and Switches		1 x 5-pin M12 connector for Power Adapter	
		1 x 8-pin M12 connector for two USB	
		1 x 5-pin M12 connector for CAN-bus and Audio line out	
		1 x 8-pin M12 connector for UART RS-232/422/485	
		1 x 8-pin M12 connector for UART RS-232	
		1 x 8-pin M12 connector for GbE LAN	
Driver Bay	HDD Driver Bay	1 x 2.5" SATA HDD Bay	
	SSD	CF Type II	
Expansion Slot		1 x Wireless LAN Module (802.11 b/g/n) (internal PCIe Mini card interface)	
Physical	Construction Front Panel	Aluminum	
	Chassis Construction	Heavy-duty steel	
	Mounting	Panel, Rack, Stand and Arm VESA 100mm x 100mm	
	Front Panel Color	Silver (Pantone 8403C)	
	Dimensions (WxHxD) (mm)	345.3 x 300.4 x 77	
	Net/Gross Weight	4.2 Kg / 5.3 Kg	
Environment	Operation Temperature (°C)	-10°C ~50°C	-10°C ~50°C
	Storage Temperature (°C)	-20°C ~70°C	-20°C ~70°C
	Vibration	5~17Hz, 0.1" double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak	
	Shock	10G acceleration part to part (11ms)	
Optional Power Supply		P/N: 63000-CLG60121C-RS - 60W Power Adapter - Input: 90VAC~264VAC, 50/60Hz - Output: 12VDC - M12 waterproof connector 5P	
Power Requirement		9~28VDC	
Front Panel Protection		IP 67 Compliant	
Power Consumption		33W	51W
Certificate		Meets CE, FCC, DNV	

1 IEI Mobile Solutions

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S12A
Dimensions (Unit: mm)
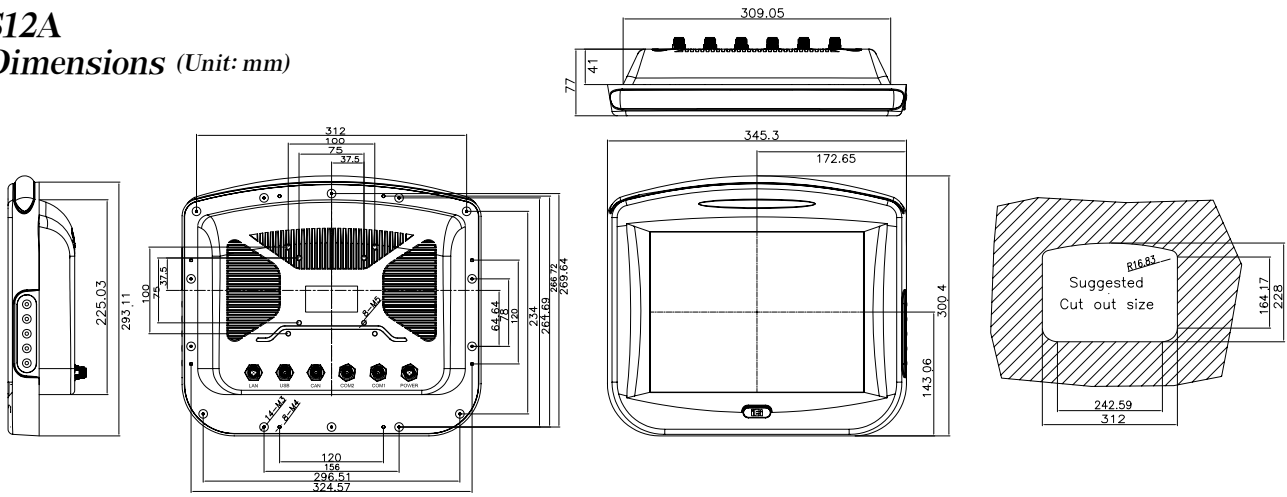
Ordering Information

Part No.	Description
S12A/R/1/16-X-R30	12.1" 500 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 160GB SATA HDD with Windows XP Embedded operaintg system, R30
S12A/R/1/4-L-R30	12.1" 500 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with LINUX operaintg system,R30
S12A/R/1/16-L-R30	12.1" 500 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 160GB SATA HDD with LINUX operaintg system,R30
S12A/R/1/1-C6-R30	12.1" 500 cd/m² IP67 panel PC with Intel® Atom™ N270, CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 1GB compact flash with Windows CE 6.0 operaintg system, R30
S12A/R/1/4-X-R30	12.1" 500 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with Windows XP Embedded operaintg system, R30
S12ASR/R/1/1-C6-R21	12.1" 1000 cd/m² IP67 panel PC with Intel® Atom™ N270, CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 1GB compact flash with Windows CE 6.0 operaintg system, R21
S12ASR/R/1/4-X-R21	12.1" 1000 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with Windows XP Embedded operaintg system, R21
S12ASR/R/1/16-X-R21	12.1" 1000 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 160GB SATA HDD with Windows XP Embedded operaintgsystem, R21
S12ASR/R/1/4-L-R21	12.1" 1000 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with LINUX operaintg system, R21
S12ASR/R/1/16-L-R21	12.1" 1000 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 160GB SATA HDD with LINUX operaintg system,R21

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Packing List

Item	Part No.	Description
Panel mount screws pack	44013-030041-RS	
Power cable	32000-127500-RS	2000mm;16AWG; (A) terminal block connector; (B) M12 Waterproof connector
Utilities CD	7B000-000087-RS	
Touch Pen	XTR104-0002-RS	
One Key Recovery CD		

Optional cables and adapter

Item	Part No.
USB cable	CB-M12USB02-R10
RJ-45 LAN cable	CB-M12RJ45-R10
DB-9 COM port cable	CB-M12COM-R20
DB-9 CAN bus and AUDIO line-out cable	CB-M12ACAN-R20
AUDIO line-out cable	CB-M12AUDIO-R10
Water-proof power adapter	63000-CLG6012IC-RS

Options

Item	Part No.
Rack mounting kit	SAILORRK-12
ARM	ARM-11-RS / ARM-31-RS
Stand	STAND-A12 / STAND-100-RS

32000-127500-RS

(B)

(A)

USB cable
(CB-M12USB02-R10)

RJ45 LAN cable
(CB-M12RJ45-R10)

DB-9 COM port cable
(CB-M12COM-R10)

DB-9 CAN bus and
AUDIO line-out cable
(CB-M12ACAN-R10)

AUDIO line-out cable
(CB-M12AUDIO-R10)

Water-proof Power Adapter
(63000-CLG6012IC-RS)

UPC-V315-QM77/NM70

15" Fully IP65 Aluminum Panel PC

- Intel Ivy Bridge mobile chipset (QM77/ NM70)
- 15" 400 nits 1024 x 768 LCD with LED backlight
- Full IP 65 compliant die-casting aluminum chassis
- PCIe mini card expasion
- Dual-DC input, 9V ~ 36V and 10.5V ~ 36V, switch automatically
- ACC power support
- Dual-band 2.4/5GHz Wi-Fi 802.11 a/b/g/n 3T3R MIMO design
- Reserved space for 3.75G / HSUPA USB dongle
- Optional GPS receiver
- Optional EM or Mifare RFID reader
- Optional Bluetooth module
- Built-in 2M pixels webcam with AF, AE and AWB capabilities
- CAN-bus interface with isolation
- F1 ~ F10 function keys with customization options

New

Full IP 65 | Touch Screen | Redundant Dual DC | Fanless | -20°C~60°C | Wireless 802.11 b/g/n | Speakers | Microphone | Camera

Various Connections Options

UPC-V315 provides different kinds of communication interfaces, such as LAN/ WLAN/ 3G/ GPS/ Bluetooth/ RFID, maximize flexibility of system integration and ensure seamless workflow.

GPS Antenna

3G USB dongle

Bluetooth Antenna

Wi-Fi Antenna (Reserver 3R3T)

RFID Antenna

RFID

F1-F10 Function Key

Connection Feasibility

Dual-Band 2.4/5GHZ Wi-Fi
Dual-band 2.4G/5G 802.11 a/b/g/n 3T3R MIMO design with up to 450 Mbps speed

Bluetooth V2.1+EDR (optional)
Connect peripheral devices with Bluetooth, such as earphone, scanner, etc.

3.75G HSUPA (optional)
Compared to Wi-Fi wireless network, 3.75G HSUPA has higher mobility with long-range mobile communication and no hotspot limitation. It is also able to connect to the Internet in real time.

GPS (optional)
Travel navigation, real-time locating and path tracking

Robust Mechanical Design

UPC-V315 is fully IP65 protected with aluminum chassis and water proof rubber gaskets. UPC-V315 also supports wide operating temperature from -20°C to 60°C.

-20°C   **60°C**

PCIe Mini Card Expansion

A. 3T3R WiFi Module

UPC-V315 supports IEEE 802.11a/b/g/n 3T3R WiFi module, enhancing the transmit speed and coverage.

T:Transmitter: the number T is absolutely relative with speed, 1T up to 150Mbps, 2T up to 300Mbps, 3T up to 450Mbps.

R:Receive: the number R is relative with receiving dead angle and distance. The higher R is, the wider the receiving range.

450 Mbps
300 Mbps
150 Mbps
54 Mbps
3T3R
2T2R
1T1R
8x 6x 4x 1x
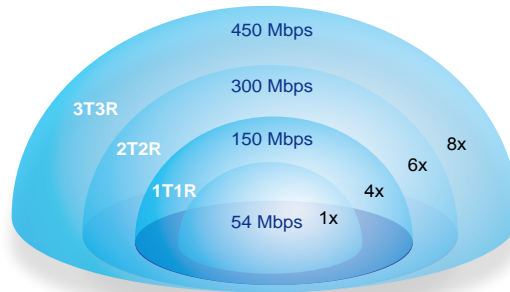
B. Solid State Disk mSATA

mSATA is compact, rugged, and much faster than traditional HDD, which is suitable for harsh environment. .

C. 4 Channel Capture Card

UPC-V315-QM77 supports 4 channel video capture solution via PCIe mini card, which can easily integrate IP camera for surveillance and real-time video streaming.

QM77 Only

IVCME-C604

Forklift Management   **Slaughter House Factory**   **Flower Market Management**

CAN-bus Interface with Isolation

The Control Area Network (CAN) is a serial bus system. The UPC-V312 on-board CAN controllers provide bus arbitration and error detection with an automatic transmission repeat function. This drastically reduces the chance of data loss, ensures system reliability, and is suitable for networking intelligent I/O devices such as sensors or actuator of machines or plants
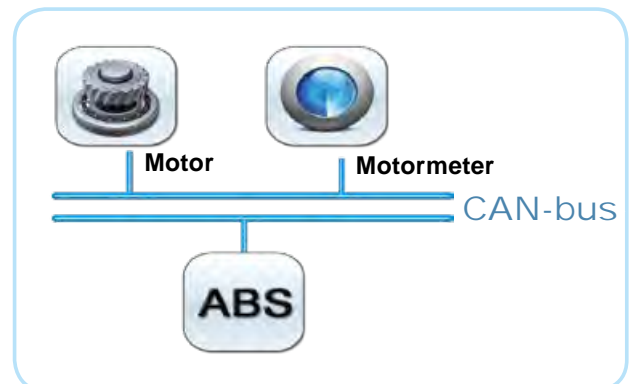
1. Isolated protection voltage 2500V/min DC protection

2. Typical transient immunity 50 kV/ms ESD protection

Motor   **Motormeter**   **CAN-bus**   **ABS**

1 IEI Mobile Solutions
2 Automation Panel Solutions
3 RISC-based Solutions
4 PACSmate Medical Solutions
5 Optional Peripherals

Specifications

Model		UPC-V315-NM70	UPC-V315-QM77
Display	LCD Size	15 "	15 "
	Max Resolution	1024(W) x 768(H)	1024(W) x 768(H)
	Brightness (cd/m²)	400	400
	Contrast Ratio	700:1	700:1
	LCD Color	16.2M	16.2M
	Pixel Pitch (mm)(HxV)	0.297(H) x 0.297(V)	0.297(H) x 0.297(V)
	Viewing Angle (V/H)	125°/ 140°	125°/ 140°
	Backlight MTBF (hrs)	50000	50000
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch Controller	DMC 9000	DMC 9000
Motherboard	CPU	Intel® Celeron® Processor 847	Intel® Core™ i3-3217UE Processor
	Chipset	Mobile Intel® QM77 Express Chipset	Mobile Intel® QM77 Express Chipset
	RAM	Built in 1*2GB DDRIII memory (System Max. 8GB; on board Max. 4GB socket Max. 4GB)	Built in 1*2GB DDRIII memory (System Max. 8GB; on board Max. 4GB socket Max. 4GB)
	Ethernet	INTELWG82579LM GbE PHY	INTELWG82579LM GbE PHY
	Audio Codec	Realtek ALC892 HD audio codec	Realtek ALC892 HD audio codec
I/O Ports and Switches		3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-BUS 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB2.0 1 x Reset button 1 x Audio jack (Line out ,MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch	3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-BUS 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB2.0 2 x USB3.0 1 x Reset button 1 x Audio jack (Line out ,MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch
System	Audio	AMP 3W + 3W (Internal Speaker)	AMP 3W + 3W (Internal Speaker)
	Camera	2M Mega Pixels	2M Mega Pixels
Connectivity	Wireless	IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10)	IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10)
	Bluetooth	Bluetooth V2.0+EDR with USB interface (optional)	Bluetooth V2.0+EDR with USB interface (optional)
	3G	Reserved USB connector (Optional)	Reserved USB connector (Optional)
	GPS	N/A	FV-W9U (Optional, internal USB header)
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook	1 x 2.5" SATA HDD bay with anti-shook
	SSD	mSATA	mSATA
	CD-ROM Driver Bay	N/A	N/A
Expansion Slot		N/A	1 x PCIe Mini Card
System Cooling		Fanless	Fanless
Physical	Construction Material	Aluminium alloy	Aluminium alloy
	Mounting	VESA 100mm x100mm or 75mm x 75mm with M8 screws	VESA 100mm x100mm or 75mm x 75mm with M8 screws
	Front Panel Color	Orange (Paintone 15C)	Orange (Paintone 15C)
	Dimension (WxHxD) (mm)	427.19 x 330.63 x 77.06	427.19 x 330.63 x 77.06
	Net Weight	7.97KG	7.97KG
Environment	Operation Temperature	-20°C ~60°C	-20°C ~60°C
	Storage Temperature	-30°C ~75°C	-30°C ~75°C
	Operating Humidity	5% ~90%, non-condensing	5% ~90%, non-condensing
	Shock	Half-sine wave shock 3G; 11ms; 3 shocks per axis	Half-sine wave shock 3G; 11ms; 3 shocks per axis
	Vibration	MIL-STD-810F 514.5C-1 (with CF card or SSD)	MIL-STD-810F 514.5C-1 (with CF card or SSD)
	IP Rating	Full IP 65	Full IP 65
Power	Adapter	90 W; 63040-010090-020-RS	90 W; 63040-010090-020-RS
	Requirement	9~36V DC	9~36V DC

IO and Human Machine Interface

	Fn	**Fn**

⌧	**Backlight On/Off**	Fn	+	⌧	**RFID enable / disable**
◀	**Audio -**	Fn	+	◀	**Audio mute**
◀»)	**Audio +**	Fn	+	◀»	**Camera enable / disable**
☼	**Brightness -**	Fn	+	☼	**Right side USB enable / disable**
☼	**Brightness +**	Fn	+	☼	**Power on / off**

Labels on IO: GbE LAN, Line Out, MIC, USB 3.0 (UPC-V315-QM77 Only), USB 2.0, AT/ATX, CLR COMS, ACC, DC Jack, Terminal Block, HDMI, VGA, CAN-bus, RS-485 / RS-485, RS-232

Ordering Information

P/N	Description
UPC-V315-QM77/R/2G-R10	15" 400cd/m² XGA fanless full IP65 panel PC with Mobile Intel® QM77 Express Chipset and Intel® Core™ i3-3217UE Processor, 802.11a/b/g/n wireless module, resistive touch screen, 2M camera,microphone,2GB DDR3 RAM, R10
UPC-V315-QM77/R-EM/2G-R10	15" 400cd/m² XGA fanless full IP65 panel PC with Mobile Intel® QM77 Express Chipset and Intel® Core™ i3-3217UE Processor, 802.11a/b/g/n wireless module, resistive touch screen, 2M camera,microphone,2GB DDR3 RAM, EM card reader, R10
UPC-V315-QM77/R-MF/2G-R10	15" 400cd/m² XGA fanless full IP65 panel PC with Mobile Intel® QM77 Express Chipset and Intel® Core™ i3-3217UE Processor, 802.11a/b/g/n wireless module, resistive touch screen, 2M camera,microphone,2GB DDR3 RAM, Mifare card reader, R10
UPC-V315-NM70/R/2G-R10	15" 400cd/m² XGA fanless full IP65 panel PC with Mobile Intel® NM70 Express Chipset and Intel® Celeron® Processor 847, 802.11a/b/g/n wireless module, resistive touch screen, 2M camera,microphone,2GB DDR3 RAM, R10
UPC-V315-NM70/R-EM/2G-R10	15" 400cd/m² XGA fanless full IP65 panel PC with Mobile Intel® QM77 Express Chipset and Intel® Celeron® Processor 847, 802.11a/b/g/n wireless module, resistive touch screen, 2M camera,microphone,2GB DDR3 RAM, EM card reader, R10
UPC-V315-NM70/R-MF/2G-R10	15" 400cd/m² XGA fanless full IP65 panel PC with Mobile Intel® QM77 Express Chipset and Intel® Celeron® Processor 847, 802.11a/b/g/n wireless module, resistive touch screen, 2M camera,microphone,2GB DDR3 RAM, Mifare card reader, R10

Packing List

Item	P/N	Q'ty
Utility CD		1
One Key Recovery CD		1
IR Remote Controller	7Z000-SLPCB005-RS	1
RJ-45 to DB-9 COM Port Cable	32005-000200-200-RS	4
M8 Screw	44325-080081-RS	8
M4 Screw	44005-040082-RS	8
Mounting Bracket		2
Screw Driver	45019-001004-00	1
Power Adapter	63040-010065-010-RS	1
Power Cord (European Standard)	32702-000401-100-RS	1
Power Transfer Cord	32702-000300-100-RS	1
M8 to M4 Screw	44300-040061-RS	8

Options

Item	P/N
ARM	ARM-31-RS
Wall Mounting Kit	AFLWK-19/AFLWK-19B
Stand	STAND-C19/STAND-100/STAND-210
GPS Module Kit	UPC-GPS-KIT01-R10
Bluetooth Module Kit	UPC-BT-KIT01-R10
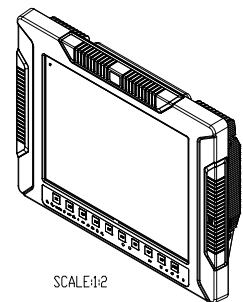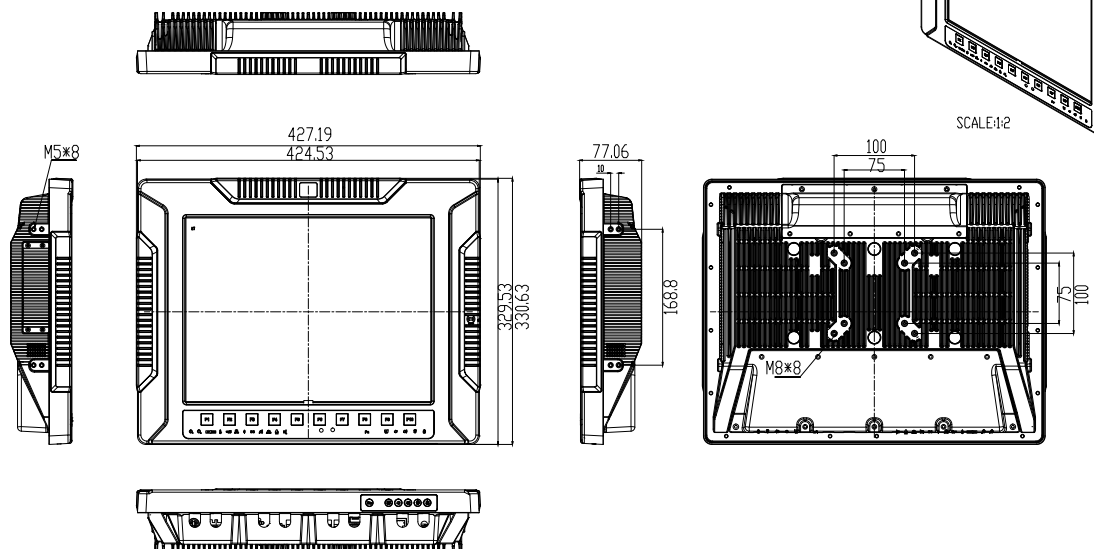
SCALE:1:2

Dimensions (Unit: mm)

M5*8

427.19
424.53
329.53
330.63

77.06
168.8

100
75
75
100

M8*8

1

IEI Mobile Solutions

2

Automation Panel Solutions

3

RISC-based Solutions

4

PACSmate Medical Solutions

5

Optional Peripherals

2-188

UPC-V312-D525 12.1" Aluminum Rugged Panel PC

- Fully IP 65 compliant with fanless Intel® Atom™ D525 1.8GHz dual-core processor
- 12.1" 600 nits 1024 x 768 LCD with LED backlight
- TWIN-DC input, 9V ~ 36V and 10.5V ~ 36V, switch automatically
- Dual-band 2.4/5GHz Wi-Fi 802.11 a/b/g/n 3T3R MIMO design
- Reserved space for 3.75G / HSUPA USB module
- Optional GPS receiver
- Optional EM or Mifare RFID reader
- Optional Bluetooth module
- Built-in 1.3M pixels webcam with AF, AE and AWB capabilities
- CAN-bus interface with isolation
- Robust die-casting aluminum chassis

Icons: Full IP 65 | Touch Screen | Redundant Dual DC | Fanless | Sunlight Readable | -20°C~60°C | Wireless 802.11 b/g/n | Speakers | Microphone | Camera

Specifications

Model Name		UPC-V312-D525-R10
Display	LCD Size	12.1"
	Max Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	600
	Contrast Ratio	700:1
	LCD Color	16.2M
	Pixel Pitch (mm) (HxV)	0.24(H) x 0.24(V)
	Viewing Angle (V/H)	150° / 130°
	Backlight MTBF (hrs)	50000
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface
	Touch controller	DMC 9000
Motherboard	SBC	UPC-12AT-D525-R10
	CPU	Intel® Atom™ D525 1.8GHz dual-core processor
	Chipset	Intel® ICH8M
	RAM	On-board 1G DDR3 SO-DIMM (System Max. 1GB)
	Ethernet	Realtek RTL8111CP PCIe GbE controller
	Audio Codec	Realtek ALC888 audio codec
I/O Ports and Switches		RS-422/485 (4-pin box header)
		RS-232 (DB-9 connector)
		CAN-bus (3-pin terminal block)
		GbE LAN (RJ-45 connector)
		4 x USB connector
		Audio jack (Line-out, Mic)
		VGA port (DB-15 connector)
		DC-IN 1 (terminal block) / DC-IN 2 (DC Jack)
		Reset button
		AT/ATX switch
Driver Bay	HDD Drive Bay	N/A
	SSD	CF Type II socket
	CD-ROM Drive Bay	N/A
Physical	Construction Front Panel	Aluminum Die-Casting
	Chassis Construction	Extruded Aluminum Alloy
	Mounting	VESA 100mm x 100mm and 75mm x 75mm with M8 screws
	Front Panel Color	Orange (Pantone 151C)
	Dimensions (WxHxD) (mm)	338.5 x 276.25 x 62.86
	Cut Out Dimensions (WxH) (mm)	338.5 x 276.25
	Net / Gross Weight	4.5 kg/ 6.8 kg
Expansion Slot		PCIe Mini slot for Wi-Fi
		PCIe Mini slot for mSATA (optional)
System Cooling		Fanless
Environment	Operating Temperature	-20°C~60°C
	Storage Temperature	-40°C~85°C
	Vibration	MIL-STD-810F 514.5C-2 (with CF card or SSD)
	Shock	Half-sine wave shock 3G; 11ms; 3 shocks per axis
	IP Level	Full IP 65
	Safety & EMC	CE / FCC
Power	Adapter	65W power adapter
		Input: 90VAC~264VAC, 50/60Hz,Output: 19V DC
	Requirement	Power 1: 9 (+/-0.3)~36V
		Power 2: 10.5 (+/-0.3)~36V
	Consumption	52W

Sidebar:
1 IEI Mobile Solutions
2 Automation Panel Solutions
3 RISC-based Solutions
4 PACSmate Medical Solutions
5 Optional Peripherals

Ordering Information

Part No.	Description
UPC-V312-D525/R-EM/2G-R11	12.1" 600cd/m² XGA fanless full IP 65 panel PC with Intel® Atom™ D525 dual core 1.8GHz,802.11a/b/g/n wireless module, resistive touch screen,2M camera, microphone,2GB DDR3 RAM, EM card reader, R11
UPC-V312-D525/R-MF/2G-R11	12.1" 600cd/m² XGA fanless full IP 65 panel PC with Intel® Atom™ D525 dual core 1.8GHz,802.11a/b/g/n wireless module, resistive touch screen,2M camera, microphone,2GB DDR3 RAM, Mifare card reader, R11
UPC-V312-D525/R/2G-R11	12.1" 600cd/m² XGA fanless full IP 65 panel PC with Intel® Atom™ D525 dual core 1.8GHz,802.11a/b/g/n wireless module, resistive touch screen,2M camera, microphone,2GB DDR3 RAM, R11

Options

Item	P/N
ARM	ARM-11-RS/ARM-31-RS
Wall Mounting Kit	AFLWK-19/ AFLWK-19B/ AFLWK-12
Stand	STAND-A19/STAND-B19/STAND-210-R11
GPS Module Kit	UPC-GPS-KIT01-R10
Bluetooth Module Kit	UPC-BT-KIT01-R10
OS: Win CE 6.0 (128MB CF Card)	UPCCF-V312-D525-CE060-128M-R10
OS: Win XPE (2GB CF Card)	UPCCF-V312-D525-XPE-2G-R10
OS: Win XPE (4GB CF Card)	UPCCF-V312-D525-XPE-4G-R10
OS: Linux (2GB CF Card)	UPCCF-V312-D525-LNX-2G-R10
OS: Win 7 Embedded (4GB CF Card)	UPCCF-V312-D525-WES7E-4G-R10

Packing List

Item	P/N	Q'ty
Utility CD	7B000-000741-RS	1
One Key Recovery CD		1
IR Remote Controller	7Z000-SLPCB005-RS	1
RJ-45 to DB-9 COM Port Cable	32005-000200-200-RS	1
M8 Screw	44325-080081-RS	8
M4 Screw	44005-040082-RS	8
Mounting Bracket	41003-0382C2-00-RS	2
Screw Driver	45019-001004-00	1
Power Adapter	63040-010065-010-RS	1
Power Cord (European Standard)	32702-000401-100-RS	1
RS-422 Cable	32205-002400-100-RS	1
Power Transfer Cord	32702-000300-100-RS	1
M8 to M4 Screw	44300-040061-RS	8

I/O Interface
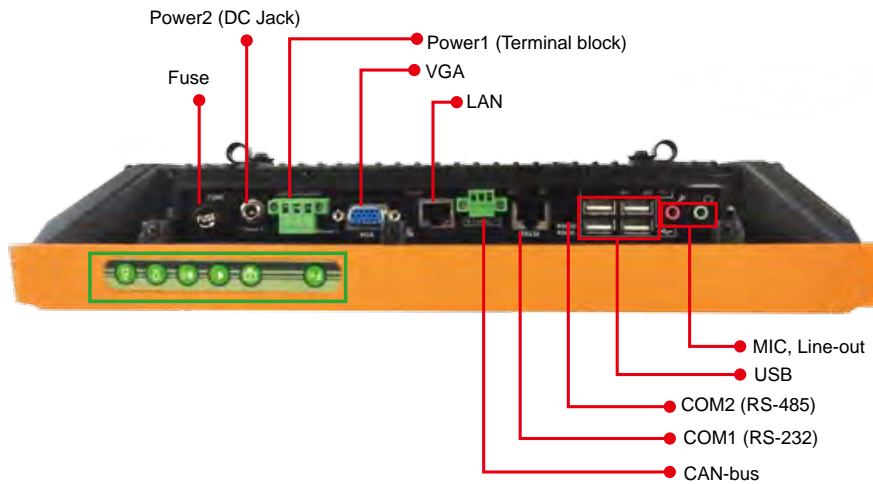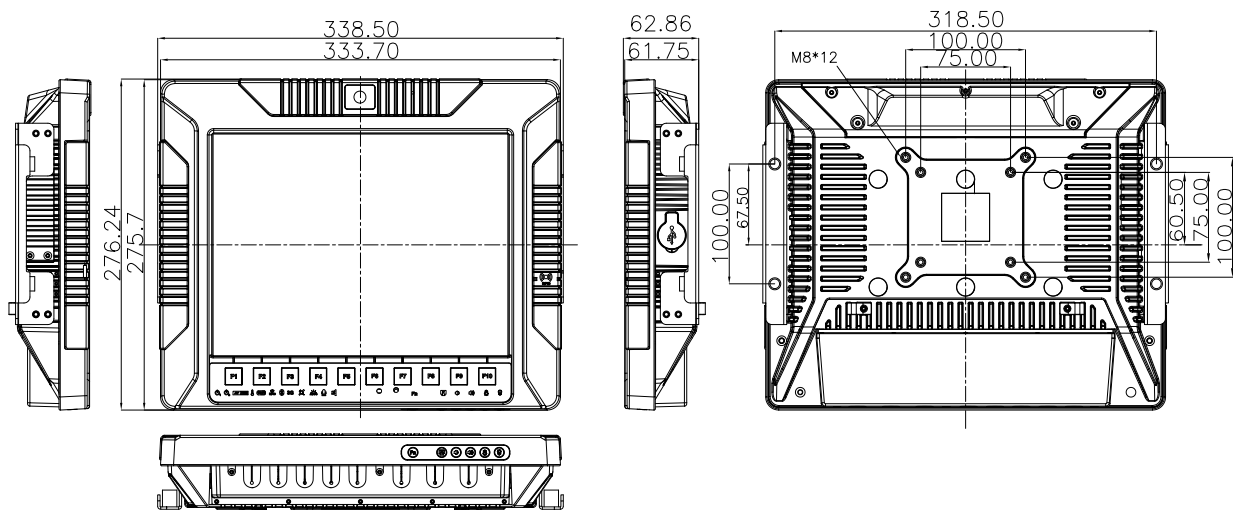
- Power2 (DC Jack)
- Power1 (Terminal block)
- Fuse
- VGA
- LAN
- MIC, Line-out
- USB
- COM2 (RS-485)
- COM1 (RS-232)
- CAN-bus

UPC-V312 Dimensions (Unit: mm)

338.50
333.70
276.24
275.7

62.86
61.75

318.50
100.00
75.00
M8*12
100.00
67.50
60.50
175.00
100.00

1
IEI Mobile
Solutions

2
Automation
Panel
Solutions

3
RISC-
based
Solutions

4
PACSmate
Medical
Solutions

5
Optional
Peripherals

UPC-12A

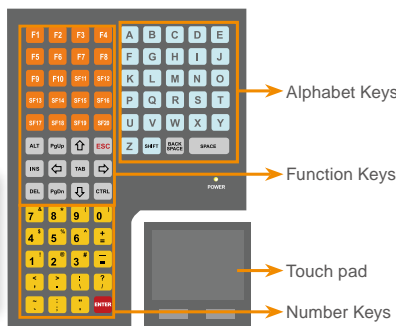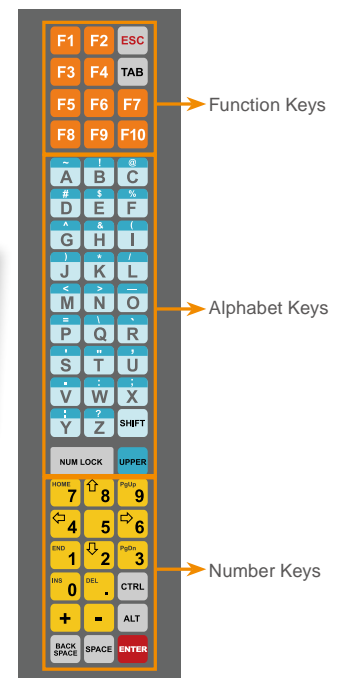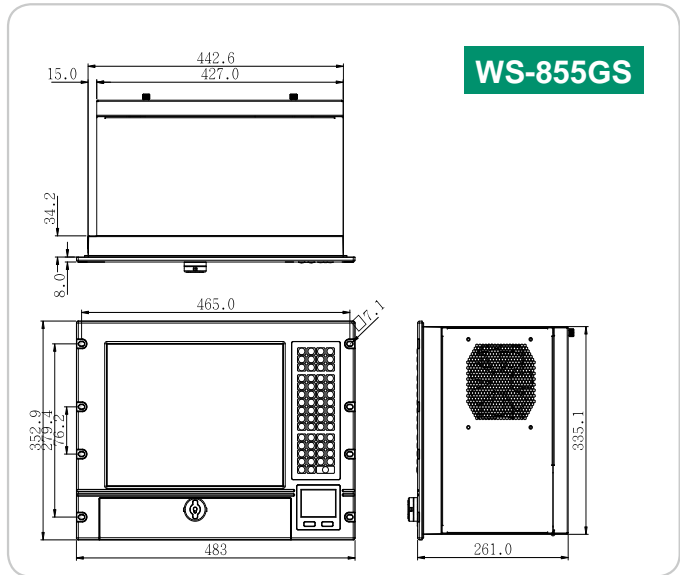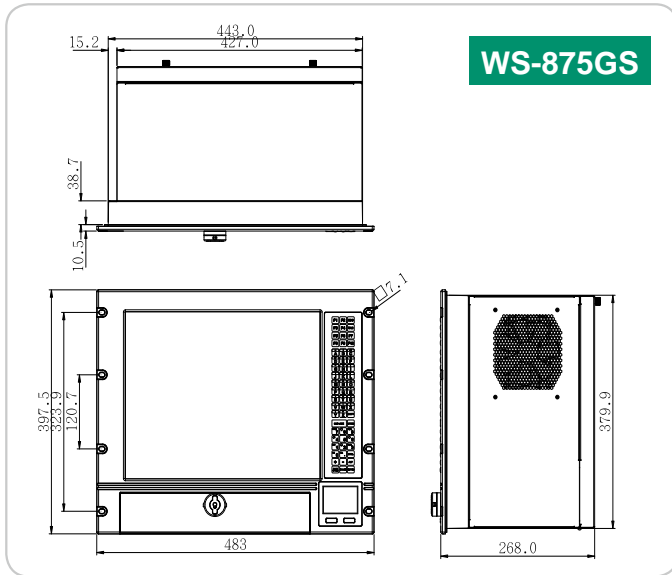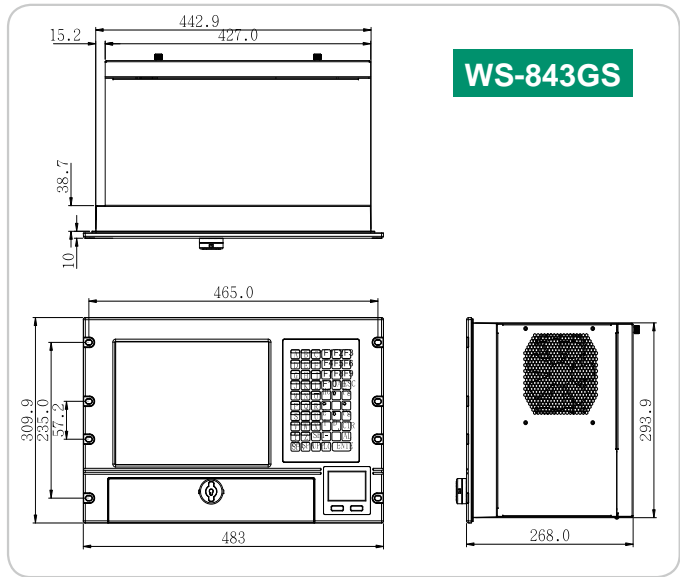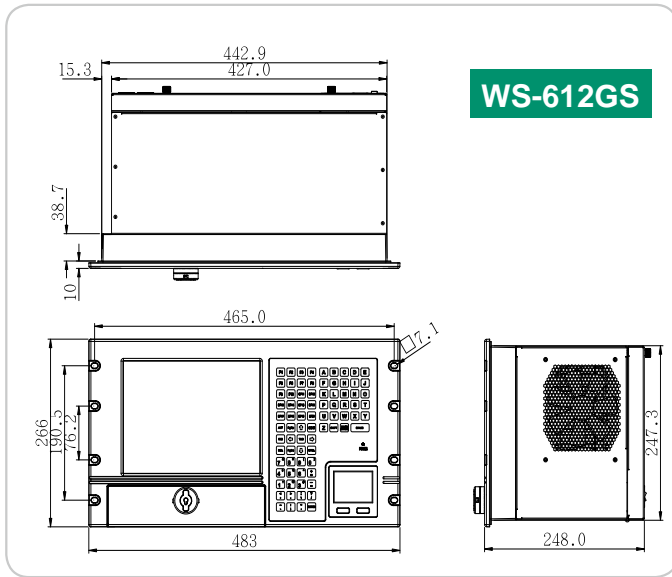## 12.1" Aluminum UPS Panel PC with Smart Battery Backup

Rugged Aluminum Die-casting Body!

- 12.1" all-in-one PPC with touch technology
- 1000 nits sunlight readable panel available
- Powerful all-in-one panel PC
  - Intel® GM45 chipset and 45nm mobile Core™2 Duo processor support
- Battery backup power protects your productivity from the constant threat of power outages and loss data
- Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing. (0%~100% brightness control for sunlight readable version)
- 802.11 b/g/n Wi-Fi support
- PCI expansion slot for adding more capacity (optional PCI express expansion interface)
- Standard VESA 75/100 mounting
- Robust die-cast aluminum chassis
- IP 65 compliant aluminum compliant front panel

Smart Battery | Wireless 802.11 b/g/n | Sunlight Readable | Touch Screen | PCI/PCIe Expansion | F3 One Key Recovery iEi symantec.

Specifications

Model		12.1" Regular Brightness	12.1" Sunlight Readable
		UPC-12A/GM45	**UPC-12AH/GM45**
Display	LCD Size	12.1"	12.1"
	Max Resolution	1024 x 768	1024 x 768
	Brightness (cd/m²)	450	1000
	Contrast Ratio	700:1	500:1
	LCD Color	262k	262k
	Pixel Pitch (mm)	0.240(H) x 0.240(V)	0.240(H) x 0.240(V)
	Viewing Angle (H-V)	150º / 150º	120º / 120º
	Backlight MTBF	50000hrs	50000hrs
Touch	Touch screen	Resistive Type 5-Wire with RS-232 interface	
	Touch controller	DMC 9000	
Motherboard	CPU	Intel® Core™2 Duo P8400 2.26GHz Intel® Celeron® M 575 2.0GHz Intel® Core™2 Duo T9400 2.53GHz	Intel® Core™2 Duo P8400 2.26GHz Intel® Celeron® M 575 2.0GHz Intel® Core™2 Duo T9400 2.53GHz
	Chipset	Intel® GM45 Chipset + ICH9M	Intel® GM45 Chipset + ICH9M
	RAM	two DDR2 SO-DIMM Up to 4GB	
	Ethernet	Realtek RTL8111CP PCIe GbE controller	
	Audio Codec	Realtek ALC888 audio codec	
I/O		3 x RS-232 COM 1 x RS-232/422/485 COM 2 x RJ-45 Giga LAN 6 x USB 2.0 (2 waterproof USBs in front of the panel) 1 x VGA 1 x Power Switch 2 x Audio Jack (Line-out, Mic-in) 1 x Reset Button	1 x COM Clear Button 1 x 9~28VDC Power Jack 1 x Power Mode Switch (Battery or DC input) 1 x 9~28VDC Power Input Terminal Block 1 x Networking UPS Management Port by RJ-45 Ethernet 1 x Remote COM port by RJ-45 connector 1 x AT Mode UPS Switch (2 pin terminal block)
Expansion		1 x PCI, 1 x PCIe x1 (Optional), 1 x PCIe Mini (Wireless LAN Module)	
LED Indicator		Power LED / HDD Status / Charging / Discharging / Light Sensor	
Membrane Keypad		LCD On/Off; Brightness Up/Down; Volume Up/Down; Auto Dimming On/Off; Battery Low Beeper (under 10% batter capacity beeper on/off)	
Drive Bay	SSD	CF Type II	
	HDD	1 x 2.5" SATA HDD bay	
Battery	Capacity	14.8V, 3800 mAH	
	UPS run-time	40 mins	40 mins
		50 mins	30 mins
		40 mins	40 mins
Physical	Construction Material	Aluminum Die-casting	
	Mounting	VESA 100 mm x100 mm	
	Front Panel Color	Orange (Pantone 151C)	
	Dimensions (WxHxD) (mm)	335 x 280 x 119	
Environment	Operation Temperature (ºC)	-10°C~55°C	
	Storage Temperature (ºC)	-20°C~70°C	
	Net/Gross Weight	5.8 Kg / 6.9 Kg	
	IP Level	IP 65 Compliant front panel	
	Safety & EMC	CE, FCC	
Touch Screen		Resistive Type 5-Wire (Touch controller IC is on board)	
Power Requirement		9~28VDC	
Power Consumption		63W	73W
		60W	70W
		65W	74W

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Ordering Information

Part No.		Description
450 nits	UPC-12A/GM45-CM5R/1G-R21	12.1" 450cd/m² XGA panel PC with Intel® Celeron® M 575 2GHz CPU , 100W UPS with 14.8V, 3800mAH, 1GB DDR2 RAM and touch screen, 802.11 b/g/n wireless
	UPC-12A/GM45-P84R/2G-R21	12.1" 450cd/m² XGA panel PC with Intel® Core™2 Duo P8400 2.26GHz CPU, 100W UPS with 14.8V, 3800mAH, 2GB DDR2 RAM and touch screen, 802.11 b/g/n wireless
	UPC-12A/GM45-T94R/2G-R21	12.1" 450cd/m² XGA panel PC with Intel® Core™2 Duo T9400 2.53GHz CPU, 100W UPS with 14.8V, 3800mAH, 2GB DDR2 RAM and touch screen, 802.11 b/g/n wireless
1000 nits	UPC-12AH/GM45-CM5R/1G-R12	12.1" 1000 cd/m² XGA panel PC with Intel® Celeron® M 575 2GHz CPU , 100W UPS with 14.8V, 3800mAH, 1GB DDR2 RAM and touch screen, 802.11 b/g/n wireless
	UPC-12AH/GM45-P84R/2G-R12	12.1" 1000 cd/m² XGA panel PC with Intel® Core™2 Duo P8400 2.26GHz CPU, 100W UPS with 14.8V, 3800mAH,2GB DDR2 RAM and touch screen, 802.11 b/g/n wireless
	UPC-12AH/GM45-T94R/2G-R12	12.1" 1000 cd/m² XGA panel PC with Intel® Core™2 Duo T7500 2.2GHz CPU, 100W UPS with 14.8V, 3800mAH, 2GB DDR2 RAM and touch screen, 802.11 b/g/n wireless

Packing List

Item	Part No.	Q'ty	Specifications
Screws Pack	44003-050501-RS	4	M5; 5mm
RJ45 to DB9 COM port cable	32000-089201-RS	1	
Power Adpater	63040-010096-010-RS	1	90~264V AC; 12V DC; 96W
Power Cord	32000-000002-RS	1	1750mm; European Standard
Utilities CD	7B000-000087-RS	1	
Touch Pen	XTR104-0002-RS	1	-
Wi-Fi 802.11 b/g/n PCIe Mini card	7F900-Q802XKN-RS		
Smart battery pack	BAT-LI-4S2P3800A		Lithium ion Battery 4S2P, 3800mAh, FOR UPC Series
One Key Recovery CD		1	

Note: Connect DC input continuously. Battery will be drained after 14 hours.

I/O Interface
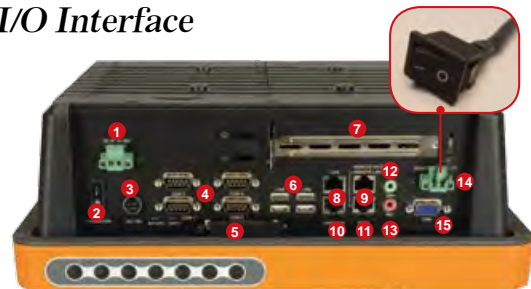
1 9~28VDC Input
2 Power Switch
3 DC 12V Power Jack
4 3 x RS-232 COM, 1 x RS-232/422/485 COM
5 User-accessible CF
6 4 x USB2.0
7 1 x PCI Expansion Slot (Optional PCIe x1 expansion)
8 2 x RJ-45 Giga LAN
9 Remote RS-232, Remote LAN
10 Clear CMOS
11 Reset
12 Line-out
13 Mic-in
14 AT Mode UPS Switch
15 VGA Output

Options

Model	UPC-12A-910	UPC-12A-GM45	UPC-12AH-GM45
Panel mounting kit	UPCPK-12		
Wall mounting kit	AFLWK-19		
Rack mounting kit	UPCRK-12		
ARM	ARM-11-RS / ARM-31-RS		
Stand	STAND-A19 / STAND-B19 / STAND-210-R11		
OS: Win CE 6.0	UPCCF-12-910-CE060-R20	N/A	N/A
OS: Win XPE	UPCCF-12-910-XPE-R20	UPCCF-12-GM45-XPE-R20	UPCCF-12-GM45-XPE-R20
Battery Pack	BAT-LI-4S2P3800A (14.8V, 3800mAH)		
PCIe x 1 Riser Card	034D335-00-100-RS		

UPC-12A Dimensions *(Unit: mm)*
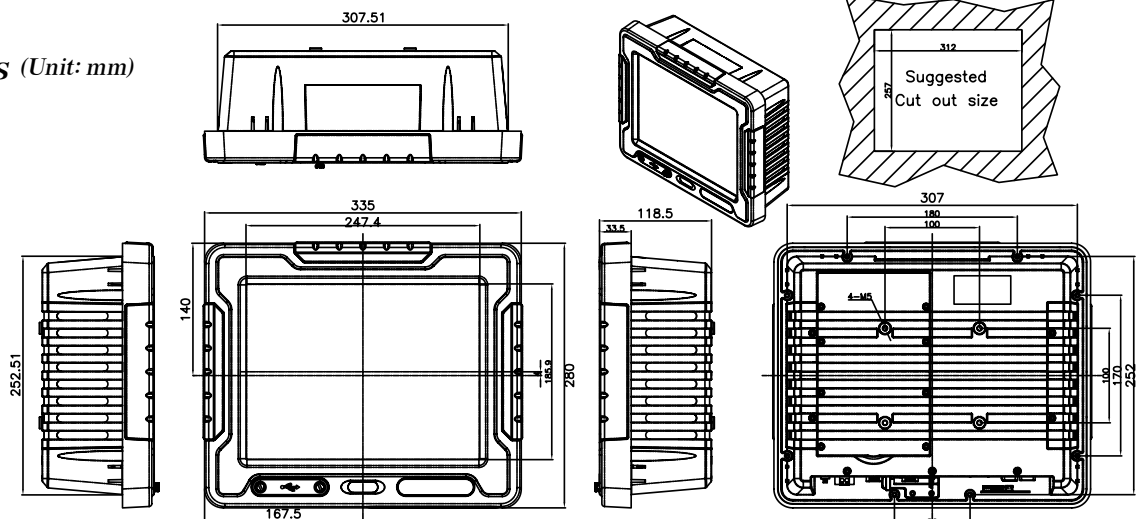
Display Workstation Solutions

IEI industrial workstations are PCs with built-in touch screens. The workstations use either a micro-ATX motherboard or a backplane with a CPU card.

>> Industrial Workstation Series

Features

- Excellent expansion capability for full/half size CPU cards
- Compact die-cast aluminum front panel and integrated LCD back frame
- Front panel, membrane keys, mouse pad and drive-bay enclosure meet IP 64 / IP 65 standard for tough environment

Backplane

Full Size/Half Size SBC

>> Rack mount Workstation Series

Product Line		WS-series	RPC-series
		IP 64 Waterproof Workstation with Membrane Keypads	Easy Rackmount Workstation with OSD Functions
LCD Size		Model / Mechanism	
6.5"	640 x 480		EC-1040G (4U 14-slot full-size)
8.4"	800 x 600		RPC-6010G (4U 14-slot full-size)
10.4"	800 x 600	WS-612GS (6U 7-slot)	
12.1"	1024 x 768	WS-843GS (7U 10-slot)	RPC-6022G (5U 14-slot)
15"	1024x 768	WS-855GS (8U 10-slot/m-ATX MB)	
17"	1280 x 1024	WS-875GS (9U 10-slot/m-ATX MB)	

Industrial Workstation Series

10.4" ~ 17" IP 64 Waterproof Workstation: Robust, Shock Resistancet

Features

1. Die-cast aluminum front panel with integrated LCD screen
2. New robust chassis and retention kit structure for shock and vibration
3. Front panel, membrane keys, mouse pad and drive-bay enclosure meet IP 64 standard for tough environment
4. Full function membrane keys and submerged OSD controller
5. Advanced thermal and air-flow design
6. Analog VGA interface supports all CPU boards

1
IEI Mobile
Solutions

2
Automation
Panel
Solutions

3
RISC-
based
Solutions

4
PACSmate
Medical
Solutions

5
Optional
Peripherals

Features

IP 64 waterproof front panel, membrane keys, mouse pad & drive-bay

The industrial workstation's front cover is IP 64 compliant. The front cover is completely protected against the entry of dust and water sprayed from any direction.

Water Proof key lock and drive bay cover

Compact die-cast aluminum front panel and integrated LCD back frame

Rack or wall mount systems always apply the whole system weight on the front bezel and LCD container. One piece design has higher strength and lighter weight because of aluminum die casting.
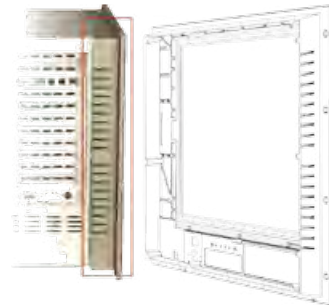
New robust chassis and retention kit structure to against shock and vibration

The whole chassis and retention kit are designed to be sturdy and rugged. The whole chassis has less joints and connections to increase resistance to shock and vibration.
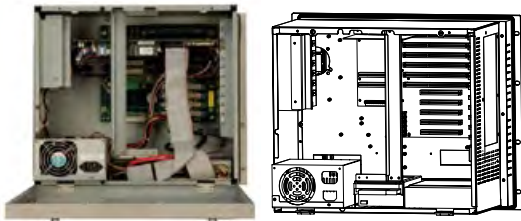
Enhanced thermal management

Built-in fans and hard drive cooling ensure that temperatures stay within operating range at all times. This extends product life and increases system reliability.
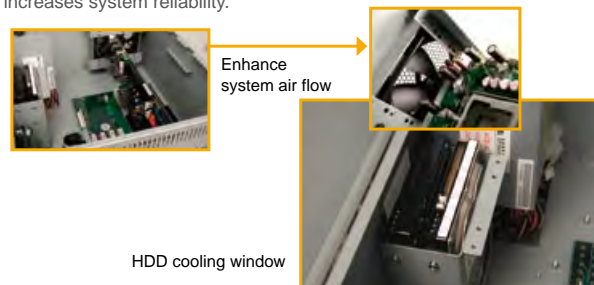
Enhance system air flow

HDD cooling window

CPU card and Micro-ATX support

The WS-855GS, WS-875GS and WS-895GS can support MicroATX motherboards. MicroATX motherboards are widely used and offer a larger range of options to suit the needs of the system.
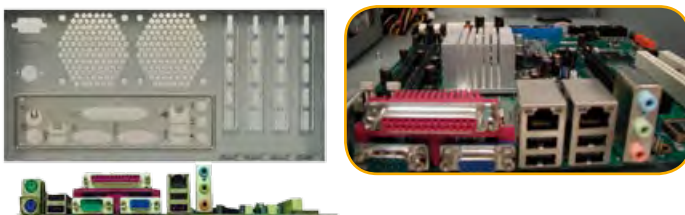
Optional RS-232 interface touch screen

The WS series provides an RS-232 port reserved for touch screen. IEI Workstation provides T-R model with high strength Fiber Glass Touch Screen applications.

Optional RS-232 port

Complete drive support

The industrial workstations support 3.5" and 5.25" drives, and a floppy drive.

Advanced thermal and air-flow design

Thermal issues are an important issue for modern industrial PCs. The industrial workstation is designed so air flows through the computer, fresh, cool air in the one side, and warm air out the other.
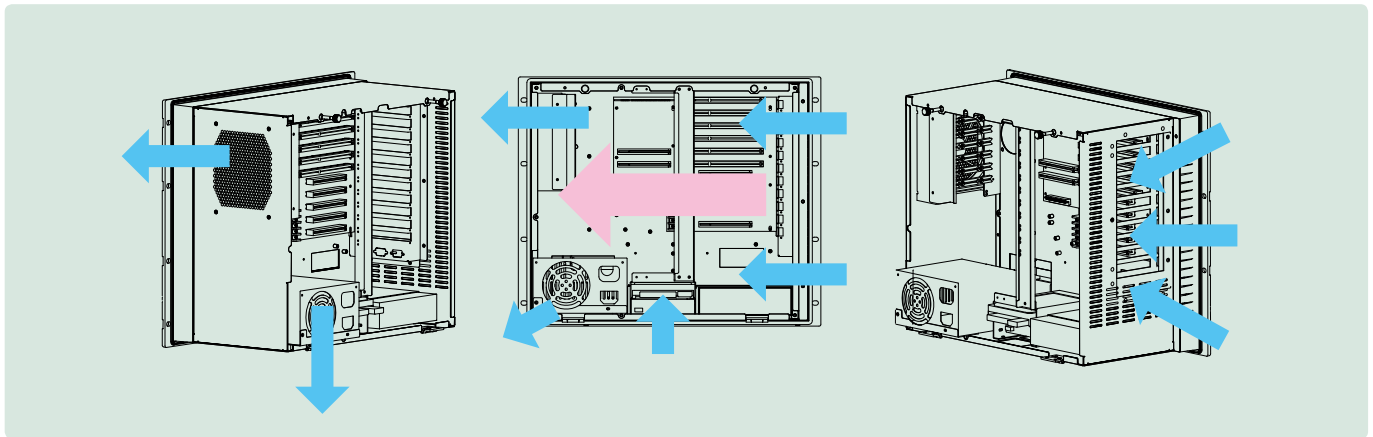
Full function Membrane keys & submerged OSD controller

• WS-612GS
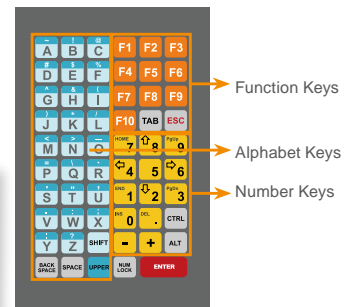
- Alphabet Keys
- Function Keys
- Touch pad
- Number Keys

• WS-843GS

- Function Keys
- Alphabet Keys
- Number Keys

• WS-855GS

- Function Keys
- Alphabet Keys
- Number Keys

• WS-875GS

- Function Keys
- Alphabet Keys
- Number Keys

Industrial Workstation Selection Guide

Model	WS-612GS	WS-843GS	WS-855GS	WS-875GS
LCD Size	10.4"	12.1"	15"	17"
Resolution	800 x 600	1024 x 768	1024 x 768	1280 x 1024
Brightness (cd/m²)	400	500	350	300
Contrast	700:1	700:1	400:1	500:1
LCD color	262K	262K	262K	16.2M
Backlight Hours	50000 (LED Backlight)	50000 (LED Backlight)	50000	50000
Input Interface	Analog VGA (DB-15)			
Slot	7 slots	10 slots	10 slots / MB	10 slots / MB
Form Factor	Full / half size SBC		Full / half size SBC / m-ATX motherboard	
Mounting	19" rack mount			
Rack Height	6U	7U	8U	9U
Front Frame	Aluminum			
IP Level	IP 64			
KeyPad	63 Keys	59 Keys	59 Keys	59 Keys
Function Key	20 Keys	10 Keys	10 Keys	10 Keys
Touch Pad	Yes			
Front Panel USB	4	2	2	2
HDD Drive Bay	1 x 3.5" HDD	1 x 3.5" HDD	1 x 3.5" HDD	1 x 3.5" HDD
CD-ROM Drive Bay	N/A	1 x 5.25" CD-ROM	1 x 5.25" CD-ROM	1 x 5.25" CD-ROM
FDD Bay	1 x 3.5" FDD	1 x 3.5" FDD	1 x 3.5" FDD	1 x 3.5" FDD
System Fan	12cm ball bearing 99.6 CFM fan			
Touch Screen	5-wire resistive touch screen			
Vibration	5 ~ 17 Hz, 0.1" double amplitude displacement / 17~640 Hz, 1.5G acceleration peak to peak			
Shock	10G acceleration peak to peak (11ms)			
Relative Humidity	5 ~ 95%, non-condensing			
Operating Temperature	0°C ~ 50°C			
Color	Silver (Pantone PMS-8001)			
Dimensions (W x H x D) (mm)	483 x 266 x 248	483 x 310 x 268	483 x 353 x 261	483 x 398 x 268
Weight (NW / GW)	9.2 / 14.4 kg	10.7 / 17.2 kg	12 / 18.2 kg	14.2 / 20.6 kg
Recommended Backplane	PCI-7S, IP-7S, BP-7S, PCIAGP-6S, HPE-7S1, PE-6S/7S, PE-7S2	PCI-10S/10S2, PX-10S, PE-10S, IP-10S, IPX-9S, BP-10S, HPE-7S1/8S, PE-6S / 7S / 7S2 / 8S / 9S /10S		
Recommended microATX MB	N/A		IMB-9454, IMB-G41A	
Power Supply	ACE-916A(AP)-RS (AT), ACE-A618A-RS-R11, ACE-4520C-RS, ACE-A225A-R10, ACE-815C(T)-RS, ACE-615A-RS-R11	AT: ACE-925A(AP/AP-U/M)-RS, ACE-932A-RS, ACE-935AL-RS, ACE-T140A-RS, ATX: ACE-4860AP-RS, ACE-828A(A/M/V)-RS, ACE-A130B-R10, ACE-A140A-R10, ACE-A140A-S-R10, ACE-A160A-R10		

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Dimensions *(Unit: mm)*

WS-612GS

442.9
427.0
15.3
38.7
10
465.0
266
190.5
76.2
247.3
17.1
483
248.0

WS-843GS

442.9
427.0
15.2
38.7
10
465.0
309.9
235.0
57.2
293.9
483
268.0

WS-875GS

443.0
427.0
15.2
38.7
10.5
397.5
323.9
120.7
17.1
379.9
483
268.0

WS-855GS

442.6
427.0
15.0
34.2
8.0
465.0
352.9
279.4
76.2
17.1
335.1
483
261.0

Ordering Information

Part NO	Description
WS-612GS / A225A / R-R20	6U 10.4" 400cd/m² SVGA LCD 8-slot industrial workstation, aluminum front, silver color, W/ACE-A225A, W/10.4" touch screen, RoHS
WS-843GS / A130B / R-R20	7U 12.1" 500cd/m² XGA LCD 10-slot industrial workstation, aluminum front, silver color, W/ACE-A130A/12.1" touch screen, RoHS
WS-855GS / A130B / R-R20	8U 15" 350cd/m² XGA LCD 10-slot industrial workstation with ACE-A130B-R10 300W ATX with PFC power supply and 15" resistive touch screen,RoHS
WS-855GSATX / A130B / R-R20	8U m-ATX 15" 350cd/m² XGA LCD workstation with ACE-A130B-R10 300W ATX with PFC power supply and 15" resistive touch screen, M-ATX version
WS-875GS / A130B / R-R20	9U 17" 300cd/m² SXGA TFT LCD workstation with ACE-A130B-R10 300W ATX with PFC power supply and 17" resistive touch screen
WS-875GSATX / A130B / R-R20	9U 17" 300cd/m² SXGA LCD workstation with ACE-A130B-R10 300W ATX with PFC power supply and 17" resistive touch screen, M-ATX version

Packing List

Part Number	Description	Amount	Remark
32000-000002-RS	AC Power Cable	1	Standard Packing, for Europe, 32000-000004-RS for South Africa 32000-000022-RS for Australia, 32000-000025-RS for America 32000-000026-RS for Switzerland
32000-101200-RS	VGA Cable	1	A)D-SUB 15P MALE 90°(B)D-SUB 15PIN MALE
32100-034801-RS	PS_ON Cable for ATX signal	1	
41015-0003C0-00-RS	Press Stick Kit (Long)	4	
41015-0004C0-00-RS	Press Stick Kit (Short)	3	
47001-000101-RS	Press Stick Rubber	7	
	User Manual	1	
32000-075000-RS	KeyPad / MousePad PS/2 Cable	1	For SBC Models
32000-078400-RS	KeyPad / MousePad PS/2 Cable	1	For m-ATX (Motherboards) Models
32000-101100-RS	RS-232 Cable / Touch Pen / Driver CD-ROM for Touch Screen	1	(A)D-SUB 9P MALE 90°(B)D-SUB 9PIN FEMALE

1
IEI Mobile
Solutions

2
**Automation
Panel
Solutions**

3
RISC-
based
Solutions

4
PACSmate
Medical
Solutions

5
Optional
Peripherals

EC-1040G

4U 14-slot Rackmount LCD Workstation

Features

1. 6.5" TFT LCD with OSD control panel
2. Multi-function thermal alarm system
3. Optional KM-088G (keyboard and touch pad module)
4. Flexible driver combination
5. PICMG 1.3 backplane and redundant power supply support
6. Advanced air-flow design

Backplane & Power Supply Options

Backplane Model No.	SBC Type	PCI	ISA	PCIe X1	PCIe X4	PCIe X16	PSU Connector
PCI-13SD-RS-R40	PICMG 1.0	3+4	3+3	0	0	0	AT/ATX
PCI-14S2-RS-R40	PICMG 1.0	4	8	0	0	0	AT/ATX
PCI-14S3-RS-R40	PICMG 1.0	4	9	0	0	0	AT/ATX
PX-14S3-RS-R41	PICMG 1.0	12	2	0	0	0	AT/ATX
PC-14S5-RS-R41	PICMG 1.0	7	6	0	0	0	AT/ATX
BP-14S-RS-R40	ISA	0	14	0	0	0	AT
PXAGP-13S3-RS-R30	PIAGP	11	0	0	0	0	AT/ATX
PE-13SD-R40	PICMG 1.3	2/2	0	0/4	1/0	1/1	ATX
PXE-13S-R42	PICMG 1.3	8	0	3	0	1	ATX

PICMG 1.3 Support

Type	Model No.	Watt
AT	ACE-935AL-RS	300W
AT	ACE-T140A-RS	400W
ATX	ACE-A130B-R10	300W
ATX	ACE-A140A-R10	400W
ATX	ACE-A140A-S-R10	400W
Redundant Power Support	ACE-R4130AP-RS	300W

Specifications

Construction	Heavy Duty Metal	Color	Black
SBC Form Factor	EC-1040GB – Full size slot CPU card EC-1040GBATX – ATX or Micro ATX	Weight (Net / Gross)	15.3kg / 28.8kg
Drive Bays	3 x 5.25" + 1 x 3.5"	Dimensions	480mm x 431mm x 176mm
Cooling Fans	2 x 8 cm	Touch Screen	Optional 4-wire resistive type with RS-232 interface
I/O openings	2 x COM, 1xPS/2	LCD Spec	
Expansion Slots	14 slots for EC-1040G 7 slots for EC-1040GATX	Size	6.5"
Indicators	1. Temperature 2. LAN 3. Fan	Resolution	640 x 480 (VGA)
Buttons	1. Power switch 2. System reset	Brightness	800 cd/m²
Operating Shock	10G acceleration peak to peak (11ms)	Contrast	600:1
Operating Vibration	5~17Hz 0.1" double amplitude displacement 17~640 Hz 1.5G acceleration peak to peak	Viewing Angle	160º / 140º
Operating Temp.	0 ~ 50°C	Backlight MTBF	50000 (LED Backlight) hrs
Operating Humidity	5 ~ 95% @ 60° C, non-condensing	LCD Color	262k

1 IEI Mobile Solutions

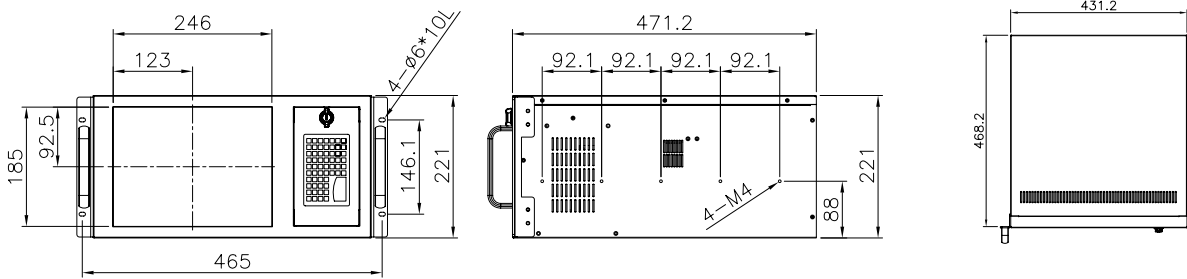**2** Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

EC-1040G
Dimensions (Unit: mm)
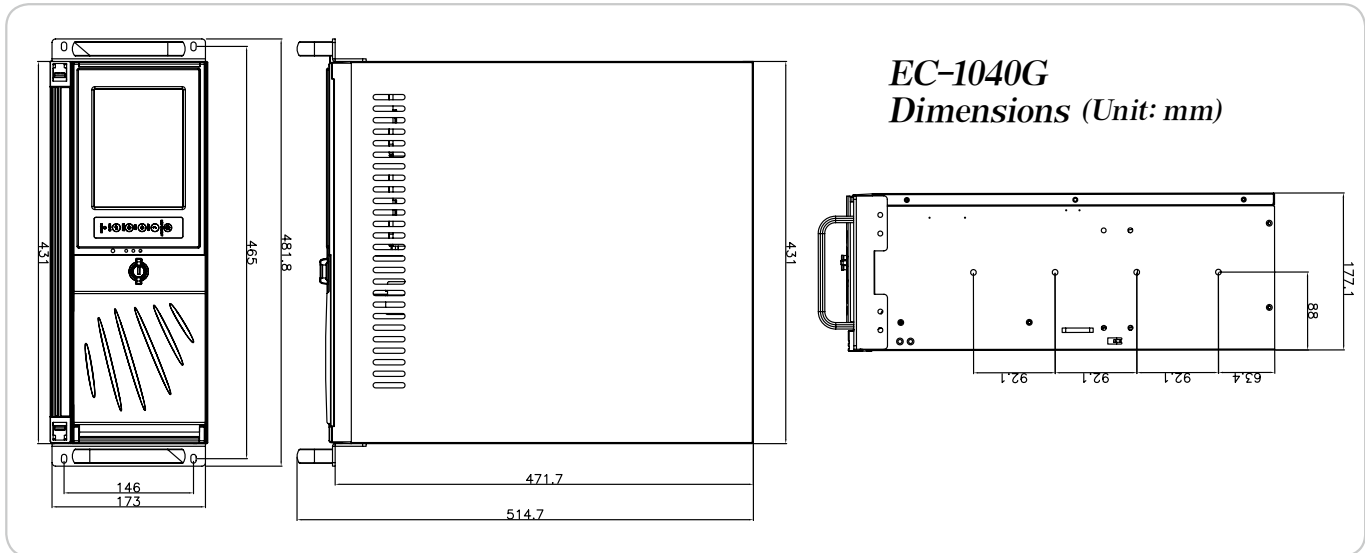
■ Flexible driver combination
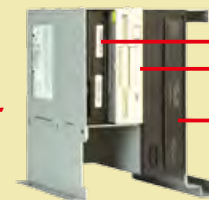
IEI EC-1040G provides a versatile drive combination for all kinds of uses. User can easily integrate every media drive size for their needs.

- 1 x 3.5" HDD or 1 x 3.5" Floppy
- 1 x 5.25" to 3.5" Adapter bracket
- 1 x 5.25" Optical Drive
- 1 x 5.25" IDE/SATA Removable Drive Bay
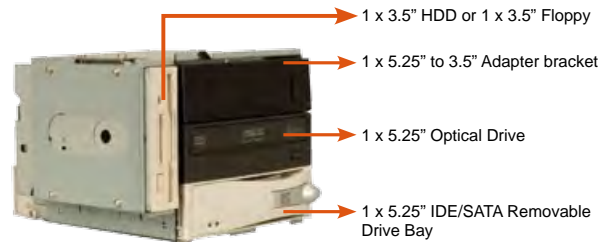
■ Rear view of EC-1040G

EC-1040GBX

- **Works with backplane**
- **14 expansion slots**

EC-1040GBATX

- **Works with ATX motherboard**
- **7 expansion slots**

■ Optional KM-088G

The KM-088G is an 88-key touch pad module. The standard version is with English keyboard and optional Japanese, German, French, Italian, Chinese, or Russian version keyboard is available. It also supports media drive for their needs.

■ Advanced air-flow design

Thermal condition is the most important issue of new generation IPCs. IEI's "Single way" design provides you higher system performance capability and more flexibility for the environment.

2 x 8 cm Fans

88 Keys with 7 Languages

Touch Pad

Ordering Information

Part No.	Description
EC-1040GB / A130B-R30	4U Rack mount LCD chassis with 6.5" 800 cd/m² VGA TFT LCD, ACE-A130B-R10, RoHS
EC-1040GB / A130B / R-R30	4U Rack mount LCD chassis with 6.5" 800 cd/m2 VGA TFT LCD, ACE-A130B-R10 and touch screen, RoHS
EC-1040GBATX / A130B-R30	4U Rack mount LCD chassis for ATX MB with 6.5" 800 cd/m² VGA TFT LCD, ACE-A130B-R10, RoHS
EC-1040GBATX / A130B / R-R30	4U Rack mount LCD chassis for ATX MB with 6.5" 800 cd/m² VGA TFT LCD, ACE-A130B-R10 and touch screen, RoHS
Optional	
KM-088G-[L]-R20	[L] : Language code EN: English, JP: Japanese, DE, German, FR: French, IT: Italian, RU: Russian, CH: Chinese

RPC-6010G

8.4" TFT LCD 4U 14-slot Rack Mount Workstation

Features

1. 8.4" TFT LCD with OSD and membrane keypads
2. Flexible driver combination
3. Lockable front door
4. Two USB ports on the front panel
5. PICMG 1.3 backplane and redundant power supply support
6. Advanced air-flow design

Backplane & Power Supply Options

Backplane Model No.	SBC Type	PCI	ISA	PCIe X1	PCIe X4	PCIe X16	PSU Connector
PCI-13SD-RS-R40	PICMG 1.0	3+4	3+3	0	0	0	AT/ATX
PCI-14S2-RS-R40	PICMG 1.0	4	8	0	0	0	AT/ATX
PCI-14S3-RS-R40	PICMG 1.0	4	9	0	0	0	AT/ATX
PX-14S3-RS-R41	PICMG 1.0	12	2	0	0	0	AT/ATX
PC-14S5-RS-R41	PICMG 1.0	7	6	0	0	0	AT/ATX
BP-14S-RS-R40	ISA	0	14	0	0	0	AT
PXAGP-13S3-RS-R30	PIAGP	11	0	0	0	0	AT/ATX
PE-13SD-R40	PICMG 1.3	2/2	0	0/4	1/0	1/1	ATX
PXE-13S-R42	PICMG 1.3	8	0	3	0	1	ATX

PICMG 1.3 Support

Power Supply Options		
Type	Model No.	Watt
AT	ACE-935AL-RS	300W
AT	ACE-T140A-RS	400W
ATX	ACE-A130B-R10	300W
ATX	ACE-A140A-R10	400W
ATX	ACE-A140A-S-R10	400W
ATX Redundant	ACE-R4130AP-RS	300W

Specifications

Construction	Heavy Duty Metal	Color	White
SBC Form Factor	RPC-6010G – Full size slot CPU card RPC-6010GBATX – ATX or micro ATX	Weight (Net / Gross)	15kg / 18kg
Drive Bays	3 x 5.25" + 1 x front-accessible 3.5" + 1 x HDD	Dimensions	528mm x 431mm x 176mm
Cooling Fans	1 x 12 cm	Touch Screen	4-wire resistive type
I/O openings	2 x USB, 2 x COM, 1 x PS/2	**LCD Spec.**	
Expansion Slots	14 slots for RPC-6022G 7 slots for RPC-6022GATX	Size	8.4"
Indicators	Power LED	Resolution	800 x 600 (SVGA)
Buttons	Power switch System reset	Brightness	450 cd/m²
Operating Shock	10G acceleration peak to peak (11ms)	Contrast	600:1
Operating Vibration	5~17Hz 0.1" double amplitude displacement 17~640 Hz 1.5G acceleration peak to peak	Viewing Angle	160º / 140º
Operating Temp.	0 ~ 50°C	Backlight MTBF	50000 (LED Backlight) hrs
Operating Humidity	5 ~ 95% @ 60° C, non-condensing	LCD Color	262k

RPC-6010G
Dimensions (Unit: mm)

■ Rear view of RPC-6010G

RPC-6010G

Works with backplane
14 expansion slots

RPC-6010GATX

Works with ATX motherboard
7 expansion slots

■ Fully functional OSD and membrane keypads

IEI RPC series has a complete set of membrane keypads and OSD functions accessed via water proof keys on the front panel. The front panel membrane keypads access simplifies system configuration.

- Function keys
- Number keys
- OSD Function keys
- Alphabet keys
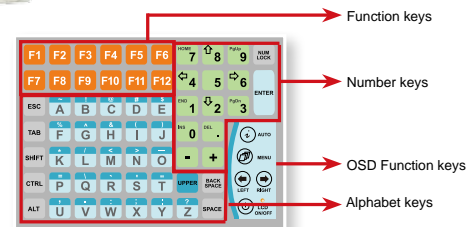
■ Flexible driver combination

IEI RPC series provides versatile drive combination for all kinds of uses. Users can easily integrate any size media drive for their needs.

Peripheral devices with USB interface are popular and widely used nowadays. For the convenience of connection, RPC series has two USB ports on the front bezel offering excellent accessibility.
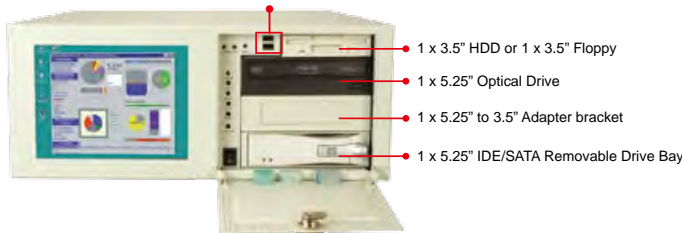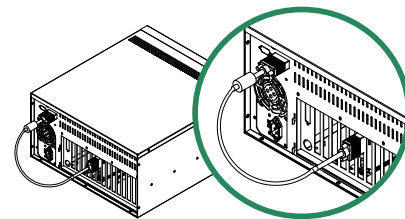
- 1 x 3.5" HDD or 1 x 3.5" Floppy
- 1 x 5.25" Optical Drive
- 1 x 5.25" to 3.5" Adapter bracket
- 1 x 5.25" IDE/SATA Removable Drive Bay

■ Analog VGA interface supports all CPU boards

■ Advanced air-flow design

Thermal condition is the most important issue of new generation IPCs. IEI's "Single way" design provides you higher system performance for the environment.

1 x 12 cm Fans

Ordering Information

ACE-A131B (ATX)	
RPC-6010GW/A130B/R-R20	4U Rack mount chassis, with with 8.4" 450cd/m² SVGA LCD w/ACE-A130B-R10 and Touch Screen, RoHS
RPC-6010GWATX/A130B/R-R20	4U Rack mount chassis for ATX motherboard, with 8.4" 450cd/m² SVGA LCD w/ACE-A130B-R10, w/8.4" Touch Screen, RoHS
ACE-R4130AP (Redundant)	
RPC-6010GWR/R4130AP/R-R20	4U Rack mount chassis, with 8.4" 450cd/m² SVGA LCD ,ACE-R4130AP-R10 and Touch Screen, RoHS
RPC-6010GWAR/R4130AP/R-R20	4U Rack mount chassis for ATX mother board, with with 8.4" 450cd/m² SVGA LCD, ACE-R4130AP-R10 and Touch Screen, RoHS

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IEI Mobile Solutions

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Optional Peripherals

RPC-6022G

12.1" TFT LCD 5U 14-slot Rack Mount Workstation

Features

1. 12.1" TFT LCD with fully functional OSD and membrane keypads
2. Flexible driver combination
3. Lockable front door
4. Two USB ports on the front panel
5. PICMG 1.3 backplane and redundant power supply support
6. Advanced air-flow design

Backplane & Power Supply Options

Backplane Model No.	SBC Type	PCI	ISA	PCIe			PSU Connector
				X1	X4	X16	
PCI-13SD-RS-R40	PICMG 1.0	3+4	3+3	0	0	0	AT/ATX
PCI-14S2-RS-R40	PICMG 1.0	4	8	0	0	0	AT/ATX
PCI-14S3-RS-R40	PICMG 1.0	4	9	0	0	0	AT/ATX
PX-14S3-RS-R41	PICMG 1.0	12	2	0	0	0	AT/ATX
PC-14S5-RS-R41	PICMG 1.0	7	6	0	0	0	AT/ATX
BP-14S-RS-R40	ISA	0	14	0	0	0	AT
PXAGP-13S3-RS-R30	PIAGP	11	0	0	0	0	AT/ATX
PE-13SD-R40	PICMG 1.3	2/2	0	0/4	1/0	1/1	ATX
PXE-13S-R42	PICMG 1.3	8	0	3	0	1	ATX

Power Supply Options		
Type	Model No.	Watt
AT	ACE-935AL-RS	300W
	ACE-T140A-RS	400W
ATX	ACE-A130B-R10	300W
	ACE-A140A-R10	400W
	ACE-A140A-S-R10	400W
ATX Redundant	ACE-R4130AP-RS	300W

PICMG 1.3 Support

Specifications

Construction	Heavy Duty Metal	Color	White
SBC Form Factor	RPC-6022G – Full size slot CPU card RPC-6022GBATX – ATX or Micro ATX	Weight (Net / Gross)	15kg / 18kg
Drive Bays	1 x 5.25" + 1 x front-accessible 3.5" + 1 x HDD	Dimensions	470mm x 431mm x 220mm
Cooling Fans	2 x 12 cm	Touch Screen	5-wire resistive type
I/O openings	2 x USB, 2 x COM, 1 x PS/2	LCD Spec.	
Expansion Slots	14 slots for RPC-6022G 7 slots for RPC-6022GATX	Size	12.1"
Indicators	Power LED	Resolution	1024 x 768 (XGA)
Buttons	Power switch System reset	Brightness	500 cd/m²
Operating Shock	10G acceleration peak to peak (11ms)	Contrast	700:1
Operating Vibration	5~17Hz 0.1" double amplitude displacement 17~640 Hz 1.5G acceleration peak to peak	Viewing Angle	160º / 160º
Operating Temp.	0 ~ 50°C	Backlight MTBF	50000 (LED Backlight) hrs
Operating Humidity	5 ~ 95% @ 60° C, non-condensing	LCD Color	262k

RPC-6022G
Dimensions (Unit: mm)

246
123
185
92.5
4-Ø6*10L
146.1
221
465

471.2
92.1 92.1 92.1 92.1
4-M4
221
88

431.2
468.2

■ RPC-6022G Rear view

RPC-6022G

Works with backplane 14 expansion slots

RPC-6022GATX

Works with ATX motherboard 7 expansion slots

■ Fully functional OSD and membrane keypads

IEI RPC series has a complete set of membrane keypads and OSD functions accessed via water proof keys on the front panel. The front panel membrane keypads access simplifies system configuration.

Function keys
Alphabet keys
Number keys
OSD Function keys

■ Analog VGA interface supports all CPU boards
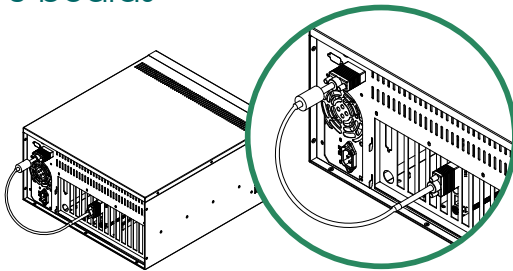
■ Advanced air-flow design

Thermal condition is the most important issue of new generation IPCs. IEI's "Single way" design provides you higher system performance and flexibility for the environment.
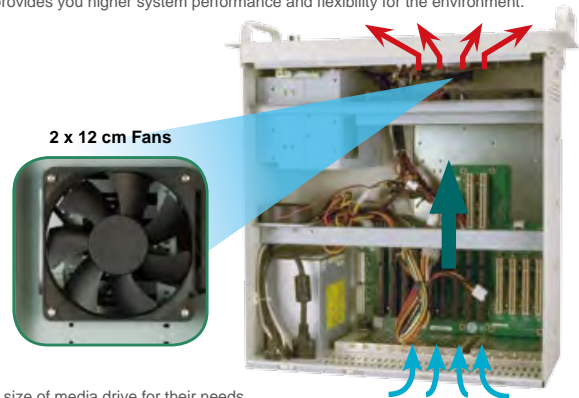
2 x 12 cm Fans

■ Flexible driver combination

IEI RPC series provides versatile drive combination for all kinds of usage. Users can easily integrate every size of media drive for their needs.

1 x 5.25" IDE/SATA Removable Drive Bay

or

1 x 5.25" to 3.5" Adapter bracket

or

1 x 3.5" HDD
1 x 3.5" HDD or 1 x 3.5" Floppy
1 x 5.25" Optical Drive

Ordering Information

ACE-A131B (ATX)	
RPC-6022GXW/A130B/R-R10	5U Rack mount chassis, with 12.1" 500cd/m² XGA LCD w/ACEA130B-R10,RoHS and Touch Screen, RoHS
RPC-6022GXWA/A130B/R-R10	5U Rack mount chassis for ATX mother board, with 12.1" 500cd/m² XGA LCD w/ACE-A130B--R10, w/12.1" Touch Screen, RoHS
ACE-R4130AP (Redundant)	
RPC-6022GXWR/R4130AP/R-R10	5U Rack mount chassis, with 12.1" 500cd/m² XGA LCD ,ACE-R4130AP Redundant Power Supply and Touch Screen, RoHS
RPC-6022GXWAR/R4130AP/R-R10	5U Rack mount chassis for ATX mother board, with 12.1" 500cd/m² XGA LCD, ACE-R4130AP-RS and Touch Screen, RoHS

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5 Optional Peripherals

Display Monitor Solutions

Durable waterproof displays are essential in today's commercial and industrial applications. IEI's versatile lines of IP 64/65 compliant shock and vibration resistant industrial displays are designed specifically to endure the rigorous demands of modern commerce and industrial environments. These displays are easily integrated into automation applications, ATM machines and human machine interfaces.

Industrial Display Monitor

DM Series

The DM series displays are flexible, durable systems that are easily integrated into a wide variety of general-purpose industrial applications.

Sunlight Readable Display Monitor

800 nits/ 1000 nits

SRM Series

The SRM series is designed to operate in high ambient lighting conditions and is especially designed for outdoor use under direct or indirect sunlight.

Multiple Input Display Monitor

5 Video Inputs

AFOLUX Monitor Series

The AFL-xxM series has multiple video inputs through common video connectors which can connects to a wide range of devices and most electronic appliances.

Product Line	DM Series		TDM Series	SRM Series	LCD-KIT Series		AFOLUX Monitor Series	
LCD Size	**6.5" ~ 19"**		**12.1" / 15"**	**12.1" / 15"**	**6.5" ~ 19"**		**7" ~ 19"**	
	6.5" ~ 10.4" Model	12.1" ~ 19" Model			6.5" ~ 10.4" Model	12.1" ~ 19" Model	7" ~ 12.1" Model	15" ~ 19" Model
Input Signal Interface	Analog VGA	Analog VGA + DVI-D	Analog VGA + DVI-D	Analog VGA + DVI-D	Analog VGA	Analog VGA+DVI-D	**WIN!!** Composite YPbPr S-Video VGA	**WIN!!** BNC Connector YPbPr S-Video VGA DVI
Brightness	300~800 nits		450 nits	**WIN!!** 800~1000 nits	300~800 nits		300~500 nits	
Operation Temperature	-10~50°C		**WIN!!** -30~70°C	-10~60°C	-10~50°C		0~50°C	
Auto Dimming Function	--		--	Yes	--		Yes (For 15" ~ 19" Model)	
OSD Function	Yes		Yes	Yes	Yes		Yes (For 15" ~ 19" Model)	
Remote Control	--		--	--	--		Yes (For 7" ~ 12.1" Model)	
IEI samrt OSD Support	Yes		Yes	Yes	Yes		Yes	
Front Panel Protection	IP 65		IP 65	IP 65	--		IP 64	

Wide Temperature Display Monitor

TDM Series **-30ºC~70ºC**

The TDM series offers an extended operational temperature range of -30°C ~ +70°C allowing it to tolerate temperature extremes in harsh operating environment.

Open Frame Display Monitor

LCD-KIT Series

The LCD-KIT series design concepts are ready for versatile applications that are easily integrated into any mechanic structure.

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5 Optional Peripherals

Heavy Industrial Display Monitor Main Features

Feature 1 — Upgrade 6.5"~12.1" Display Monitor with LED Backlight Technology

- Inverter-free design increases system reliability and lowers total product cost as well as maintenance cost
- Better for the environment, mercury and lead free
- LCD provides 50000hrs service life
- 15%~30% less power consumption compared to CCFL

12.1"
10.4"
8.4"
6.5"
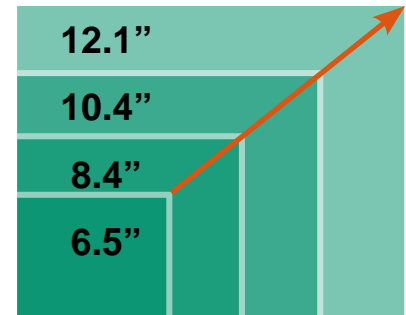
Feature 2 — Increase Power Adapter Efficiency (Meet Energy Related Products ErP)

The display monitor R20 series comes with a power adapter which complies with the ErP 2009/125/EC directive, meaning the power consumption of the whole system in either standby or off mode is under 1W.

ErP Compliant Power Adapter

Stand by or Off Mode Max. Energy Consumption ≤ 1W

Feature 3 — Dual Touch Screen Control Interface: RS-232 & USB

Display monitor series provides both RS-232 and USB ports for touch screen connection.

- Lockable RS-232 connector ensures secure attachment
- Standard Type A USB 2.0 interface with 480 Mbit/s maximum transfer rate provides faster data transmission than a traditional RS-232 interface (Except 8.4" DM series)

Combination of USB & RS-232 Interfaces

Feature 4 — M Model Supports 9~36V DC Power Input for Mobile Application

New

Display Monitor series M models support wide 9~36V DC power input. Factory and mobile environments, such as vehicles, usually use 12V or 24V DC power source. The wide 9~36V power input range by terminal block and 12V power input by power jack solutions adapt to a wide variety of appliance requirements. (Manufacture by order)

9~36V DC Power Input (manufacture by order) IDD-936169A-R20

Power Adapter12V DC input

Lockable DC Jack

Feature 5 — IP 65 Waterproof Aluminum Front Panel

IP 65 is the highest dust, water and oil proof standard in ground usage It absolutely prevents any micro-particles from getting into the system front panel and allows the system to function in harsh environments.

Feature 6 — OSD Function Keypad on the Front Panel

IEI's display monitors have OSD function keys on the front panel. Users can easily configure monitor functions using the waterproof OSD function keys.

Brightness 100
Contrast 46
Clock 50
Phase 57
H.Position 43
V.Position 43
Sharpness 1 2 4 6

Enter   Select

LCD ON/OFF
Auto-adjust / ESC
LEFT
RIGHT
MENU / SELECT
POWER Indicator

• OSD lock secures your settings
Press left and right buttons eight seconds, the OSD functions will be locked. Press eight seconds again, the OSD functions will be unlocked.

With OSD Disable Function
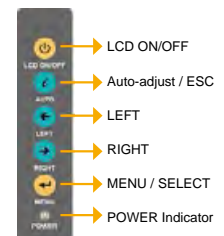
IEI SmartOSD Software OSD for IEI LCD Monitors

IEI SmartOSD is a proprietary On-Screen-Display (OSD) software solution that enables easy, remote monitor setting adjustments in Windows environment. IEI SmartOSD delivers excellent performance and provides more flexibility than typical OSD hardware solutions when adjusting a monitor. SmartOSD also allows monitor settings such as brightness, contrast, screen position, size, and color gain to be read and changed over normal video cable (VGA/DVI).
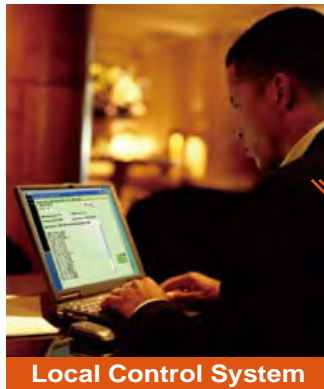
Directly controls IEI display device through standard video cables !

VESA DDC / CI Protocol

DVI~10m   VGA~30m

Local Control System

IEI Display Monitor Only!

smart OSD

SmartOSD Features

- 100% compatible with Windows environment -Windows 95/NT 4.0/98/2000/2003/XP/Vista
- Normal video cable (VGA/DVI) connection only
- Overcome operation obstacles

Distance, location and multiple display units no longer present obstacles when controlling the monitors with the SmartOSD.

Multiple Control Displays   Untouchable Location

100% Compatible with VESA DDC / CI Protocol

IEI LCD monitors are implemented with the VESA DDC/CI protocol and standard VESA Monitor Control Command Set (MCCS). Compliance software for designing displays compatible with VESA's DDC/CI and MCCS standards are easily modified and applied in other application programs.

■ Various Remote Management Functions

1.EDID
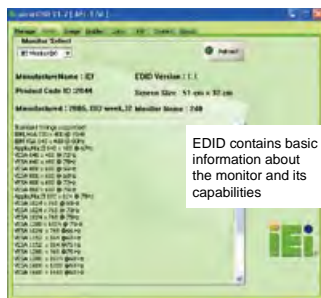
EDID contains basic information about the monitor and its capabilities

2.Image Setting
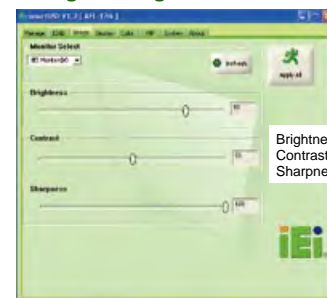
Brightness
Contrast
Sharpness

3.Display Setting

Phase
Clock

4.Color Setting

User Red Gain
User Green Gain
User Blue Gain
Color Temperature
Gamma

5. Picture in Picture Setting

PIP On/Off
PIP Input Source
PIP Size

6. System Setting

Monitor Power Control
Auto Brightness
Main Source Input
Volume
Misc (Factory Reset/OSD Lock/OSD Unlock)
Mute

7.Monitor Power Management and File Saving
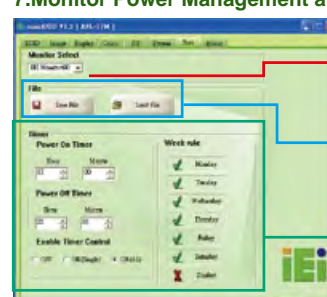
Monitor Select
Selects the monitor unit for which the system parameters will be adjusted

Settings Saving
Saves the referred settings of all the OSD functions as .dat files and load the settings

Power Management
Setts the monitor power on/off by time and week

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Optional Peripherals

DM Series

6.5"~19" IP 65 Industrial Monitors, Robust, Shock Resistant with OSD Function

Features

1. Aluminum front panel meets IP 65 standard for tough working environment
2. Combination USB & RS-232 Touch Interfaces
3. Robust chassis and retention kit structure for shocking and vibration requirement
4. Over 300cd/m² high brightness and 50000hrs MTFB long lifetime panel
5. Analog VGA and DVI-D interface supports most of general system boards
6. M models support 9~36V DC power input for mobile application

Specifications

Model	DM-65GHS	DM-84GHS	DM-104GHS	DM-121GXS	DM-150GS	DM-170GS	DM-190GS
LCD Size	6.5"	8.4"	10.4"	12.1"	15"	17"	19"
Input Interface	Analog VGA	Analog VGA	Analog VGA	Analog VGA + DVI-D	Analog VGA + DVI-D	Analog VGA + DVI-D	Analog VGA + DVI-D
Max Resolution	640 x 480	800 x 600	800 x 600	1024 x 768	1024 x 768	1280 x 1024	1280 x 1024
Brightness (cd/m²)	800 Sunlight Readable	450	400	500	350	300	450
Contrast Ratio	600 : 1	600 : 1	700 : 1	700 : 1	500 : 1	800 : 1	1000 : 1
Display Color	262K	262K	262K	262K	16.2M	16.7M	16.7M
Pixel Pitch (mm)	0.207	0.213	0.264	0.3075	0.297	0.264	0.294
Viewing Angle (H/V)	160º /140º	160º /140º	160º /140º	160º / 160º	120º / 100º	160º / 160º	170º / 160º
Touch Screen	Resistive type 4-wire / RS-232 & USB interface (touch controller IC is on board)	Resistive type 5-wire / RS-232 & USB interface (touch controller IC is on board)					
Front Frame	Aluminum						
Chassis	Heavy-duty						
Input Voltage	12VDC	12VDC or 9-36VDC					
OSD Function	OSD Keypad						
Smart OSD	Yes						
Mounting	Wall/Arm/Din Panel/Rack	Wall / Panel / Rack / Arm / Stand / VESA 100mm x 100mm					
Color	Silver						
Dimensions (W x H x D mm)	183 x 143 x 41	244 x 178 x 49	312 x 242 x 53	340 x 260 x 58	410 x 309 x 64.4	452 x 356 x 65.2	482 x 399 x 73
Operating Temperature	-10°C~50°C				0°C~50°C		
Front Panel Protection	IP 65						
Net Weight	1 kg	1.8 kgs	3 kgs	3.8 kgs	6 kgs	8.6 kgs	10 kgs
Power Adapter	36W, 63000-FSP036RAB610-RS			60W, 63040-010060-040-RS			

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4 PACSmate Medical Solutions

5 Optional Peripherals

Mounting Kits

	DM-65GS	DM-84GS	DM-104GS	DM-121GS	DM-150GS	DM-170GS	DM-190GS
Panel Mount Kit	PK-65M	PK-84M	PK-104M	PK-170M			PK-190M
Wall Mount Kit	WK-065MS-R10	WK-190MS-R10					
Rack Mount Kit	RK-065MS-R10	RK-084MS-R10	RK-104MS-R10	RK-121MS-R10	RK-150MS-R10	RK-170MS-R10	RK-190MS-R10
Din Mount Kit	DK-84MS		N/A				
LCD Monitor Arm	ARM-11				ARM-31		
LCD Monitor Stand	STAND-100-RS				STAND-210-R11		

Packing List

Description	Part Number	Remark
1 x AC power cable	32000-089900-RS	Length:1800mm (EU or US, Which type of cord is shipped depends on the contry)
1 x VGA cable	32000-036200-RS	Length:1800mm
1 x 60W AC power adapter (Non M model ONLY)	63040-010060-040-RS	For DM-150GS-R20 / 170GS-R20 / 190GS-R20 series Operating Temperature : 0ºC~ +40ºC
1 x 36W AC power adapter (Non M model ONLY)	63000-FSP036RAB610-RS	For DM-65GHS-R20 / 84GHS-R20 / 104GHS-R20 / 121GXS-R20 series Operating Temperature : 0ºC~ +40ºC
1 x User manual		
1 x Power cable for terminal block	32100-041001-RS	For M model only
1 x Touch screen RS-232 Cable / USB Cable / Driver CDROM	RS-232 Cable:32005-001100-100-RS USB Cable:32001-006100-100-RS	Length: 1800 mm Length: 1500 mm
1 x Touch pen	43125-0002C0-00-RS	

Ordering Information

Part No.		Description
6.5"	DM-65GHS/R-R20	6.5" 800cd/m² High luminance VGA LCD monitor with VGA, Aluminum front panel, Silver color, W/RS-232 and USB Touch screen, R20, RoHS
8.4"	DM-84GHS/R-R20	8.4" 450cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color,W/RS-232 Touch screen, R20, RoHS
	DM-84GHMS/R-R21	8.4" 450cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color,W/RS-232 Touch screen, 9~36V DC input, R21, RoHS
	DM-84GHS-USB/R-R20	8.4" 450cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color,W/USB Touch screen, R20, RoHS
	DM-84GHMS-USB/R-R21	8.4" 450cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color,W/USB Touch screen, 9~36V DC input, R21, RoHS
10.4"	DM-104GHS/R-R20	10.4" 400cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color, W/RS-232 and USB Touch screen, R20, RoHS
	DM-104GHMS/R-R21	10.4" 400cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color, W/RS-232 and USB Touch screen, 9~36V DC input, R21, RoHS
12.1"	DM-121GXS/R-R20	12.1" 500cd/m² XGA LCD monitor, Aluminum front panel, Silver color,W/RS-232 and USB Touch screen, R20, RoHS
	DM-121GXMS/R-R21	12.1" 500cd/m² XGA LCD monitor, Aluminum front panel, Silver color,W/RS-232 and USB Touch screen, 9~36V DC input, R21, RoHS
15"	DM-150GS/R-R20	15" 350cd/m² XGA LCD monitor, Aluminum front panel, Silver color, W/RS-232 and USB Touch screen, R20, RoHS
	DM-150GMS/R-R21	15" 350cd/m² XGA LCD monitor, Aluminum front panel, Silver color, W/RS-232 and USB Touch screen, 9 ~36V DC input, R21, RoHS
17"	DM-170GS/R-R20	17" 300cd/m² SXGA LCD monitor, Aluminum front panel, Silver color, W/RS-232 and USB Touch screen, R20, RoHS
	DM-170GMS/R-R21	17" 300cd/m² SXGA LCD monitor, Aluminum front panel, Silver color,W/RS-232 and USB Touch screen, 9~36V DC input, R21, RoHS
19"	DM-190GS/R-R21	19" 450cd/m² SXGA LCD monitor, Aluminum front panel, Silver color, W/RS-232 and USB Touch screen, R21, RoHS
	DM-190GMS/R-R22	19" 450cd/m² SXGA LCD monitor, Aluminum front panel, Silver color, W/RS-232 and USB Touch screen,9~36V DC input, R22, RoHS

Note: The smartOSD function is only supported by revision 11 models and above

1 IEI Mobile Solutions

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5 Optional Peripherals

TDM-121/150GMS

12.1"/15" Wide Range Temperature TFT LCD Monitor

USB 2.0

12V DC input

RS-232 +9~36V DC input VGA DVI-D

smart OSD

High Brightness | Wide View Angle | IP 65 | XGA 1024 x 768 | Wide Temperature | 50.000 hours Life Time
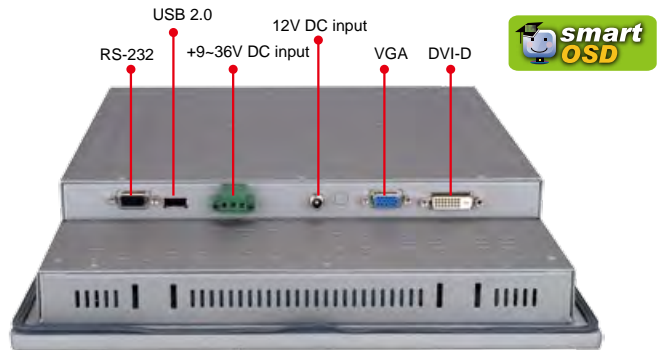
Features

1. Wide operating temperature: -30ºC~+70ºC
2. 12.1" XGA high resolution
3. Superior image
4. M models support 9~36V DC power input for mobile application
5. DVI-D and analog VGA input interface for comprehensive usage
6. IP 65 compliant

Specifications

Model	TDM-121GMS	TDM-150GS
LCD Size	12.1"	15"
Input Interface	Analog VGA + DVI-D	Analog VGA + DVI-D
Max. Resolution	1024 x 768	1024 x 768
Brightness (cd/m²)	500	450
Contrast Ratio	700 : 1	700 : 1
Display Color	262K	16.2M
Pixel Pitch (mm)	0.3075	0.297
Viewing Angle (H/V)	160/160	160/160
Touch Screen	Resistive Type 8-Wire	
Front Frame	Aluminum	Aluminum
Chassis	Heavy-duty	Heavy-duty
Input Voltage	9-36VDC	9-36VDC
OSD Function	Yes	Yes
Smart OSD	Yes	Yes
Mounting	Wall / Panel / Rack / Arm Stand / VESA 100mm x 100mm	
Color	Sliver	
Dimensions (W x H x D mm)	340 x 260 x 58	410 x 309 x 55.1
Operating Temperature	-30°C~70°C	
Front Panel Protection	IP 65	
Net Weight	3.3 kgs	6 kgs

IEI Strict Design Quality Verification

Typical monitors can only be used in environments that have temperatures in the range of 0°C to 50°C. Extended IEI environmental testing is performed to ensure the TDM series continues to function properly over its entire service life in a wide temperature range of -30°C to +70°C. After being tested in the -30°C to +70°C temperature range, the TDM series was found to maintain its original luminance.

-30°C to 70°C Assurance

IEI in House Burn-in Testing Laboratory

Continuous 1,000urs Burn-in Test

71.85°C 47.5%

Burn-in Testing Setting
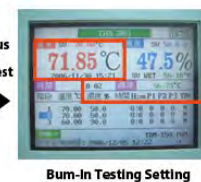
To assure the TDM can function properly in harsh working environment, the internal temperature of fest chamber was set in the range -30ºC to +70ºC

High & Low Temporature Burn-in test

Burn-In Testing Report

Nine thermocouples record all the temperature variations during the burn-in test and the TDM monitor functions during the test.

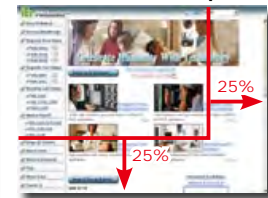## ■ 12.1" XGA Resolution: 1024 x 768

The TDM-121GMS supports higher resolutions and smaller pixel pitches (0.24mm versus 0.24mm) to deliver great computer displays.

TDM-121GMS

■ High Brightness: 450 cd/m²

With a luminance of 450 cd/m², the TDM series offers an improvement over the 250 to 300cd/m² luminance typically available with other 12.1-inch TFT LCD modules. The high-brightness feature ensures the screen content is highly visible in all lighting conditions

Normal Brightness | **High Brightness**

■ Wide Viewing Angle: 160º

Typical small-size monitors only support 130º/110º (H/V) viewing angle, but IEI TDM series can support viewing angle up to 160º/160º (H/V). Viewing angle maintains screen brightness by reducing the possibility of color change when you view the monitor from the side.

General Viewing Angle (H/V) ≒130º/110º

TDM Series Viewing Angle (H/V) ≒160º/160º
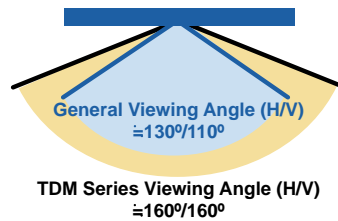
TDM Series Viewing Angle
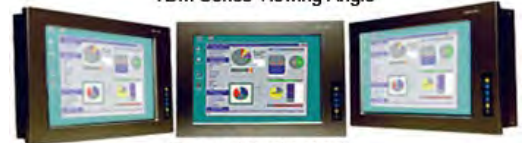
General Viewing Angle

Mounting Kits

	TDM-121GMS	**TDM-150GMS**
Panel Mount Kit	PK-170M	PK-170M
Wall Mount Kit	WK-190MS-R10	WK-190MS-R10
Stand	STAND-100-RS	STAND-200-R11
Arm	ARM-11-RS	ARM-31-RS
Rack Mount Kit	RK-121MS-R10	RK-150MS-R10

Options Power

Description	Part Number	Remark
1 x 36W AC power adapter	63000-FSP036RAB610-RS	Operating temperature : 0ºC~ +40ºC

Packing List

Description	Part Number	Remark
1 x AC power cable	32000-089900-RS	Length:1800mm (EU or US, Which type of cord is shipped depends on the contry)
1 x VGA cable	32000-036200-RS	Length:1800mm
1 x User manual		
1 x Power cable for terminal block	32100-041001-RS	For M model only
1 x Touch screen RS-232 Cable / USB Cable / Driver CDROM	RS-232 Cable:32005-001100-100-RS USB Cable:32001-006100-100-RS	Length:1800mm Length:1500mm
1 x Touch Pen	43125-0002C0-00-RS	

Ordering Information

Part No.	Description
TDM-121GMS/R-R21	12.1" 500cd/m² XGA LCD monitor, Aluminum front panel, W/12.1" touch screen, 9~36V input DC input, -30ºC ~ +70ºC operating temperature, R21, RoHS
TDM-150GMS/R-R21	15" 450cd/m² XGA LCD Monitor, Aluminum front panel, W/15" touch screen, 9~36V input DC input, -30ºC ~ +70ºC operating temperature, R21, RoHS

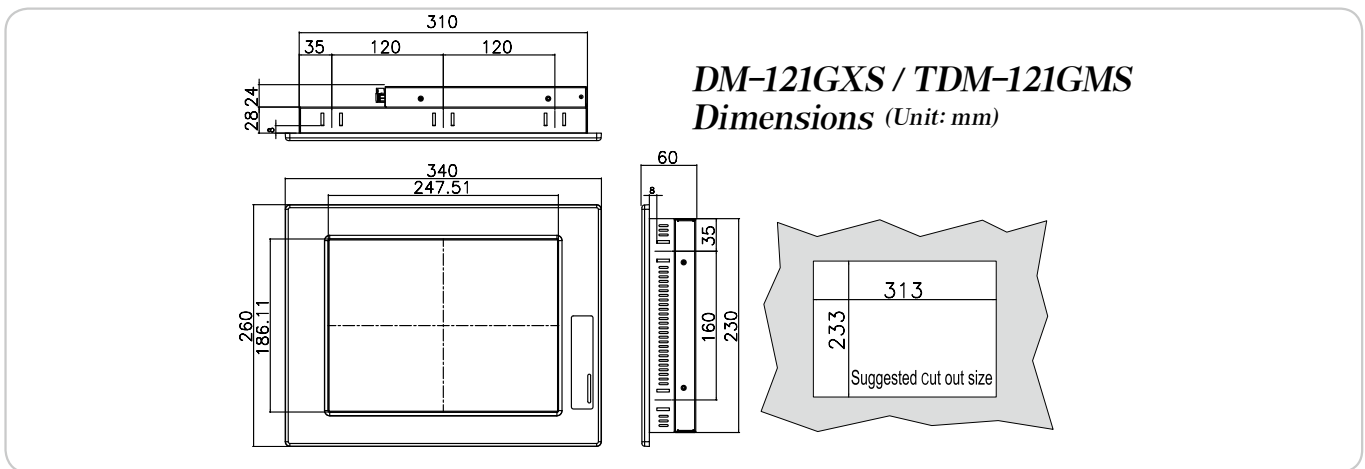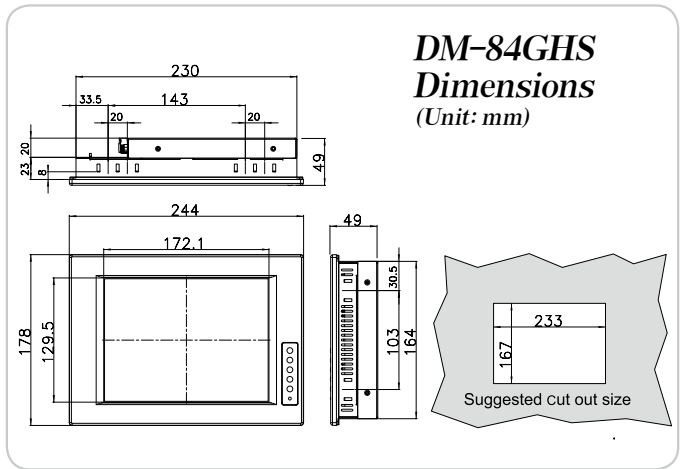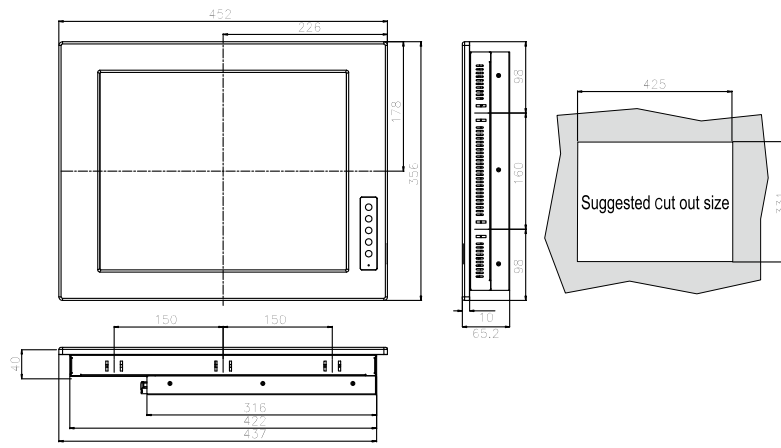**1** IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

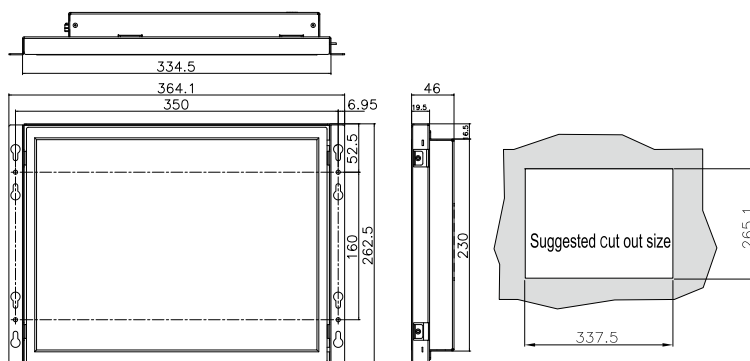**5** Optional Peripherals

SRM-121/150

12.1"/15" Sunlight Readable TFT LCD Monitor

Fanless

SRM Series

Open Frame

SRM-KIT Series

New 9-36V DC Input

With Auto-Dimming Function

Extendable OSD Cable with Auto-Dimming Function

High Brightness | Auto Dimming | IP 65 | Wide Temperature | Anti Reflection

RS-232 | USB 2.0 | +9~36V DC input | 12V DC input | VGA | DVI-D
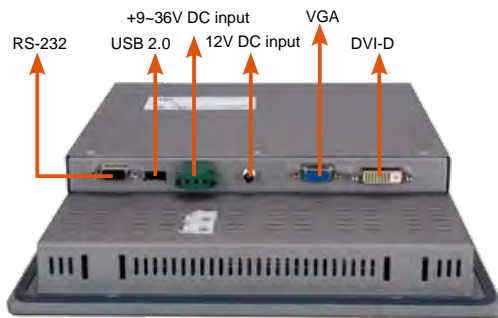
Features

1. 800 and 1000nits super high brightness
2. Superior fanless design
3. 12.1" anti-reflection technology reduces light reflection and high transmission rate to prevent light loss or distortion
4. Adjustable auto-dimming function
5. Wide operating temperature:-10ºC~+60ºC
6. OSD lock secures your settings
7. IEI patent software OSD support

Specifications

Model	SRM-121XA	SRM-150GS
	SRM-KIT121XA	SRM-KIT150G
LCD Size	12.1"	15"
Input Interface	Analog VGA + DVI-D	
Max Resolution	1024 x 768 (XGA)	1024 x 768 (XGA)
Brightness (cd/m²)	1000	800
Contrast Ratio	600:1	800:1
Display Color	262k	262k
Pixel Pitch (mm)	0.240	0.297
Viewing Angle (H/V)	160°/140°	160°/140°
Touch Screen	Resistive Type 5-Wire	
Front Frame	Aluminum	
Chassis	Heavy-duty	
Input Voltage	9-36VDC	
OSD function	Yes	
Smart-OSD	Yes	
Mounting	Wall / Panel / Rack / Arm / Stand / VESA 100mm x 100mm	
	Panel	
Color	Sliver	
Dimensions (W x H x D mm)	340 x 260 x 58	410 x 309 x 55.1
	316 x 224.4 x 47.9	364.1 x 262.5 x 46
Operating Temperature	-10°C ~ +60°C	
Front Panel Protection	IP 65	
	N/A	
Net Weight	3.3 kgs	6 kgs

■ Super High Brightness

Typical high brightness monitors usually have more than six CCFLs, but IEI SRM monitors have super high brightness with only four CCFLs. IEI SRM panels are still readable in bright sunlight with fewer backlights and thereby don't power consumption or produce extra heat.

SRM Series — 1,000cd/m² / 800cd/m²

Typical LCD — 300cd/ m²

Brightness
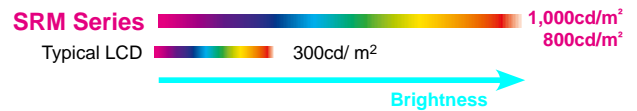
■ Wide Temperature Range

Extended IEI environment testing is performed to ensure the SRM series continues to function properly over its entire service life in a wide working temperature range of -10°C to +60°C in order to accommodate diverse industrial applications such as outdoor kiosks in winter and summer.

Conventional Operation: 0ºC~50ºC

SRM Series

-10ºC ←→ 60ºC

Operation Temperature -10~60ºC
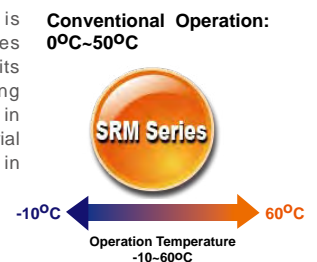
■ Superior Fanless Design and Low Power Consumption

SRM models are fanless and therefore use less power and are more silent than conventional high brightness monitors that use several high-speed cooling fans. SRM models use between 25W and 30W of power compared to the 40W to 50W used by conventional high-brightness monitors.

1
IEI Mobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

■ Innovative Auto-Dimming Function

IEI SRM series with auto-dimming functioin can adjust brightness according to ambient light so that users can do their job properly under different lamp house averages, and outdoor environments. This function not only prevents unnecessary brightness that strains eyes, it also saves energy. The SRM series auto-dimming default settings can be easily customized with the OSD menu to suit any environment.

Adjustable Backlight

Adjustable Ambient Brightness

■ Anti-Reflection Technology

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. The SRM has a special AR (anti-reflection) surface treatment to prevent reflection, ensuring excellent visibility in daylight conditions.

How does the Anti-Reflection Surface work?

Glare from External Light Source

Reduced Reflection of Light

Anti-Reflective Polarlzer Film

No Diffusion of LCD Image

Smooth Surface

LCD Screen

● Reduces intensity of reflected light
● Higher contrast
● Colors are more vibrant
● No image distortion

■ Natural Color Matrix (NCM) Technology

POS terminals and kiosks often display advertisements and colorful images, the colors of which must remain vivid and faithful to the original. The IEI SRM monitor with NCM optimization technology prevents this difference by separating color data and luminance components while controlling individual display colors for optimized performance.

Conventional Image

Original Image

Image with NCM
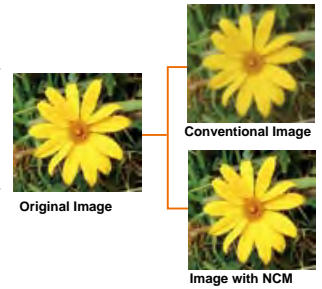
■ 12.1" XGA High Resolution

The SRM-121XA series supports higher resolutions and smaller pixel pitches (0.24mm versus 0.24mm) to deliver great displays. Higher resolution on a high-density display allows more viewable content so that the user does not have to scroll as much to view the entire screen.

12.1" SVGA Screen Capture **12.1" XGA Screen Capture**

25%

25%

XGA Higher Resolution
• Presents vivid and fine display quality   • Increases viewable content

Mounting Kits

	SRM-150GS
Panel Mount Kit	PK-170M
Wall Mount Kit	WK-190MS-R10
Rack Mount Kit	RK-150MS-R10
LCD Monitor Arm	ARM-31
LCD Monitor Stand	STAND-210-R11

Packing List

Description	Part Number	Remark
1 x AC power cable	32000-089900-RS	Length: 1800mm (EU or US, Which type of cord is shipped depends on the contry)
1 x VGA cable	32000-036200-RS	Length:1800mm
1 x DVI cable	32000-086600-RS	Length:1800mm
1 x 36W AC power adapter	63000-FSP036RAB610-RS	Operating Temperature : 0ºC~ +40ºC (for 12V DC Input Model Only)
1 x User manual		
1 x Power cable for terminal block	32100-041001-RS	For M model only
1 x Touch screen RS-232 Cable / USB cable / Driver CDROM	RS-232 Cable:32005-001100-100-RS USB Cable:32001-006100-100-RS	Length:1800mm Length:1500mm
1 x Touch pen	43125-0002C0-00-RS	

Ordering Information

● 12.1" XGA SRM Series

Model	Description
SRM-121XA/R-R30	12.1" 1000cd/m² sun readable XGA LCD monitor, Aluminum Front Panel,Silver Color,w/VGA and DVI-D input, w/12.1" RS-232 and USB Touch Screen, R30, RoHS
SRM-121XMA/R-R30	12.1" 1000cd/m² sun readable XGA LCD monitor, Aluminum Front Panel,Silver Color,w/VGA and DVI-D input,w/9~36V DC input, w/12.1" RS-232 and USB Touch Screen, R30, RoHS

● 15" XGA SRM Series

Model	Description
SRM-150GS/R-R30	15" 800cd/m² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/15" RS-232 and USB Touch Screen, R30, RoHS
SRM-150GMS/R-R30	15" 800cd/m² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/9~36V DC input , w/15" RS-232 and USB Touch Screen, R30, RoHS

● 12.1"/15" SRM-KIT Series

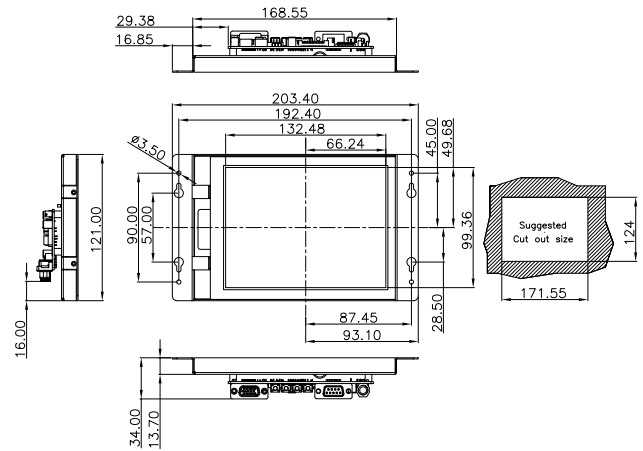| Model	Description
SRM-KIT121XA-R30	12.1" 1000 cd/m² Sun Rdadable XGA TFT LCD kit,VGA and DVI-D input, R30, RoHS
SRM-KIT150G-R30	15" 800 cd/m² Sun Rdadable XGA TFT LCD kit, VGA and DVI-D input, R30, RoHS
SRM-KIT121XMA-R30	12.1" 1000 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, R30, RoHS
SRM-KIT150GM-R30	15" 800 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, R30, RoHS

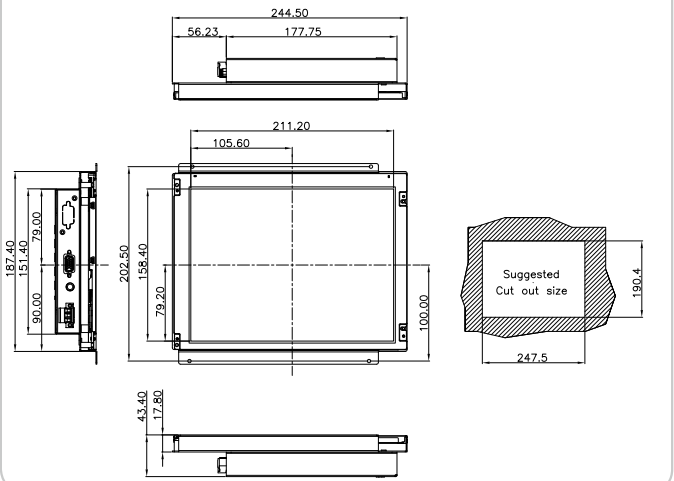**1** IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions
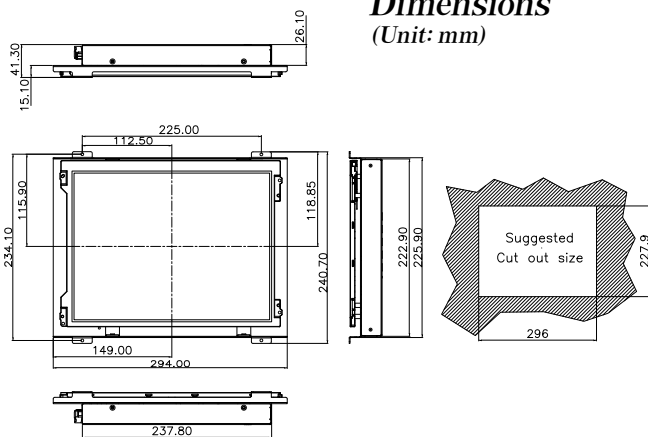
5 Optional Peripherals

DM-65GHS
Dimensions
(Unit: mm)
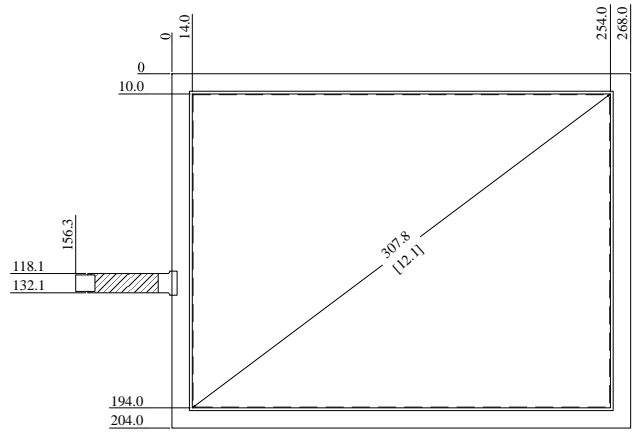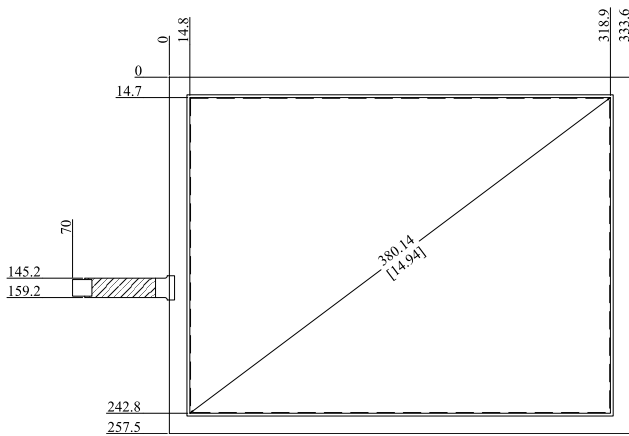
Suggested cut out size

DM-84GHS
Dimensions
(Unit: mm)

Suggested cut out size

DM-104GHS
Dimensions (Unit: mm)

Suggested Cut out size

DM-121GXS / TDM-121GMS
Dimensions (Unit: mm)

Suggested Cut out size

DM-150GS / TDM-150GMS / SRM-150GS
Dimensions (Unit: mm)

Suggested Cut out size

1
IEI Mobile
Solutions

2
**Automation
Panel
Solutions**

3
RISC-
based
Solutions

4
PACSmate
Medical
Solutions

5
Optional
Peripherals

DM-170G
Dimensions *(Unit: mm)*

Suggested cut out size
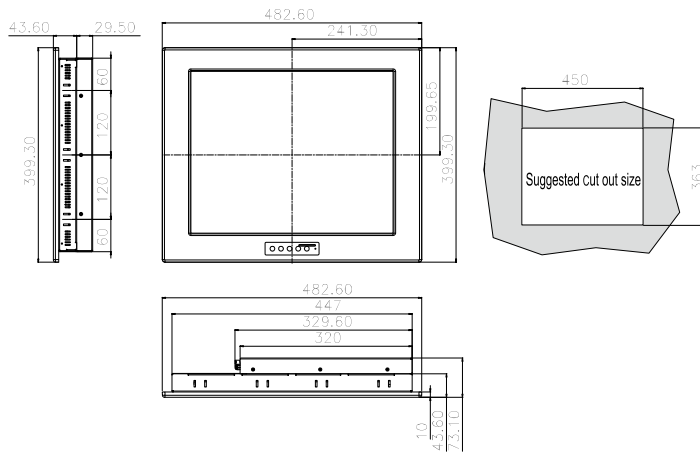
DM-190G
Dimensions *(Unit: mm)*
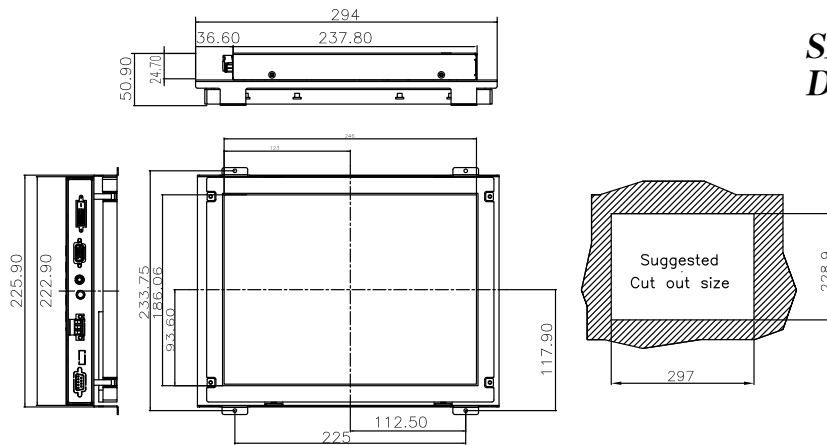
Suggested cut out size

SRM-KIT121G
Dimensions *(Unit: mm)*

Suggested Cut out size

SRM-KIT150G
Dimensions *(Unit: mm)*

Suggested cut out size

1

IEI Mobile
Solutions

2

**Automation
Panel
Solutions**

3

RISC-
based
Solutions

4

PACSmate
Medical
Solutions

5

Optional
Peripherals

LCD Kit Series

6.5" ~ 17" Open Frame LCD Monitor with OSD Function

Sunlight Readable Available

Features

1. 6.5"~17" modular architecture for efficient integration
2. Over 300cd/m² high brightness and 50000hrs MTFB long lifetime panel
3. Analog VGA or digital DVI interfaces support most of general systems
4. Sunlight readable option
5. Support software OSD for remote control applictions

smart OSD

Specifications

1000 nits   **800 nits**

Model	LCD-KIT65GH	LCD-KIT84GH	LCD-KIT104GH	LCD-KIT121GX	LCD-KIT150G	LCD-KIT170G	SRM-KIT121XA	SRM-KIT150G
LCD Size	6.5"	8.4"	10.4"	12.1"	15"	17"	12.1"	15"
Input Interface	Analog VGA			Analog VGA + DVI-D				
Max. Resolution	640 x 480	800 x 600	800 x 600	1024 x 768	1024 x 768	1280 x 1024	1024 x 768	1024 x 768
Brightness (cd/m²)	800	450	400	500	350	300	1000	800
Contrast Ratio	600 : 1	600 : 1	700 : 1	700 : 1	500 : 1	800 : 1	700:1	600:1
Display Color	262K	262K	262K	262K	16.2M	16.7M	262k	262k
Pixel Pitch (mm)	0.207	0.213	0.264	0.3075	0.297	0.264	0.240	0.297
Viewing Angle (H/V)	160/140	160/140	160/140	160/160	120/100	160/160	120°/120°	150°/110°
Chassis	Heavy-duty							
Input Voltage	12VDC	12VDC or 9-36VDC						
OSD function	Yes							
Smart-OSD	Yes							
Mounting	Panel							
Dimensions (W x H x D mm)	203 x 121 x 34	234 x 147 x 35.3	242.2 x 209 x 33.6	294 x 240.7 x 42	364.1 x 262.5 x 41.9	390.4 x 300 x 46.9	316 x 224.4 x 47.9	364.1 x 262.5 x 46
Operating Temperature	-10°C~50°C						-10°C~60°C	
Net Weight	1 kg	1.8 kgs	3 kgs	3.8 kgs	6 kgs	8.6 kgs	3.3 kgs	6 kgs
Power Adapter	36W, 63000-FSP036RAB610-RS				50W, 63000-FSP050DBAB1411-RS		36W, 63000-FSP036RAB610-RS	

Note: The smartOSD function is supported by revision 11 models and above

Ordering Information

	Part No.	Description
6.5"	LCD-KIT65GH-R20	6.5" 800cd/m² High luminance VGA TFT LCD kit, VGA input, R20, RoHS
8.4"	LCD-KIT84GH-R20	8.4" 450cd/m² High luminance SVGA TFT LCD kit, VGA input, R20, RoHS
	LCD-KIT84GHM-R21	8.4" 450cd/m² High luminance SVGA TFT LCD kit, VGA input, 9~36V DC input, R21, RoHS
10.4"	LCD-KIT104GH-R20	10.4" 400cd/m² High luminance SVGA TFT LCD kit, VGA input, R20, RoHS
	LCD-KIT104GHM-R21	10.4" 400cd/m² High luminance SVGA TFT LCD kit, VGA input, 9~36V DC input, R21, RoHS
12.1"	LCD-KIT121GX-R20	12.1" 500cd/m² XGA TFT LCD kit, VGA and DVI-D input, R20, RoHS
	LCD-KIT121GXM-R21	12.1" 500cd/m² XGA TFT LCD kit, VGA and DVI-D input, 9~36V DC input, R21, RoHS
	SRM-KIT121XA-R20	12.1" 1000 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, R20, RoHS
	SRM-KIT121XMA-R21	12.1" 1000 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, R21, RoHS
15"	LCD-KIT150G-R20	15" 350cd/m² XGA TFT LCD kit, VGA and DVI-D input, R20, RoHS
	LCD-KIT150GM-R21	15" 350cd/m² XGA TFT LCD kit, VGA and DVI-D input, 9~36V DC input, R21, RoHS
	SRM-KIT150G-R20	15" 800 cd/m² Sun Rdadable XGA TFT LCD kit, VGA and DVI-D input, R20, RoHS
	SRM-KIT150GM-R21	15" 800 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, R21, RoHS
17"	LCD-KIT170GS-R20	17" 300cd/m² SXGA TFT LCD kit, VGA and DVI-D input, R20, RoHS
	LCD-KIT170GM-R21	17" 300cd/m² SXGA TFT LCD kit, VGA and DVI-D input, 9~36V DC input, R21, RoHS

Note: The smartOSD function is supported by revision 11 models and above

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

LCD-KIT65GH
Dimensions *(Unit: mm)*

LCD-KIT84GH
Dimensions *(Unit: mm)*

Suggested Cut out size
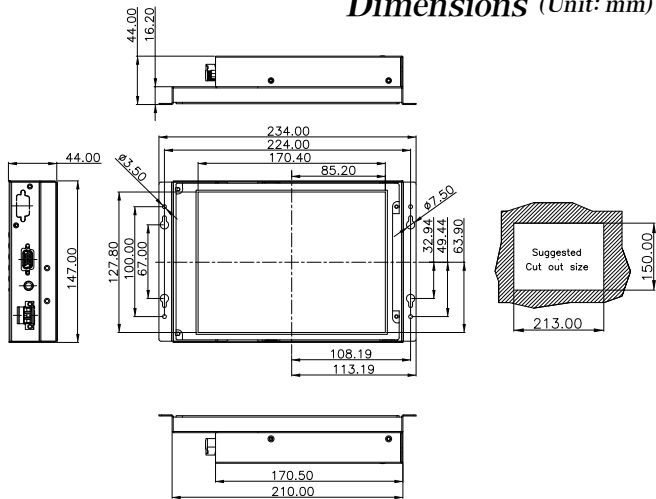
LCD-KIT104GH
Dimensions *(Unit: mm)*

Suggested Cut out size

LCD-KIT121G
Dimensions
(Unit: mm)

Suggested Cut out size

LCD-KIT150G Dimensions
(Unit: mm)

41.30
15.00
334.50
270.30
364.10
182.05
131.05
262.10
222.00
26.20

Suggested Cut out size
337.5
265.1

SRM-KIT150G Dimensions
(Unit: mm)

364.5
350
334.5
160
52.5
6.95
262.5
19.5
46
230
6.5

Suggested cut out size
337.5
265.1

LCD-KIT170G Dimensions
(Unit: mm)

299.60
150.50
R5.00
46.30
20.00
188.20
195.20
390.40
360.90
270.30
70.10
120.10
26.20
222.00

Suggested Cut out size
363.9
302.6
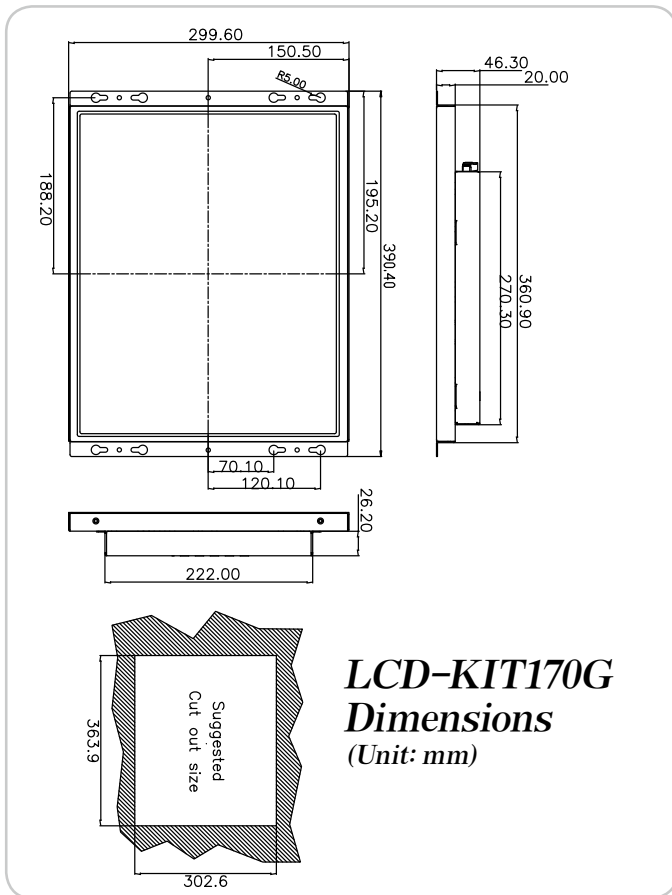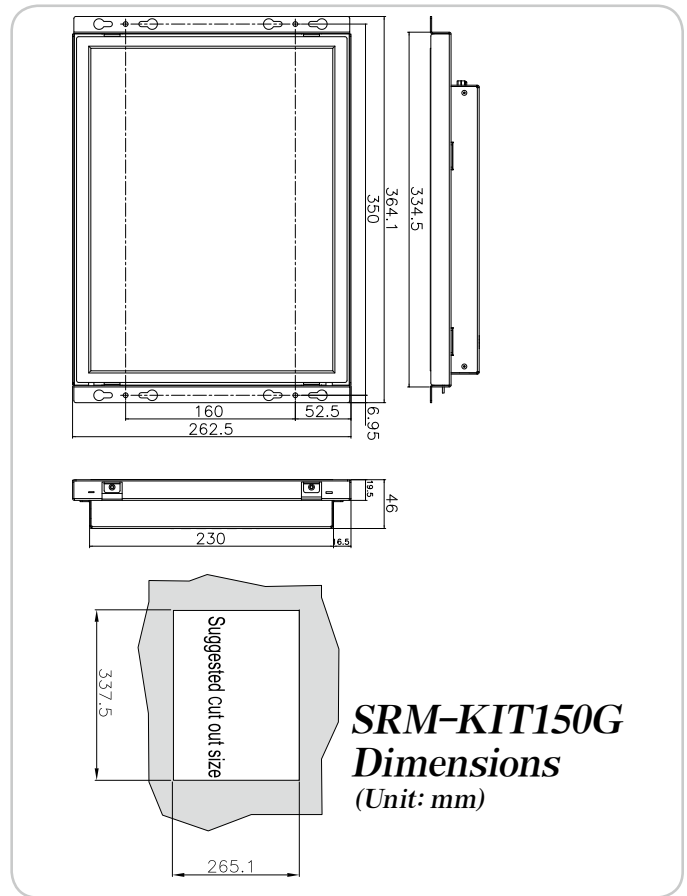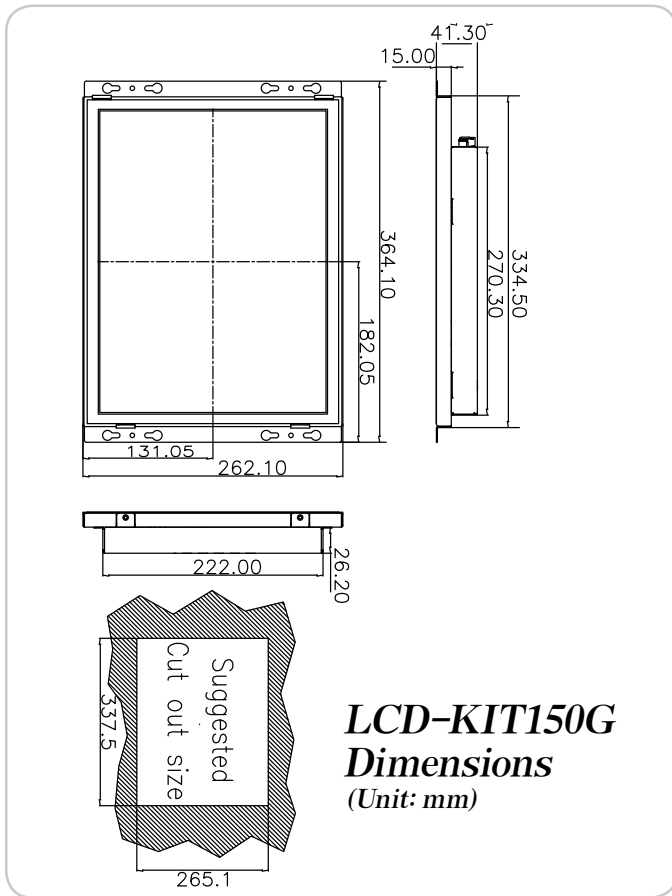
Touch Screen Series
6.5" ~ 17" Resistive LCD Touch Screen Kit

Features

1. Optical clarity: Total transmission 78 % or more
2. Input through a special stylus or finger 100g or less
3. High reliability and durability in the field

Packing List

1 x Touch screen	
1 x Controller board	
1 x Touch cable	
1 x Touch driver on CD-ROM	
1 x RS-232 / USB cable	

Ordering Information

Touch Screen Kit		IEI Products	Sensor
RS-232	USB		
T-R065G	T-R065G-USB	DM-65GS, LCD-KIT65G	4-Wire
T-R084G	T-R084G-USB	DM-84GS,ISDM-84G, LCD-KIT84G	4-Wire
T-R104G	T-R104G-USB	DM-104GS,ISDM-104G, LCD-KIT104G	5-Wire
T-R121G	T-R121G-USB	DM-121GS,ISDM-121G, LCD-KIT121G	5-Wire
T-R150G	T-R150G-USB	DM-150GS,ISDM-150G, LCD-KIT150G	5-Wire
T-R170G	T-R170G-USB	DM-170GS,ISDM-170G, LCD-KIT170G	5-Wire

T-R065G Dimensions *(Unit: mm)*
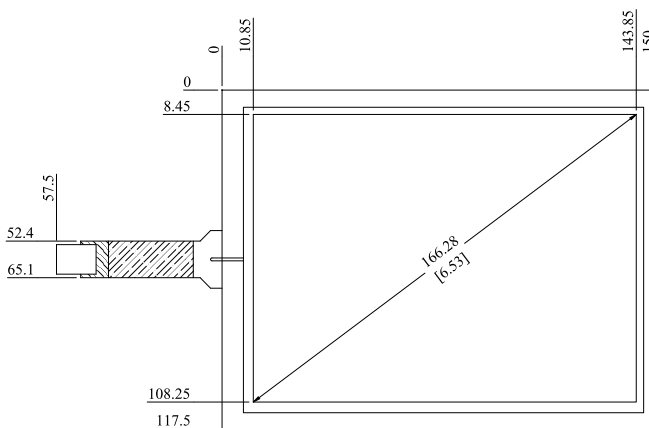
T-R084G Dimensions *(Unit: mm)*
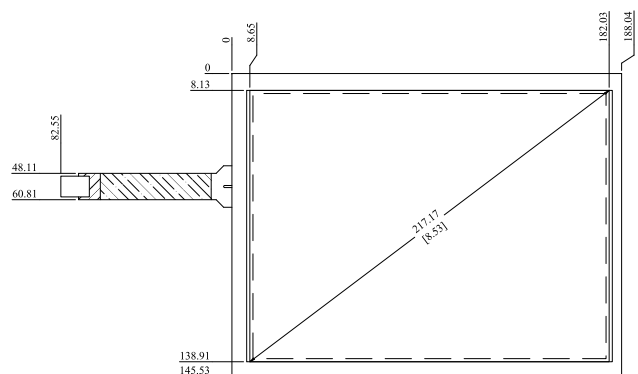
T-R104G
Dimensions *(Unit: mm)*

265.26
[10.42]

0 14.4
0
15.7
69.7
87.35
101.35
226.5
238.8
175
188.7

T-R121G
Dimensions *(Unit: mm)*

307.8
[12.1]

0 14.0
0
10.0
156.3
118.1
132.1
254.0
268.0
194.0
204.0
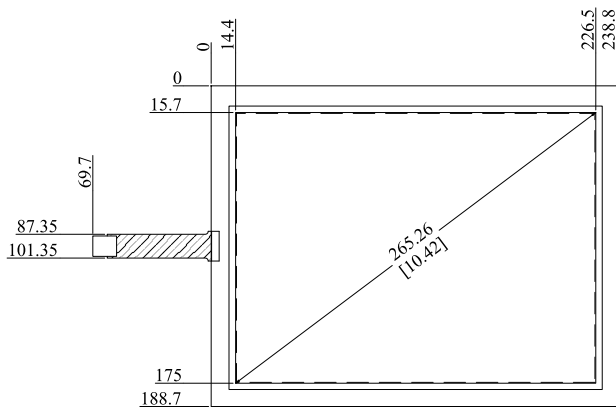
T-R150G
Dimensions *(Unit: mm)*

380.14
[14.94]

0 14.8
0
14.7
70
145.2
159.2
318.9
333.6
242.8
257.5

T-R170G
Dimensions *(Unit: mm)*

434.88
[17.09]

0 13
0
11.34
71
140.54
154.54
352
365
283.74
295.08
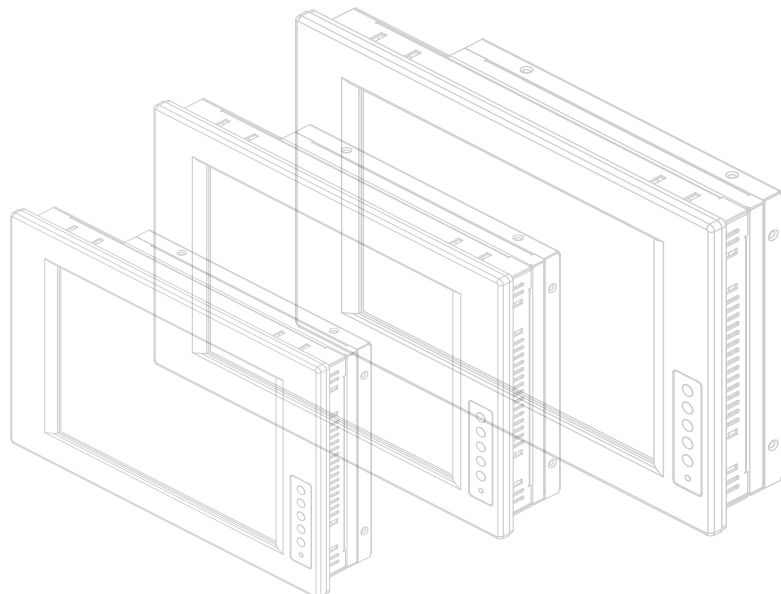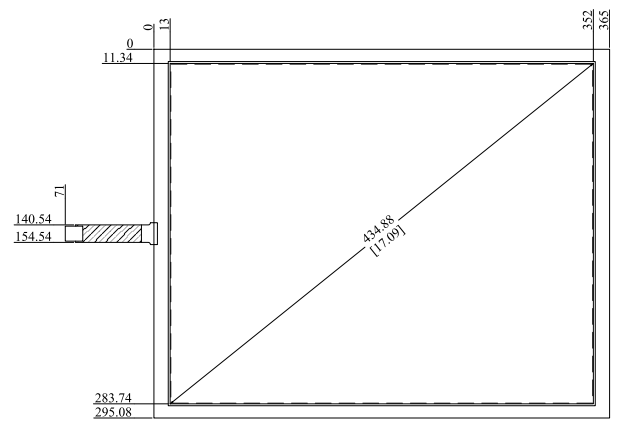
AFOLUX Multimedia Monitors

7"~19" AFOLUX Touch Monitors

- 7"~19" LCD monitor with resistive touch panel

- Multiple video input interface: VGA/S-Video/Component/Composite/DVI

- PIP function

- Ambient light sensor

- Built-in two speakers

- IP 64 front panel protection

■ Stylish Design

The clean and refreshingly simple look of the AFOLUX monitor provides an aesthetic interface for public area applications (e.g. ATMs) and industrial solutions (e.g. operator terminal).

■ Light Weight Construction

Light weight construction ensures the AFOLUX can be mounted on a rack, panel and VESA stand.

Only Half Weight of DM Series

DM-150GS 6kgs

AFL-15M 3.2kgs

■ Five Video Inputs

The AFL-15M/17M/19M have multiple video inputs through common video connectors including VGA, DVI-D, S-Video, component and BNC video input interfaces. The 5-in-1 system connects to a wide range of devices and most electronic appliances. (The AFL-07M/08M/10M/12M are 4-in-1 systems with VGA, S-Video, component and composite)
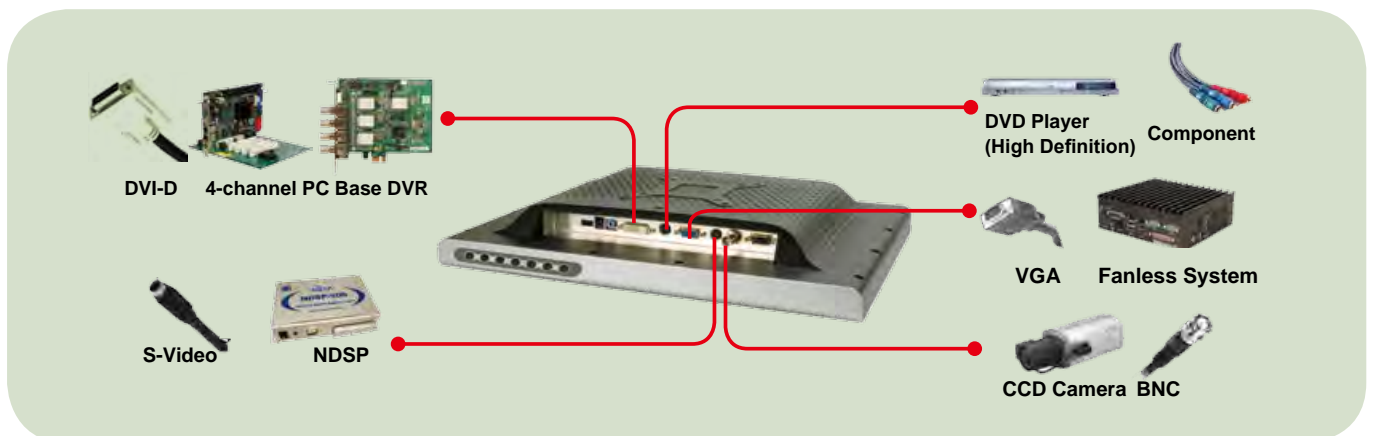
DVI-D   4-channel PC Base DVR

S-Video   NDSP

DVD Player (High Definition)   Component

VGA   Fanless System

CCD Camera BNC

1

IEI Mobile Solutions

2

Automation Panel Solutions

3

RISC-based Solutions

4

PACSmate Medical Solutions
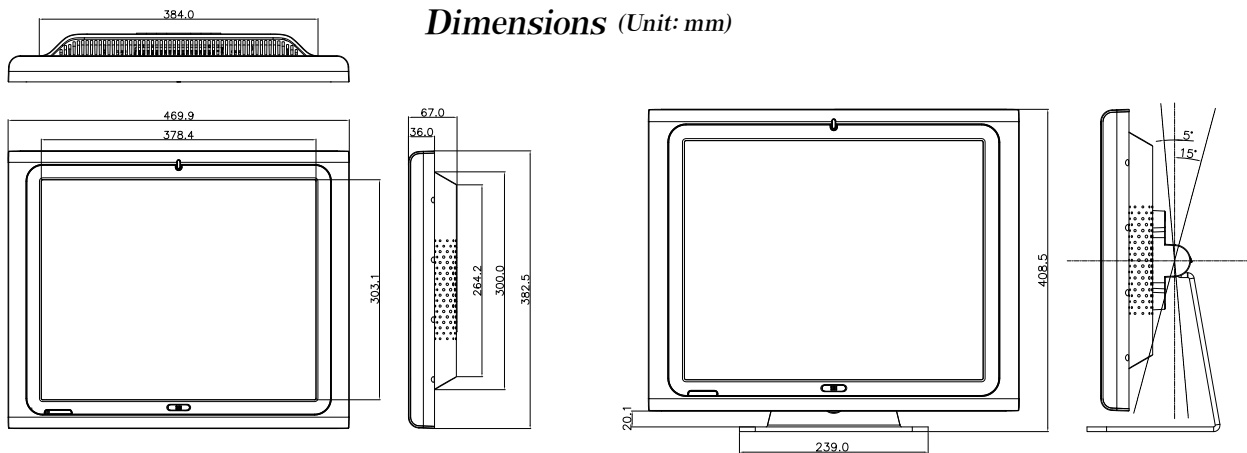
5

Optional Peripherals

■ PIP Function

PIP enables a second video/image to be viewed in a small on-screen window. Images from other sources including DVR and DVD devices can also be viewed in the PIP window.

The small on-screen window can be easily resized and moved to a specified onscreen location. Alternatively, "picture-outside-picture" (POP) can be implemented by dividing the screen into two equally sized portions with two different outputs being displayed on either screen.

PIP Settings :
- Three sizes including small, medium and large
- Four positions including upper left, lower left, upper right and lower right.
- Independent PIP widow color controls (brightness, contrast, hue and saturation)
- A blend function makes the PIP transparent

Main screen and sub screen can't display BNC/S-Video or VGA/YPbPr inputs at the same time

Picture In Picture
(Video on Video)
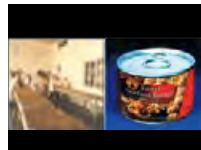
Side by Side
(Video & Video)
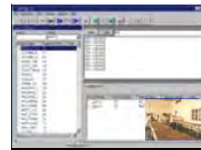
Picture In Picture
(Video on Graphics)
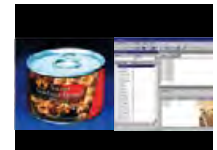
Side by Side
(Video & Graphics)

■ Remote Control for OSD Function

Hot-keys on the remote control include PIP zone, main source setting, auto-dimming, brightness, contrast and volume. Remote control hot-keys ensure easy configuration.

LCD ON/OFF
Main Source Setting
PIP Zone
Mute

Auto Dimming
OK
Auto-adjustment/Exit
Brightness
Contrast
Volume
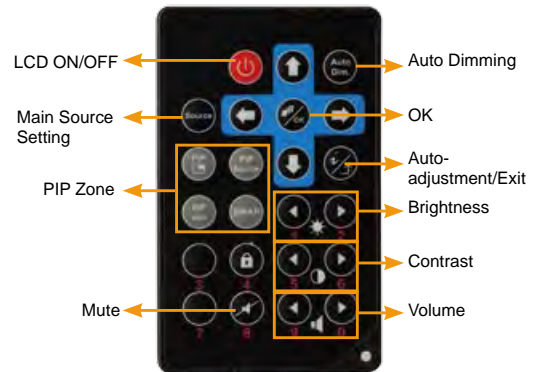
■ Full OSD Function

Integrated OSD functions under the front panel for convenient monitor configuration. Image, display, PIP, color and system configurations can all be set with the hidden OSD.

Image

System

Color

PIP

Display

Right
Left
MENU
Auto
Down
UP
LCD ON/OFF
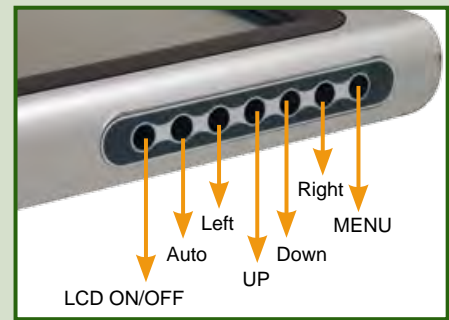
OSD Keypad is designed for AFL-15M/17M/19M

■ Ambient Light Sensor

The AFOLUX 15M, 17M and 19M models come with an ambient lightsensor (ALS) to ensure your monitor performs optimally in all lighting conditions.

The ALS can be turned on or off according to the user's preference and the operational environment. Some of the ALS benefits include:

- Reduced cost of operation by reducing the power usage
- Extended backlight life
- Provides comfortable viewing

- Higher Ambient Illuminance   - Lower Ambient Illuminance

ALS is placed on the front side, where there is an opening for light

■ Applications

Interactive digital signage

Digital menu boards in numerous restaurants

Video gaming machines in bars and casinos

1
IEI Mobile
Solutions

2
Automation
Panel
Solutions

3
RISC-
based
Solutions

4
PACSmate
Medical
Solutions

5
Optional
Peripherals

Specifications

Model	AFL-07M	AFL-08MH	AFL-10M	AFL-12M	AFL-15M	AFL-15ME	AFL-17M	AFL-19M
LCD Size	7"	8.4"	10.4"	12.1"	15"	15"	17"	19"
Input Interface	1. Composite (NTSC/PAL) 2. YPbPr 3. S-Video 4. VGA				1. BNC Connector (NTSC/PAL) 2. YPbPr 3. S-Video 4. VGA 5. DVI			
Max. Resolution	800 x 480 (WVGA)	800 x 600 (SVGA)	800 x 600 (SVGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)
Brightness (cd/m²)	500	450	400	500	350	250	380	450
Contrast Ratio	400:1	600:1	700:1	700:1	700:1	700:1	1000:1	1000:1
Display Color	262K	262K	262K	262K	262K	16.2M	16.7M	16.7M
Pixel Pitch (mm)	0.1905	0.213	0.264	0.24	0.297	0.297	0.264	0.294
Viewing Angle (H/V)	140º / 130º	160º / 140º	160º / 140º	160º / 140º	140º / 125º	170º / 160º	170º / 160º	170º / 160º
Touch Screen	Resistive type 4-wire (touch controller IC is on board)		Resistive type 5-wire (touch controller IC is on board)					
Front Frame	ABS and PC Plastic front frame							
Chassis	Aluminum chassis							
Input Voltage	12VDC							
OSD Function	Remote control for OSD functions				1. OSD Keypad below the front panel 2. Remote control for OSD functions			
Smart-OSD	YES							
Mounting	Panel / Wall mounting (VESA 75 x 75mm)		Panel / Wall mounting (VESA 75 x 75mm / 100 x 100mm)		Wall mounting (VESA 100 x 100mm)			
Color	Gray 7539U				Sliver (877U) & Gray (ABSA2037)			
Dimensions (W x H x D mm)	226 x 140 x 40	234 x 184 x 41	276 x 227 x 51	304 x 246 x 50	393 x 308 x 61		428 x 350 x 65	470 x 382 x 67
Operating Temperature	0°C~+50°C							
Front Panel Protection	IP 64 Compliant							
Net Weight	0.88 Kg	1.14 Kg	1.33 Kg	2.12 Kg	3.2 Kg		5.0 Kg	5.6 Kg
Power Adapter	36W, 63000-FSP036RAB610-RS				60W, 63000-FSP060DBAB1553-RS			

7"~12.1" AFOLUX Monitor

4-in-1 Multiple Video Input System

Standard VESA Mounting
Audio (Line in)
12V DC Input
S-Video
VGA
Component
Composite
RS-232 for Touch screen
USB for Touch screen
Speaker
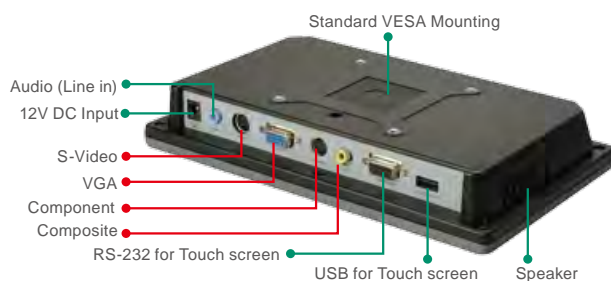
15"~19" AFOLUX Monitor

5-in-1 Multiple Video Input System (DVI-D Added)

Standard VESA mounting
Speaker
DVI-D
12V DC IN
USB for Touch screen (Option)
OSD KEY PAD
Audio (Line in)
Component
VGA
S-Video
BNC
RS-232 for Touch screen(Option)

1 — IEI Mobile Solutions

2 — **Automation Panel Solutions**

3 — RISC-based Solutions

4 — PACSmate Medical Solutions

5 — Optional Peripherals
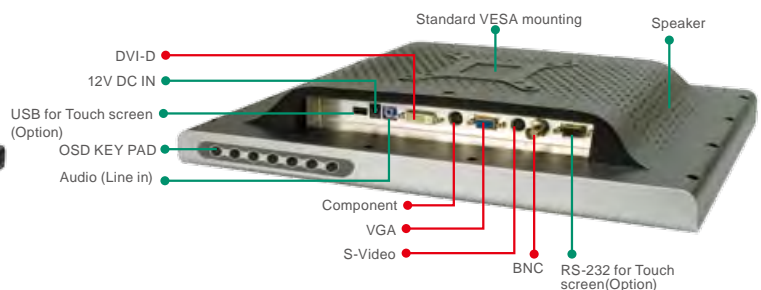
AFL-07M
Dimensions *(Unit: mm)*
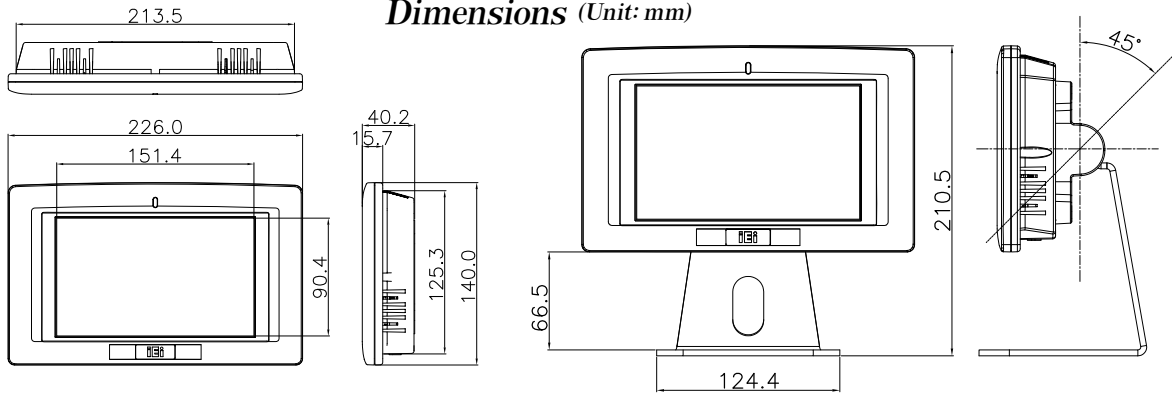
AFL-08M
Dimensions *(Unit: mm)*
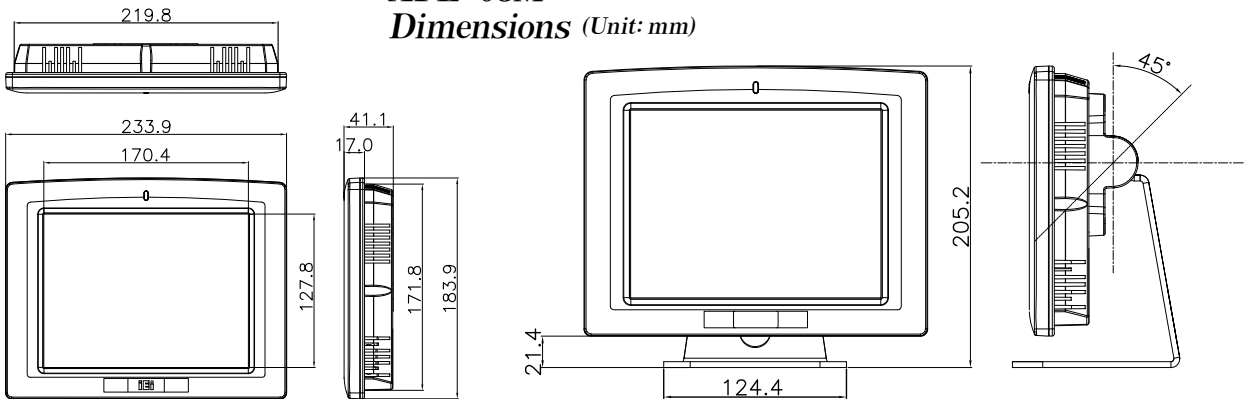
AFL-10M
Dimensions *(Unit: mm)*
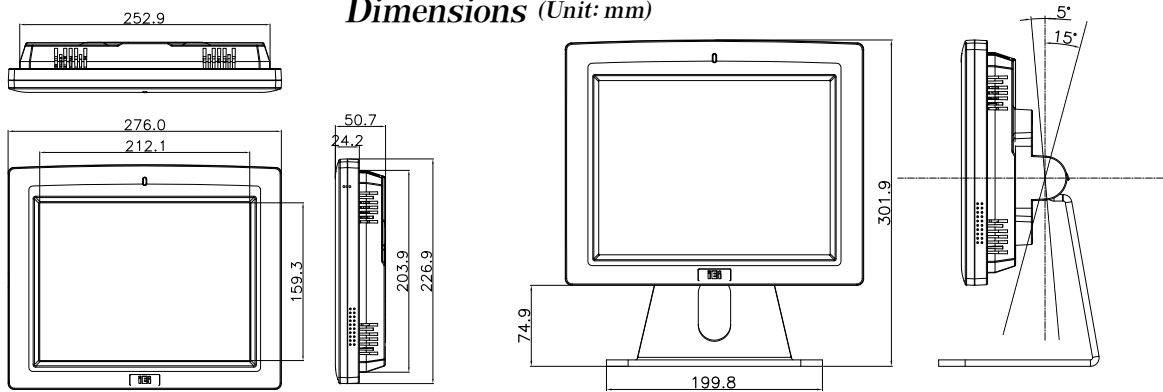
AFL-12M
Dimensions *(Unit: mm)*

AFL–15M
Dimensions *(Unit: mm)*

320.0
393.1
306.0
230.0
60.0
30.0
199.0
234.6
308.1
371.3
57.3
239.0
5°
15°

AFL–17M
Dimensions *(Unit: mm)*

351.4
428.0
339.9
272.3
64.0
34.0
261.0
261.0
350.0
392.4
36.3
239.0
5°
15°

AFL–19M
Dimensions *(Unit: mm)*

384.0
469.9
378.4
303.1
67.0
36.0
264.2
300.0
382.5
408.5
20.1
239.0
5°
15°

Options

Model	AFL-07M	AFL-08MH	AFL-10M	AFL-12M	AFL-15M	AFL-17M	AFL-19M
Panel Mounting Kits	AFLPK-08		AFLPK-12		AFLPK-15	AFLPK-17	AFLPK-19
Wall Mounting Kits	AFLWK-12				AFLWK-19		
Rack Mounting Kits	AFLRK-07	AFLRK-08	AFLRK-10	AFLRK-12	AFLRK-15-R11	AFLRK-17-R11	N/A
LCD Monitor Stand	STAND-A08/STAND-100-RS		STAND-A12/STAND-100-RS		STAND-A19/STAND-B19/STAND-210-R11		
VSTAND	VSTAND-A07		VSTAND-A10		VSTAND-A12	N/A	
DC to DC Converter Module	IDD-930160-KIT						

Ordering Information

Part NO	Description
AFL-07M/R-R20	7" 500cd/m² WVGA LCD monitor, plastic front panel, gray color, with 7" RS-232 and USB touch screen R20, RoHS
AFL-08MH/R-R20	8.4" 450cd/m² SVGA LCD monitor, plastic front panel, gray color, with 8.4" RS-232 and USB touch screen R20, RoHS
AFL-10M/R-R20	10.4" 400cd/m² SVGA LCD monitor, plastic front panel, gray color, With 10.4" RS-232 and USB touch screen R20, RoHS
AFL-12M/R-R20	12.1" 600cd/m² XGA LCD monitor, plastic front panel, gray color, With 12.1" RS-232 and USB touch screen R20, RoHS
AFL-15M/R-R20	15" 350cd/m² XGA LCD monitor, plastic front panel, gray color, with 15" RS-232 touch screen R20, RoHS
AFL-15ME/R-R20	15" 250cd/m² XGA LCD monitor, plastic front panel, gray color, with 15" RS-232 touch screen R20, RoHS
AFL-15M-USB/R-R20	15" 350cd/m² XGA LCD monitor, plastic front panel, gray color, with 15" USB touch screen R20, RoHS
AFL-15ME-USB/R-R20	15" 250cd/m² XGA LCD monitor, plastic front panel, gray color, with 15" USB touch screen R20, RoHS
AFL-17M/R-R20	17" 380cd/m² SXGA LCD monitor, plastic front panel, gray color, With 17" RS-232 touch screen R20, RoHS
AFL-17M-USB/R-R20	17" 380cd/m² SXGA LCD monitor, plastic front panel, gray color, With 17" USB touch screen R20, RoHS
AFL-19M/R-R20	19" 450cd/m² SXGA LCD monitor, plastic front panel, gray color, With 19" RS-232 touch screen R20, RoHS
AFL-19M-USB/R-R20	19" 450cd/m² SXGA LCD monitor, plastic front panel, gray color, With 19" USB touch screen R20, RoHS

Packing List

Description	Part No.	Remark
1 x AC power Cable	32000-089900-RS	Length: 1800 mm (EU or US, Which type of cord is shipped depends on the contry)
1 x VGA Cable	32000-036200-RS	Length: 1800 mm
1 x DVI Cable	32000-086600-RS	Length: 1800 mm For AFL-15M / 17M / 19M-R20
1 x Audio Cable	32007-001600-100-RS	Length: 1800 mm
1 x Component Cable	32010-000300-100-RS	Length:150 mm
1 x Component Extend Cable	32000-132800-RS	Length: 1800 mm
1 x 36W AC Power Adapter	63000-FSP036RAB610-RS	For AFL-07M / 08M / 10M / 12M-R20 series Operating Temperature : 0ºC~ +40ºC
1 x 60W AC Power Adapter	63000-FSP060DBAB1553-RS	For AFL-15M / 17M / 19M-R20 series Operating Temperature : 0ºC~ +40ºC
1 x User Manual		
1 x Remote Control	7Z000-8T00322ICP01G-RS	
1 x Touch Pen	43125-0002C0-00-RS	
1 x Touch screen RS-232 Cable / USB Cable / Driver CDROM	RS-232 cable:32005-001100-100-RS USB cable: 32001-006100-100-RS	Length: 1800 mm Length: 1500 mm RS-232 cable is for R models USB cable is for USB models

Remote Control

Touch Pen

Component Extension Cable   Component Cable

Optional 60W DC/DC Converter Module Spec. (P/N:IDD-930160-KIT)

Input Voltage	9~30VDC
Input Current	Max. 8A at 6VDC
Output	12V @ 5A
Max. Total Output	60W
Performance Characteristics	Noise & ±Ripple: <320mV, Line Regulation: <120mV , Load Regulation: <120mV
Transient Toggle Rate	250 Hz (50% duty ratio)
Transient Current Step	From 0 % to 50 % and 50 % to 100 % of max current
Efficiency	typ. 95% (Vin=12V, 80% of full load)
Dimensions	42 mm x 103 mm x 31 mm
Mounting Kit	12 mm x 80 mm
Cable Length	180 cm
Operating Temperature	-40 ℃ ~ 85 ℃

IDD-930160-KIT

60 W DC/DC converter module can be easily mounted in the vehicle equipment to supply DC power source.

IDD-930160-KIT(Optional)

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

LKM-926G/9268G

15" LCD Monitor/ Keyboard/ Mouse/ Speaker/ KVMA switch 5-in-1 1U Height Drawer

No special cables required to connect up to 8 computers!
Five functions: LCD monitor, keyboard, mouse, speaker and KVMA switch

No special cables and connecting up to eight computers !
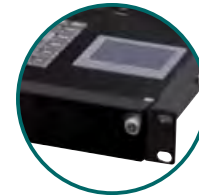
LKM-9268G
Two self-clich prevents the keyboard from sliding and shaking

Features

1. Outstanding LCD Module : Channel change control, auto scan control, programmable station name

2. KVMA Switch : 8-port KVMA switch can be manually or automatically set via LCD module

3. Standard support of English version keyboard. Optional Japanese, German, French, Italian version keyboard support

4. Embedded speaker can support alarm warning notice or audio application

5. Hot Pluggable - Add or remove computers without having to power down the switch

Specifications

			LKM-926G	LKM-9268G
System Connections			1	8
LCD Specifications	LCD Size		15"	
	Resolution		1024 x 768	
	Luminance (cd/m²)		350 cd/m²	
	Display Color		262k	
	Viewing Angle (CR=10)		400:1	
	Contrast Ratio		120º / 100º	
	LCD MTBF (hrs)		50000	
Connectors	KVMA Port	Keyboard	1 x PS/2 (Purple)	8 x PS/2 (Purple)
		Video	1 x HDB-15 Male (Blue)	8 x HDB-15 Male (Blue)
		Mouse	1 x PS/2 (Green)	8 xPS/2 (Green)
		Speaker	1 x ø 3.5 Stereo Plug (Red)	8 x ø 3.5 Stereo Plug (Red)
LCM Adjustment			No	Yes
Computer Port Selection			No	Auto-scan/ Pushbutton
Switch	LCD Power		1 x Pushbutton	
	Speaker		1 x Pushbutton	
	LCM Adjustment		No	3 x Pushbutton
Color			Black (PANTONE Black C) or White (PANTONE 413C)	
Environment	Operating Temp.		0~50˚C	
	Humidity		5-95%, non-condensing	
	Shock		10G acceleration peak to peak (11ms)	
	Vibration		5-17Hz, 0.1" double amplitude displacement.17-640Hz, 1.5G acceleration peak to peak.	
Physical Properties	Housing		Metal	
	Dimensions (L x W x H mm)		482 x 323.25 x 520	

Packing List

Part Number	Description	Amount
41020-009501-00-RS	Rack mount bracket (Long)	2
41020-009001-01-RS	Rack mount bracket (Short)	2
LKM-CB18A-RS	1.8M cable Set	1
32000-000002-RS	18.3 cm round cable power cord	1
19600-000082-RS	Screw set	1
63SPU45E201-000-RS	AD/DC power supply (For AC input model)	1
63000-ACEN023T-RS	48 VDC/DC power supply (For 48VDC input model)	1
63000-ACEN023C-RS	24 VDC/DC power supply (For 24VDC input model)	1

LKM−926G/9268G Dimensions *(Unit: mm)*

321.57
903.29
410.6
323.35
31.75
482
Active Area

Outstanding LCD Module
* Display station number
* Auto scan or user manually selected setting

Ordering Information

LKM-926G [C] - [L]-R20	Single Input 15" LCD / Keyboard / Mouse / Speaker 1U drawer includes 1.1M length cable set.AC Input, R20
LKM-926G [C] T - [L]-R20	Single Input 15" LCD / Keyboard / Mouse / Speaker 1U drawer includes 1.1M length cable set. 48VDC input, R20
LKM-926G [C] - [C] - [L]-R20	Single Input 15" LCD / Keyboard / Mouse / Speaker 1U drawer includes1.1M length cable set. 24VDC input, R20
LKM-9268G [C] - [L]-R20	8 input 15" LCD / Keyboard / Mouse / Speaker 1U drawer, AC input, R20
LKM-9268G [C] T - [L]-R20	8 input 15" LCD / Keyboard / Mouse / Speaker 1U drawer, 48VDC input, R20
LKM-9268G [C] - [C] - [L]-R20	8 input 15" LCD / Keyboard / Mouse / Speaker 1U drawer, 24VDC input, R20

[C] Color Code   B: Black   **W**: White
[L] Language Code EN: English, **JP**: Japanese, **DE**: German, **FR**: French, **IT**: Italian, **TW**: Traditional Chinese, **SP**: Spanish, **RU**: Russian

Options

LKM-CB18A-RS	1.8 M cable set; includes VGA, Keyboard, Mouse and Audio cable
LKM-CB30A-RS	3.0 M cable set; includes VGA, Keyboard, Mouse and Audio cable
LKM-CB50A-RS	5.0 M cable set; includes VGA, Keyboard, Mouse and Audio cable

1 IEI Mobile Solutions
2 Automation Panel Solutions
3 RISC-based Solutions
4 PACSmate Medical Solutions
5 Optional Peripherals

LKM-927G/9278G

17" LCD Monitor / Keyboard / Mouse / Speaker / KVMA Switch 5-in-1 1U Height Drawer

LKM-9278GB

LKM-9278GW

No special cables required for connecting up to eight computers !

Convenient OSD Control Buttons

Two internal Speakers with audio on/off switch

Touch pad and two control buttons

Two self-clinch prevents the keyboard from sliding and shaking

Auto-scanning, selecting and editing computer ports by LCD module control buttons

5-in-1 1U height drawer !
LCD monitor, keyboard, mouse, speaker and KVMA switch

The LKM-927G and LKM-9278G LCD KVMA control units allow secure access to one or multiple computers from a single KVMA (keyboard, video, mouse and audio) console in a system rack.

A single LKM-927G or LKM-9278G can control up to 8 computers. The LKM-927G and LKM-9278G both feature 17" LCD monitor and keyboard with built-in touchpad in a 1U rack. The five-in-one space-saving design has either one (LKM-927G) or eight (LKM-9278G) ports to be conveniently installed in 1U system rack.

Features

1. Integrated KVMA console (88-key keyboard and touchpad) with 17" LCD monitor in a 1U rack maximizes space in your control center.
2. Supports up to 1280x1024 resolution
3. Wide viewing angles: 160° wide viewing angle for easy viewing
4. Hot-pluggable capabilities enables the addition or removal of computers without having to power down the switch
5. Multiple languages supported: English, Japanese, German, French, Italian, Traditional Chinese, Spanish, and Russian version keyboard supported.
6. Auto-scan mode: Automatically scan the port with an interval of 10 seconds so that users can monitor their activity automatically. (For LKM-9278G)
7. Editable station name: Allow users to name each computer station on the LCD module to easily manage every station. (For LKM-9278G)
8. Optional DC power input: 48 VDC or 24 VDC power input options for more mobile and server room applications

Specifications

		LKM-927G	LKM-9278G
System Connections		1	8
LCD Specifications	LCD Size	17"	
	Resolution	1280x1024	
	Luminance (cd/m²)	380	
	Display Color	16.7M	
	Viewing Angle (CR=10)	170⁰ / 160⁰	
	Contrast Ratio	1000:1	
	LCD MTBF	50000 hrs	
Connectors	KVMA Port	Keyboard	1 x PS/2 (Purple)	8 x PS/2 (Purple)
		Video	1 x HDB-15 Male (Blue)	8 x HDB-15 Male (Blue)
		Mouse	1 x PS/2 (Green)	8 xPS/2 (Green)
		Speaker	1 x ø 3.5 Stereo Plug (Red)	8 x ø 3.5 Stereo Plug (Red)
LCM Adjustment		No	Yes
Computer Port Selection		No	Auto-scan / Pushbutton
Switch	LCD Power	1 x Pushbutton	
	Speaker	1 x Pushbutton	
	LCM Adjustment	No	3 x Pushbutton
Color		Black (PANTONE Black C) or White (PANTONE 413C)	
Environment	Operating Temp.	0~50°C	
	Humidity	5%~85%RH	
	Shock	10G acceleration peak to peak (11ms)	
	Vibration	5-17Hz, 0.1" double amplitude displacement.17-640Hz, 1.5G acceleration peak to peak.	
Physical Properties	Housing	Metal	
	Weight	17kg	
	Dimensions (L x W x H)	57.2 x 48.2 x 4.4 cm (17"/1U)	

Dimensions (Unit: mm)

572
928
68
100
130
130
100
38
482
465
433
44
32
367

Ordering Information

LKM-927G [C] - [L] -R20	Single input 17" LCD Monitor / Keyboard / Mouse / Speaker 1U Drawer with individual monitor and keyboard module, AC input, R20
LKM-927G [C] T - [L] -R20	Single input 17" LCD Monitor / Keyboard / Mouse / Speaker 1U Drawer with individual monitor and keyboard module, 48VDC input, R20
LKM-927G [C] C - [L] -R20	Single input 17" LCD Monitor / Keyboard / Mouse / Speaker 1U Drawer with individual monitor and keyboard module, 24VDC input, R20
LKM-9278G [C] - [L] -R20	8 inputs 17" LCD Monitor / Keyboard / Mouse / Speaker 1U drawer with individual monitor and keyboard module, AC input, R20
LKM-9278G [C] T - [L] -R20	8 inputs 17" LCD Monitor / Keyboard / Mouse / Speaker 1U drawer with individual monitor and keyboard module, 48VDC input, R20
LKM-9278G [C] C - [L] -R20	8 inputs 17" LCD Monitor / Keyboard / Mouse / Speaker 1U drawer with individual monitor and keyboard module, 24VDC input, R20

Note:

[C] Color Code **B**: Black **W**: White
T: 48VDC power input model
C: 24VDC power input model
[L] Language Code EN: English, **JP**: Japanese, **DE**: German, **FR**: French,
　　　　　　　　　　IT: Italian, **TW**: Traditional Chinese, **SP**: Spanish, **RU**: Russian

Packing List

Part Number	Description	Amount
41020-009501-00-RS	Rack mount bracket (Long)	2
41020-009001-01-RS	Rack mount bracket (Short)	2
LKM-CB18A-RS	1.8M cable set	1
32000-000002-RS	18.3 cm round cable power cord	1
19600-000082-RS	Screw set	1
63SPU45E201-000-RS	AD/DC power supply (For AC input model)	1
63000-ACEN023T-RS	48 VDC/DC power supply (For 48VDC input model)	1
63000-ACEN023C-RS	24 VDC/DC power supply (For 24VDC input model)	1

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

IOVU Series PPC

IOVU RISC-based PPC

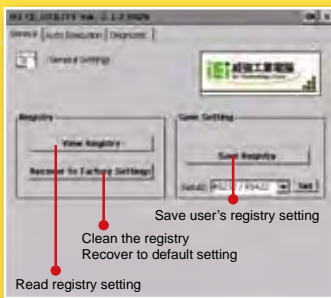**IOVU** (Input and Output Viewer) series enables the great embedded flexibility for RISC-based panel PC. Built with a XScale or Alchemy CPU, LCD display, touch screen, I/O peripherals, and pre-installed Windows® CE 5.0 or embedded Linux, the IOVU series provides the most cost-effective and stable solution for a diverse range of embedded RISC-based panel PC applications. The supported software includes thin client technology, remote management tool , embedded OS SDK (software development kit) and BSP (board support package).

▶▶Equipped with RISC CPU and Windows® CE embedded OS, the IOVU series panel PCs are with high-performance computing power, fanless design, low-power consumption, wide operating temperature, and wide-input-voltage range.

▶▶The IOVU is designed for high durability in harsh environments, due to its rugged, compact, low power consumption, and embedded system hardware design without failure-prone hard disk and fan. Each IOVU equips with an IP 65 or IP 64 compliant front panel to protect against accidental contacts of foreign bodies and against water.

▶▶Each IOVU is driven by an powerful RISC CPU with built-in WDT (Watchdog Timer) functions, has a touch screen TFT display, and comes with a series of integrated external peripheral connectors including Ethernet ports, serial ports, USB ports, audio ports, SD Card slot, and optional wireless communication modules supporting Wi-Fi 802.11 b/g, Bluetooth, GPS, or GSM/GPRS.

Windows CE 5.0 | **Linux** | **Fanless** | **Touch Screen** | **Wireless 802.11 b/g** | **RS-232 /422/485** | **Watchdog Timer** | **Speakers** | **Wide Temperature** | **Dual LAN**

Applications and Mounting Options

The IOVU series (IOVU-430M excluded) utilizes the 75x75 VESA mount standard, allowing for a wide range of mounting options in various industry applications.

Wall Mount

Panel Mount

Gaming

Vehicle PC

Industrial Automation

Home/Building Automation

Arm Mount

75 x 75 VESA Mount

Multimedia / Digital Signage

IOVU Intelligent Panel PC

Open HMI series

▌Introduction

IOVU series enables the great embedded flexibility for RISC-based panel PC applications. Built-in XScale or Alchemy CPU, LCD display, touch screen, I/O peripherals and pre-installed Windows® CE5.0 and Windows® CE6.0, the IOVU series provides the most cost-effective and stable solution for a diverse range of embedded RISC-based panel PC application. IOVU provides an easy way to collect, transfer, process, access and manage data which is generated or inquired in various applications such as factory automation, home automation, medical, transportation management, and POS.

RISC-based Solutions : The best platform for embedded system and Panel PC

	4.3"	5.7"	7"
Model Name	IOVU-430M	IOVU-570M IOVU-572M	IOVU-751R IOVU-752S
CPU	XScale® PXA270 416 MHz	Xscale® PXA 520 MHz Xscale® PXA 624 MHz	Alchemy AU1250 500 MHz Samsung S3C6410 ARM11 677 MHz
Memory	128MB	128MB/256MB	256MB
Feature	1. Projected- capacitor type multi touch screen 2. Built-in Wi-Fi 802.11b/g function 3. GPIO and CAN-bus control	1. Compact form factor 2. Built-in Wi-Fi 802.11b/g function	1. PoE available 2. MPEG 1/2/4 support

MARVELL XScale® PXA270 and RMI Alchemy™ AU1250

High performance, ultra low power, lower cost, faster time-to-market, ARM V5TE compliant and robust tool chains make XScale® technology a compelling choice for applications ranging from smaller multimedia portable devices to high performance I/O or network applications.

PXA27x Processor Block Diagram
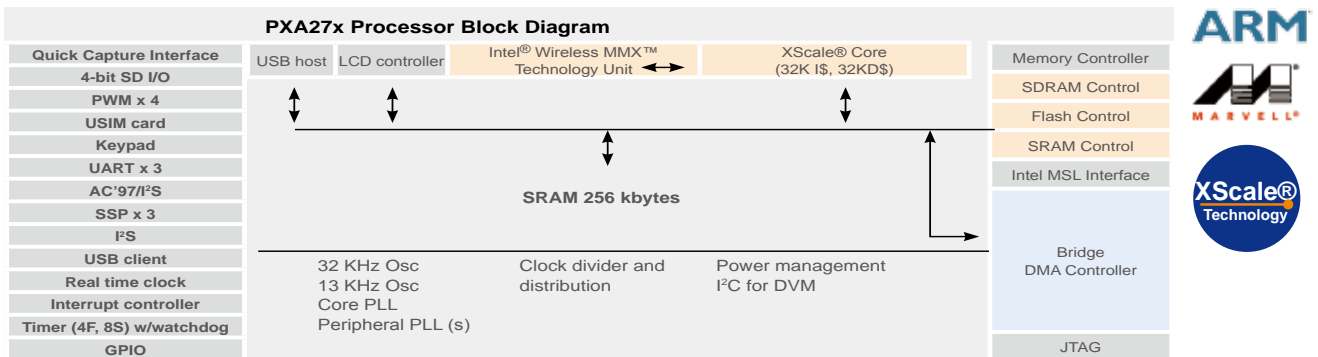
IEI provides RMI Alchemy™ RISC-based technology to enable users to play DVD quality video efficiently at full-frame rates with low power consumption. The integrated MAE (Media Acceleration Engine) supports common digital video media including MPEG1, 2, 4, DivX, and WMV9 scaled up to 1024 x 768 pixel resolution , and delivers full D1 resolution without the need for a DSP or specialized coding.
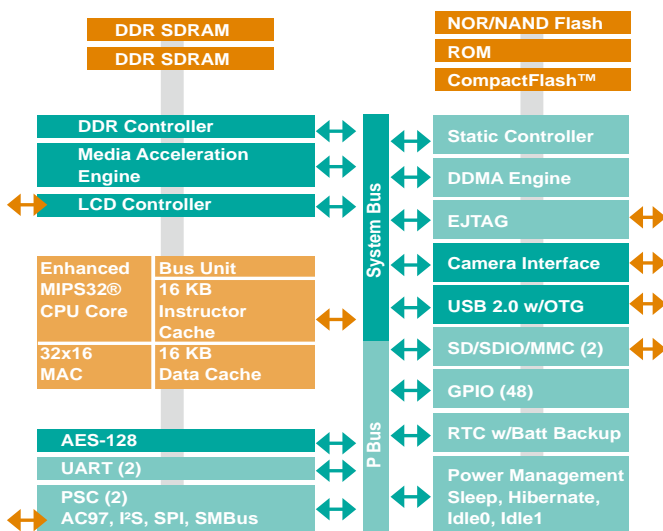
	Alchemy™ Au1250™	AMD® LX800
CPU Speed	500 MHz	500MHz
Companion Chipset	No need	AMD® CS5536
Super I/O	No need	Winbond W83627EHG
System Memory	DDR2/DDR3	DDR
Multimedia Support	Built-in Hardware MAE	MPEG1/2 with Software codec
H.D.D I/F	IDE	IDE
LCD I/F	24-bit TTL	24-bit TTL
Power Consumption	492 mW	4W
Working Temperature	-40°C ~ 100°C	0°C ~ 50°C or -10°C ~ 70°C
Embedded OS Support	Windows® CE and Embedded Linux	Windows® XP/XPe/CE

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

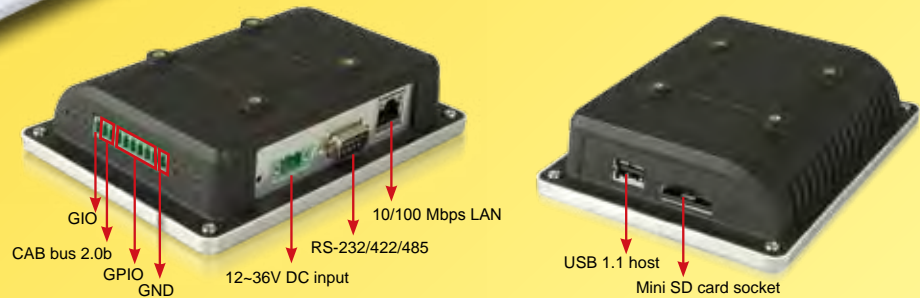**4** PACSmate Medical Solutions

5 Optional Peripherals

Software Support

SDK (Software Development Kit)

- Included Software Development Kit (SDK) for eMbedded Visual C++ to program Windows® CE application.

- Built-in .NET Compact Framework support with related SDK.

- Thin Client Technology, Microsoft RDP (Remote Desktop Protocol), to enable IOVU series to access Microsoft Windows® based applications installed on Microsoft Terminal Service server.

- The SDK includes GUI, sample code, and tool chain for users to build the custom application easily.

IEI WinCE Utility

- Free pre-installed utilities for configuring and diagnosing your IOVU series panel PC

Save user's registry setting

Clean the registry
Recover to default setting

Read registry setting

Easy to set programs for auto execution

Quickly verify peripheral function and check OS / Boot_loader version

RMT (Remote Management Tool)

- Free pre-installed utilities for configuring and diagnosing your IOVU series panel PC

Remotely control
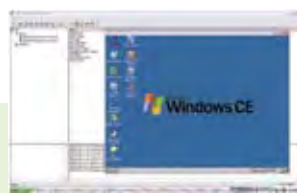
BSP (Board Support Package)

Linux Kernel 2.6.11

- GNU standard Embedded Linux 2.6.11 bootloader and OS image

- Secure Shell (OpenSSH) providing 128-bit, 192-bit or 256-bit encryption between the IOVU series and another system.

- Built-in web browser and X-window system.

- Related Linux drivers for onboard peripheral I/O, network and audio.

- Optional Board Support Package (BSP) includes kernel source code for customers to customize their own OS image

Embedded Linux Kernel configuration

Customization Linux Linux
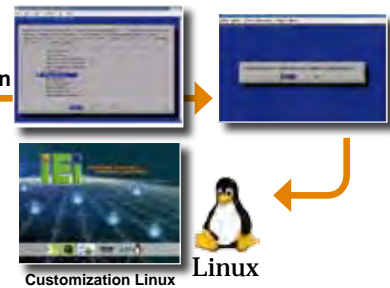
Windows® CE5.0

- Standard Windows® CE5.0 professional version license.

- Optional Board Support Package (BSP) for customers to customize their own OS image.

Windows® Platform Builder

Customization WinCE

IOVU RISC-based Panel PC Specifications

Model Name	IOVU-430M	IOVU-430S	IOVU-570M	IOVU-572M	IOVU-751R	IOVU-752S
SYSTEM						
CPU	XScale® PXA270 416 MHz	Samsung S3C2416 400MHz	XScale® PXA270 520 MHz	XScale® PXA310 624 MHz	Alchemy™ AU1250 500 MHz	Samsung S3C6410 ARM11 677 MHz
Operating System	Win CE 5.0	Win CE 6.0	Win CE 5.0	Win CE 6.0	Win CE 5.0	Win CE 6.0
Bootloader Storage	2 MB	128MB	2 MB	128 MB	2 MB	128 MB
RAM	128 MB SDRAM	128 MB SDRAM	128 MB SDRAM	256 MB DDR2	256 MB DDR2	256 MB DDR2
Program Storage Area	1GB miniSD card	Bootloader Storage	1GB SD card	Bootloader Storage	1GB SD card	Bootloader Storage
DISPLAY						
LCD Size	4.3"	4.3"	5.7"	5.7"	7"	7"
LCD Color	262 K	262 K	262 K	262 K	262 K	262 K
Display Resolution	WQVGA	WQVGA	VGA	VGA	WVGA	WVGA
LCD Brightness (cd/m²)	500	500	400	400	500	500
Dot Pitch (mm)	0.066(H) x 0.198(V)	0.066(H) x 0.198(V)	0.06(H) x 0.18(V)	0.06(H) x 0.18(V)	0.064(H) x 0.191(V)	0.1905(H) x 0.1905(V)
Viewing Angle (H-V)	140 / 110	140 / 120	140 / 100	140 / 100	140 / 100	140 / 130
Backlight MTBF	10000	20000	50000	50000	50000	50000
Touch Screen	1. Projected Capacitor Type 2. Resistor Type	Resistor Type	Resistor Type	Resistor Type	Resistor Type	Resistor Type
Multimedia Support	MPEG 1	MPEG-1/2/4/H.263	MPEG 1	MPEG 1	MPEG 1/2/4 and WMV9	MPEG-4/H.263/H.264
I/O and COMMUNICATION						
I/O Interface	1 x RS-232/422/485 (software controllable) 1 x Reset button 1 x 10/100Mbps LAN 1 x USB1.1 host 1 x CAN-bus 2.0b 6 x GPIO(voltage range 2.97V~3.63) 1 x 2-pin terminal block DC input 1 x miniSD card slot	1 x RS-232/422/485 COM port (software controllable) 1 x Reset button 1 x 10/100Mbps LAN 1 x USB1.1 host 1 x CAN bus 2.0b 6 x GPIO (voltage range 2.97V~3.63) 1 x 2-pin terminal block DC input 1 x miniSD card slot	1 x RS-232/422/485 (software controllable) 2 x 10/100Mbps LAN 2 x USB1.1 host 1 x SD card slot 1 x Reset button 1 x AT mode power switch 1 x 2-pin terminal block DC input	1 x RS-232/422/485 (software controllable) 2 x 10/100Mbps LAN 2 x USB 1.1 host 1 x SD card slot 1 x Reset button 1 x AT mode power switch 1 x 2-pin terminal block DC input	1 x 4-wired RS-232/422/485 (software controllable) 1 x RS-232 2 x 10/100Mbps LAN (one supports PoE) 2 x USB 2.0 host 1 x Reset button 1 x AT mode power switch 1 x 2-pin terminal block DC input 1 x Power jack	1 x RS-232 COM port 1 x RS-232/422/485 COM port (software controllable) 1 x 10/100Mbps LAN (supports PoE) 2 x USB 2.0 host 1 x Reset button 1 x On/Off power switch 1 x Power jack
Audio	2 x 1W speaker	2 x 1W speaker	2 x 1.5W speaker	2 x 1.5W speaker	2 x 1.5W speaker	2 x 1.5W speaker
Wireless LAN	802.11 b/g	802.11 b/g	802.11 b/g	802.11 b/g	N/A	N/A
DIMENSION						
Construction Material	ABS + PC Plastic	ABS + PC Plastic	ABS + PC Plastic	ABS + PC Plastic	ABS + PC Plastic	Aluminum (Al 6061)
Net Weight (kg)	0.6	0.7	0.7	0.7	0.8	1.2
Front Panel Color	Black	Black	Black	Black	Black	Silver
Dimensions (W x H x D mm)	145 x 104 x 34	145 x 104 x 34	180 x 135 x 45	180 x 135 x 46	226 x 140 x 41	188 x 124 x 40
ENVIRONMENTAL / POWER						
Operating Temperature (ºC)	0ºC~50ºC	0ºC~50ºC	-20ºC~60ºC	-10ºC~ 60°C	-20ºC~60ºC	-10°C~ 60°C
Front Panel Protection	IP64 compliant	IP65 compliant	IP64 compliant	IP64 compliant	IP64 compliant	IP64 compliant
Power Mode	AT	AT	AT	AT	AT	AT
Power Requirement	12~36V DC input	12~36V DC input	12~36V DC input	12~36V DC input	6~30V DC input	6~30V DC input
Power Consumption	7 W	7 W	14 W	14 W	14 W	14 W
Vibration and Shock	1. Axes: 3 axes (Vertical / Transverse / Longitudinal) 2. 10 ~ 500Hz, 60min/axis 3. Equivalent to Z: 2.18Grms, X: 1.6Grms, Y: 1.96Grms					
Humidity	5%-90% RH	5%-90% RH	5%-90% RH	5%-90% RH	5%-90% RH	5%-90% RH

IOVU-430M

**Multi-touch Empowered
Arm Based Flat-bezel Panel PC**

While touch sensor is commonplace for single points of contact, IOVU-430M's multi-touch sensor enables users to interact with the system with more than one finger at a time. IOVU-430's RISC-based system provides high performance, lower power consumption, wide operating temperature, rugged compact form factor and cost efficiency. Built-in Wi-Fi module, GPIO (General Purpose Input/Output) and CAN-bus control have varied applications be flexible.

Features:

- RISC-based processor provides high performance and extremely low power consumption
- 4.3" widescreen WQVGA TFT LCD with projected-capacitor touch screen
- Multi-touch function provides flexible touch control
- Compact fanless design with plastic housing
- Built-in 1.5w speakers
- Optional 802.11b/g Wi-Fi function
- CAN-bus and GPIO provide flexible industrial control
- Flat multi-touch screen and IP65 compliant
- Mini Secure Digital (SD) card slot for storage expansion

GIO
CAB bus 2.0b
GPIO
GND
12~36V DC input
RS-232/422/485
10/100 Mbps LAN
USB 1.1 host
Mini SD card socket

IOVU RISC-based PPC | Windows CE 5.0 | ARM | Multi-touch | Wide Temperature | Wireless 802.11 b/g | XScale® PX270

Flexible Connectivity

Designed for automation applications, IOVU-430M provides various control interface choices to fit different automatic control applications. One can use GPIO (General Purpose Input & Output) in single control cases, for instance, to receive door sensor signal via digital input and send output signal to lock relay for door control. Furthermore, IOVU-430M provides CAN-bus connectivity which empowers to compose a smart network in advanced automation applications.

Digital Input — Door Sensor
Digital Output — Door Lock Relay
Brightness Sensor
Curtain Controller
Light
Air Condition
CAN-bus
Temperature Sensor

1 IEI Mobile Solutions
2 Automation Panel Solutions
3 RISC-based Solutions
4 PACSmate Medical Solutions
5 Optional Peripherals

Projected Capacitor Multi-touch

Projected Field

Front Glass

X-Y Wire Array

Hard Coat Film Rear
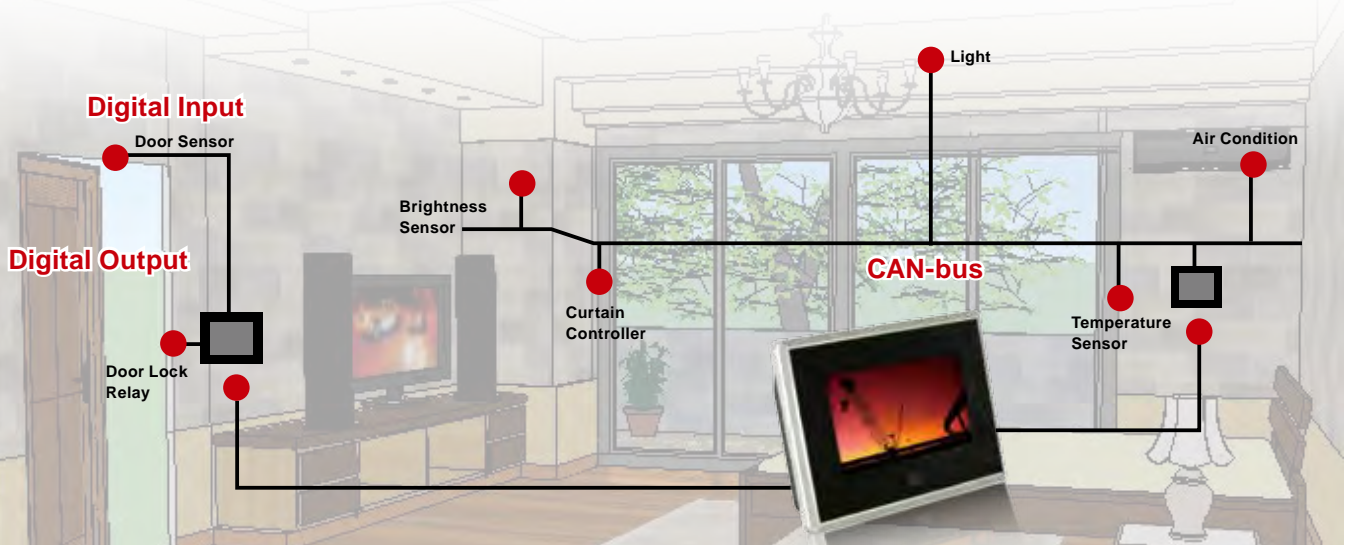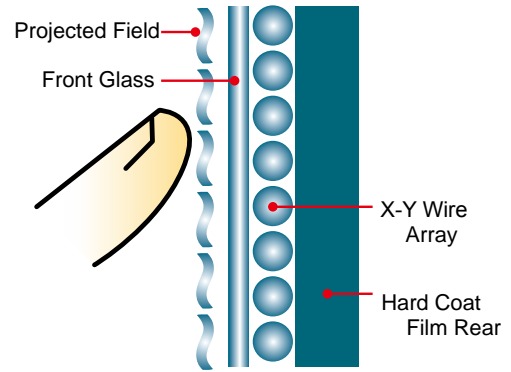
Activated by a finger or gloved hand

● Operation Theory

PCT is based on the principle of embedding an array of micro-fine sensing wires within a multi-layer laminated screen behind a protective front surface, ensuring that the sensing medium is well-protected from accidental and malicious damage.

● IEI IOVU-430M Multi-touch SDK

Empowered by equipping multi-touch technology, IOVU-430M provide users with a more delightful controlling experience. Compared to conventional single-touch technology, now application programmers increase user interface to more friendliness by providing intuitive gesture control methods. IEI shares software development kit and demo AP with source code to support quick software building. IEI IOVU-430M multi-touch SDK provides up to 10 gestures for user to define various users behaviors which makes operating more convenient and interesting.

BSP, SDK

Microsoft eMbedded Visual C++ 4.0

Microsoft .net Compact Framework

Microsoft Visual Studio
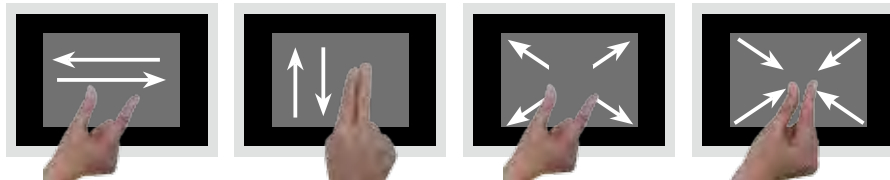
Slide (Multi-touch) Left (Right)

Slide (Multi-touch) Up (Down)

Zoom Out

Zoom In
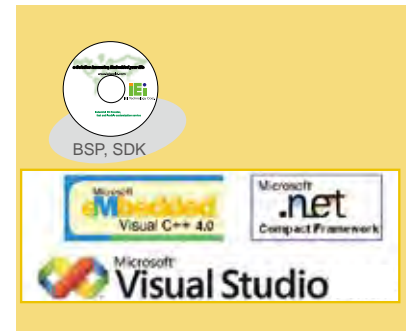
● Gesture Applications

Using a combination of gestures, users can freely rotate, zoom-in, and zoom-out, to emphasize specific photographs, graphics, or diagrams. With the ability to go back to a wider vision of an entire slide, convenience and flexibility is greatly enhanced during the communication process.
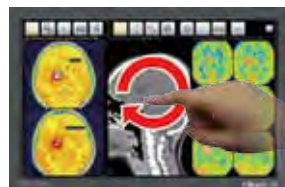
Healthcare

Presentation
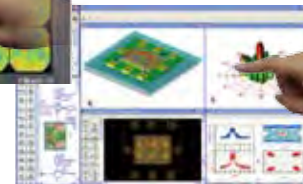
e-Collaboration

Flat Bezel Panel

The IOVU-430M full-flat surface screen makes the screen and bezel appear to blend seamlessly together. The flat-bezel design removes the front frame (bezel) of standard LCD to create a seamless surface. The IOVU-430M zero-bezel resistive/projective capacitive touch system offers aesthetic elegance, easy to clean, seamless front face.

Full Flat Screen

In-Wall Cage

White in-wall cage

Black in-wall cage

- ● **Better visual effects**
- ● **No EDGE EFFECTS**
- ● **Sleek, stylish luxury look without clutter**
- ● **Easy clean properties**

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

IOVU-430M Specifications

Model	IOVU-430M
LCD size	4.3"
Max. Resolution	480 x 272
Brightness (cd/m²)	500
LCD Color	262K
Pixel Pitch (mm)	0.066(H) x 0.198(V)
Backlight MTBF	10000 hrs
Touch Screen	Projected-Capacitor
CPU	MARVELL XScale PXA270 416MHz
RAM	128MB SDRAM
Bootloader Storage	2MB boot ROM
OS/Program Storage	1GB miniSD card
I/O Ports and Switches	1 x RS-232/422/485 COM port (software controllable) 1 x Reset button 1 x 10/100Mbps LAN 1 x USB1.1 host 1 x CAN-bus 2.0b 6 x GPIO (voltage range 2.97V~3.63) 2-pin terminal block DC input
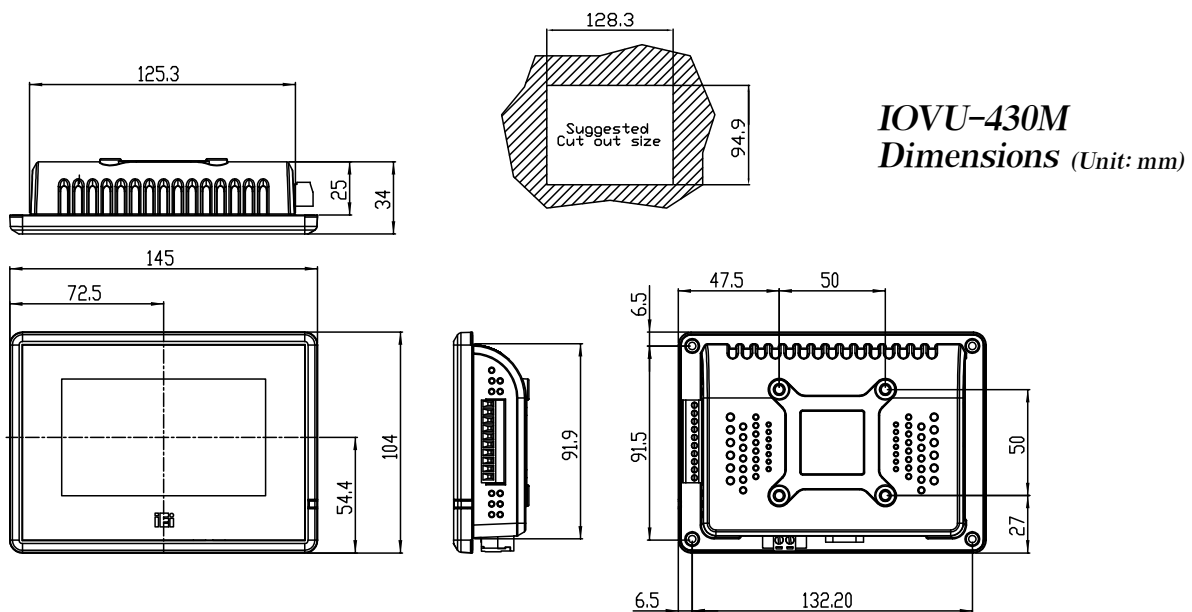
Audio	2 x 1W speaker
Construction Material	ABS + PC Plastic
LED Function	1 x Power ON/OFF LED on front panel
Mounting	Wall, stand, vstand and arm (VESA 50 x 50)
Front Panel Color	Black
Dimensions (W x H x D mm)	145 x 104 x 34
Operation Temperature (ºC)	0ºC ~ 50ºC
Storage Temperature (ºC)	-20ºC ~ 60ºC
Net Weight (kg)	0.7
IP Level (Front Panel)	IP 65
Power Requirement	12~36V DC input
Power Consumption	7W

IOVU-430M Dimensions (Unit: mm)

Packing List

1 x IOVU-430M
1 x Null modem cable
1 x Screw kits
1 x Utility CD includes SDK, utilities and technical document
1 x Touch pen (only for single-touch mode)

Options

Part No.	Description
63000-FSP060DBAB1555-RS	12V/5A DC 60W power adapter with bare wire, 90~264V AC input
IOVU-430M-IWC/B/-R10	In-wall cage (Black)
IOVU-430M-IWC/W/-R10	In-wall cage (White)

Ordering Information

Part No.	Description
IOVU-430M-CE5/MT/-R10	4.3" TFT, WQVGA fanless with MARVELL XScale PXA270 CPU, 128MB SDRAM, projected-capacitor multi-touch panel PC with built-in Windows® CE 5.0 license
IOVU-430M-CE5/ST/-R10	4.3" TFT, WQVGA fan-less with MARVELL XScale PXA270 CPU, 128MB SDRAM, resistor type single-touth panel PC with built-in Windows® CE 5.0 license
IOVU-430M-CE5/ST/WL/-R10	4.3" XSCALE PXA270 416MHZ resistor type single-touch panel PC with 802.11b/g Wi-Fi function ,built-in Windows® CE 5.0
IOVU-430M-CE5/MT/WL/-R10	4.3" XSCALE PXA270 416MHZ capacitor type multi-touch panEL PC with 802.11b/g Wi-Fi function ,built-in Windows® CE 5.0

IOVU-430S

ARM-based Panel PC

New

Built-in Wi-Fi function

WiFi

Wi-Fi function supports 802.11b/g

GIO
CAB bus 2.0b
GPIO
GND
12~36V DC input
RS-232/422/485
10/100 Mbps LAN
USB 1.1 host
Mini SD card socket

IOVU RISC-based PPC · **Windows CE 6.0** · **ARM** · **SAMSUNG** · **Wide Temperature** · **Fanless**

Features

- RISC-based processor provides high performance and extremely low power consumption
- 4.3" widescreen WQVGA TFT LCD with Resistive-touch
- Compact fanless design with plastic housing
- Built-in 1w speakers
- CAN bus and GPIO provide fl exible industrial control
- Flat multi-touch screen and IP65 compliant
- Mini Secure Digital (SD) card slot for storage expansion

Packing List

1 x IOVU-430S
1 x Null modem cable
1 x Screw kits
1 x Utility CD includes SDK, utilities, and technocal document
1 x Touch pen (only for single touch mode)

Options

Part No.	Description
63000-FSP060DBAB1555-RS	12V/5A DC 60W power adapter with bare wire, 90~264V AC input
IOVU-430M-IWC/B/-R10	In-wall cage (Black)
IOVU-430M-IWC/W/-R10	In-wall cage (White)

Ordering Information

Part No.	Description
IOVU-430S-CE6/ST/-R10	RISC Panel PC, 4.3" LCD, ARM S3C2416X40-Y640 400MHz CPU, 128MB SDRAM, Win CE6.0, RoHS
IOVU-430S-CE6/ST/WL/-R10	RISC Panel PC, 4.3" LCD, ARM S3C2416X40-Y640 400MHz CPU, 128MB SDRAM with 802.11b/g WiFi function, Win CE6.0, RoHS

Dimensions *(Unit: mm)*
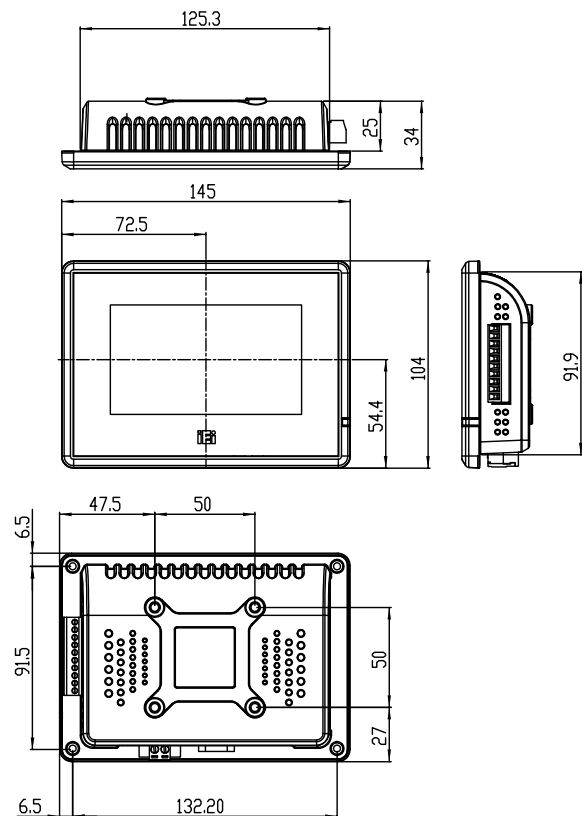
125.3, 25, 34, 145, 72.5, 104, 54.4, 91.9, 47.5, 50, 6.5, 91.5, 50, 27, 6.5, 132.20

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

IOVU-570M

ARM-based Panel PC

Built-in Wi-Fi function

Wi-Fi function
supports 802.11b/g

SD card

Preinstalled Windows® CE5.0 boot
from secure digital card

2 x USB1.1 host

12~36 V DC-IN

Reset button

10/100Mbps LAN
RS-232/422/485
(software controllable)

IOVU RISC-based PPC

Windows CE 5.0

ARM

Multi-touch

XScale® PX270

Features

- 5.7" TFT VGA LCD with resistive touch screen
- MARVELL XScale PXA270 520MHz processor and 128MB SDRAM
- Default 1GB Secure Digital card for OS and user data/programs
- Built-in 802.11b/g wireless LAN
- Built-in 1.5W speakers
- IP64 compliant front panel
- Fan-less design for rigorous environments
- Preinstalled Windows® CE5.0 operating system
- Windows® CE5.0 SDK for user application software development

Packing List

1 x IOVU-570M
1 x Utility CD includes application tools, SDK, and technical document
1 x Null modem cable
1 x Touch pen

Ordering Information

Part No.	Description
IOVU-570M-CE5/-R10	5.7", VGA fanless touch panel PC with MARVELL XScale PXA270 CPU, 128MB SDRAM, 802.11b/g wireless LAN and built-in Windows® CE5.0 operating system

IOVU-570M Dimensions *(Unit: mm)*

162

28.5

180

46.7

17.5

88

135.8

116.8

75

75

Options

Part No.	Description
AFLPK-12	Panel mounting kit
AFLWK-12	VESA 75 wall mounting kit
ARM-11-RS	LCD monitor/PPC arm kit, loading capacity from 3kg~7kg
STAND-A08-RS	LCD monitor/PPC stand kit for VESA 75 and supports up to 5 Kg
VSTAND-A07	LCD monitor/PPC stand V type for VESA 75, 0~90 degree adjustable hinge and support up to 2.5 Kg
AFLP-12BMSR-U	USB magnetic card reader
AFLP-BRW01-U / AFLPBRB01-U	USB barcode reader (white / black)
AFLP-CDB01 / AFLP-CDW01	VFD customer display (green) 5 x 7 dot matrix (black / white)
63000-FSP060DBAB1555-RS	12V/5A DC 60W power adapter with bare wire, 90~264V AC input

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

IOVU-572M

ARM-based Panel PC

New

Built-in Wi-Fi function

Wi-Fi Wi-Fi function supports 802.11b/g

SD card

SD Card Slot for storage

2 x USB 1.1 host

12~36 V DC-IN

Reset button

10/100Mbps LAN
RS-232/422/485
(software controllable)

IOVU RISC-based PPC

Windows CE 6.0

ARM

XScale® PX310

Wide Temperature

Wireless 802.11 b/g

Fanless

Features

- 5.7" TFT VGA LCD with resistive touch screen
- MARVELL XScale PXA310 624MHz processor and 256 MB DDR2
- Built-in 802.11b/g wireless LAN
- Built-in 1.5W speakers
- IP 64 compliant front panel
- Fanless design for rigorous environments
- Preinstalled Windows® CE6.0 operating system
- Windows® CE6.0 SDK for user application software development

IOVU-572M Dimensions (Unit: mm)

75

75

180

88

135.8

162

28.5

17.5

46.7

116.8

Packing List

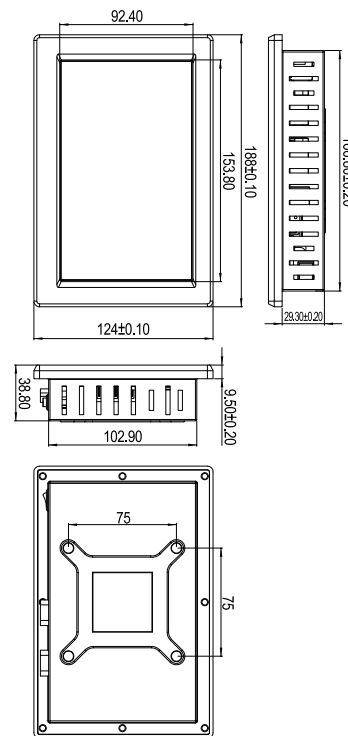| 1 x Utility CD includes application tools, SDK, and technical document |
| --- |
| 1 x Null modem cable |
| 1 x Touch pen |

Ordering Information

Part No.	Description
IOVU-572M-CE6/-R10	5.7" LCD, Marvell PXA310 624MHZ, built-in Wi-Fi, WIN CE6.0, RoHS

Options

Part No.	Description
AFLPK-12	Panel mounting kit
AFLWK-12	VESA 75 wall mounting kit
ARM-11-RS	LCD monitor/PPC arm kit, loading capacity from 3kg~7kg
STAND-A08-RS	LCD monitor/PPC stand kit for VESA 75 and support up to 5 kg
VSTAND-A07	LCD monitor/PPC stand V type for VESA 75, 0~90 degree adjustable hinge and support up to 2.5 Kg
AFLP-12BMSR-U	USB magnetic card reader
AFLP-BRW01-U / AFLPBRB01-U	USB barcode reader (white / black)
AFLP-CDB01 / AFLP-CDW01	VFD customer display (green) 5 x 7 dot matrix (black / white)
63000-FSP060DBAB1555-RS	12V/5A DC 60W power adapter with bare wire, 90~264V AC input

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

IOVU-751R

MIPS-based Panel PC

Multi-Media

MPEG1 MPEG2 MPEG4 WMV9 DivX MPEG4

Hardware Decode

Reset Button | 2 x USB2.0 | LAN 1 | LAN 2 (PoE)

Power Switch | RS-232 | RS-232/422/485 | 6~30V DC IN

Intranet Internet

PoE | Power Sourcing Ethernet Switch

Wireless LAN Access Point

IP Camera

VoIP Phone

RMI Raza Microelectronics, Inc. | Windows CE 5.0 | Linux | MIPS TECHNOLOGIES
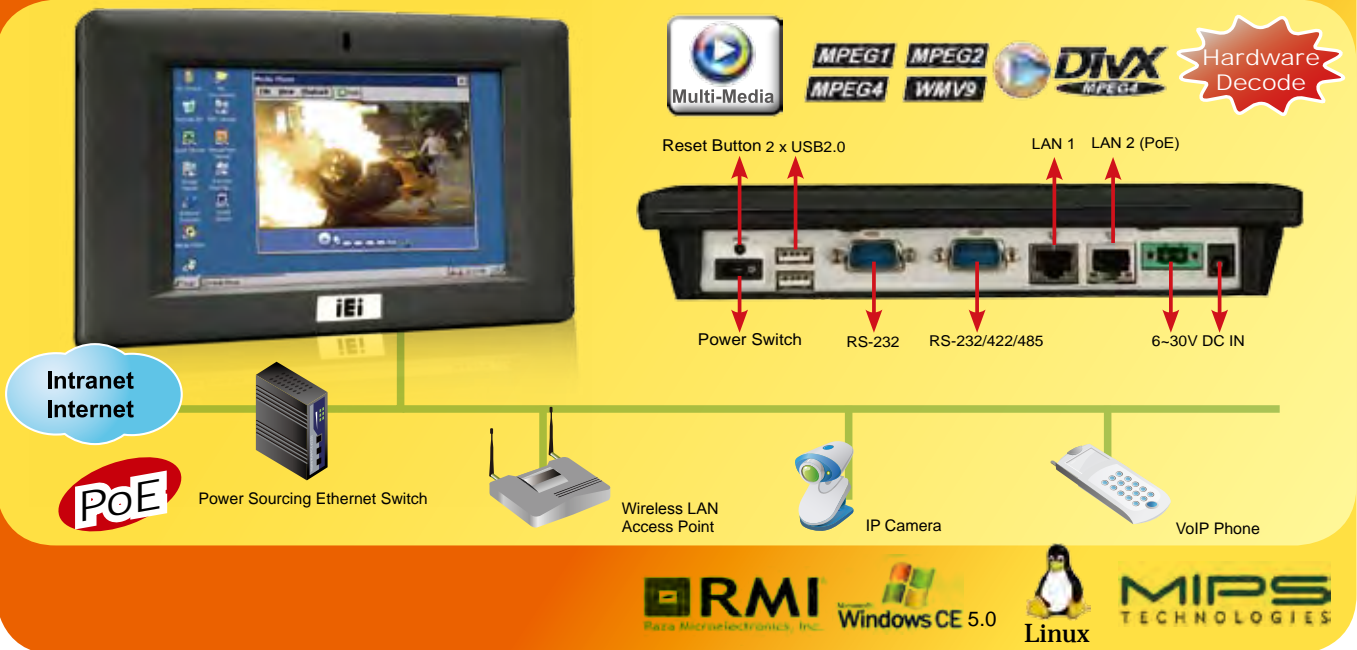
Features

- Processor includes MAE (Media Acceleration Engine) supports MPEG 1/2/4 and WMV9
- RISC-based processor provides high performance and extremely low power consumption
- PoE (Power over Ethernet) function
- 7" widescreen WVGA TFT LCD with resistive touch screen
- Compact design with plastic housing
- Fanless system
- Built-in 1.5W speakers
- Secure Digital card slot for storage expansion
- IP64 compliant front panel

Packing List

| |
|---|
| 1 x IOVU-751R |
| 1 x Utility CD includes application tools, SDK, and technical document |
| 1 x Null modem cable |
| 1 x Touch pen |
| 1 x Screw kit |

Ordering Information

Part No.	Description
IOVU-751R-CE5/-R10	7", WVGA fan-less touch panel PC with RMI Alchemy AU1250 CPU, 256MB DDR2 SDRAM, LAN supports PoE function and built-in Windows® CE5.0 Operating System
IOVU-751R-UX/-R10	7", WVGA fan-less touch panel PC with RMI Alchemy AU1250 CPU, 256MB DDR2 SDRAM, LAN supports PoE function and built-in ARM-Linux 2.6.11 Operating System

IOVU-751R Dimensions *(Unit: mm)*

Options

Part No.	Description
AFLPK-12	Panel mount kit
AFLWK-12	VESA 75 wall mount kit
ARM-11-RS	LCD Monitor/PPC Arm kit loading capacity from 3kg~7kg
STAND-A08-RS	LCD Monitor/PPC Stand kit for VESA 75 and support up to 5 Kg
VSTAND-A07	LCD Monitor/PPC STAND V type for VESA 75, 0~90 degree adjustable hinge and support up to 2.5 Kg
AFLP-12BMSR-U	USB Magnetic Card Reader
AFLP-BRW01-U / AFLPBRB01-U	USB Barcode Reader (White / Black)
AFLP-CDB01 / AFLP-CDW01	VFD Customer Display (Green) 5 x 7 dot matrix (Black / White)
63000-FSP060DBAB1553-RS	Adapter Power; FSP;FSP060-DBAB1;Active PFC;Vin:90~264VAC;60W;Dim:62*110*31.5mm;Plug=9.5mm;Cable=1500mm;Erp(NO LOAD 0.5W); Vout:12VDC;Φ2.5/Φ5.5;CCL;RoHS
63000-FSP060DBAB1555-RS	12V/5A DC 60W power adapter with bare wire, 90~264V AC input

IOVU-752S

ARM-based Panel PC

New

2 x USB 2.0 | RS-232 | RS-232/422/485 | LAN (PoE) | DC IN | 9~30V | Power Switch | Reset Button

IOVU RISC-based PPC | Windows CE 6.0 | ARM | SAMSUNG | Wide Temperature | Fanless

Features

- RISC-based processor provides high performance and extremely low power consumption
- PoE (Power over Ethernet) function
- 7" widescreen WVGA TFT LCD with resistive touch screen
- Samsung S3C6410 ARM11 677MHz processor and 256 MB DDR2
- Preinstalled Windows® CE6.0 operating system
- Sleek and compact metal design with very thin frames
- Built-in 1.5W speakers
- IP 64 compliant front panel
- Fanless design for rigorous environments

IOVU-752S Dimensions (Unit: mm)

Packing List

1 x Utility CD includes application tools, SDK, and technical document
1 x Null modem cable
1 x Touch pen
1 x Screw kit

Ordering Information

Part No.	Description
IOVU-752S-CE6/-R10	7" LCD, SAMSUNG S3C6410X66-YB40 667MHz with PoE function, WIN CE6.0, RoHS

Options

Part No.	Description
AFLPK-12	Panel mounting kit
AFLWK-12	VESA 75 wall mounting kit
ARM-11-RS	LCD monitor/PPC arm kit, loading capacity from 3kg~7kg
STAND-A08-RS	LCD monitor/PPC Stand kit for VESA 75 and support up to 5 Kg
VSTAND-A07	LCD monitor/PPC STAND V type for VESA 75, 0~90 degree adjustable hinge and support up to 2.5 Kg
AFLP-12BMSR-U	USB magnetic card reader
AFLP-BRW01-U / AFLPBRB01-U	USB barcode reader (white / black)
AFLP-CDB01 / AFLP-CDW01	VFD customer display (green) 5 x 7 dot matrix (black / white)
63000-FSP060DBAB1553-RS	Power adapter; FSP; FSP060-DBAB1; active PFC;Vin:90~264VAC; 60W; Dim: 62*110*31.5mm; plug=9.5mm; cable=1500mm; Erp(no loading 0.5W); vout:12VDC; Φ2.5/Φ5.5; CCL; RoHS
63000-FSP060DBAB1555-RS	12V/5A DC 60W power adapter with bare wire, 90~264V AC input

1 — IEI Mobile Solutions

2 — Automation Panel Solutions

3 — RISC-based Solutions

4 — PACSmate Medical Solutions

5 — Optional Peripherals

PACSmate Medical Solutions

Celebrate Humanity with Technology

PACSmate Technology Inc. is a professional medical solution provider, focusing on developing and manufacturing medical IT and medical device products which include high-resolution diagnostic displays, bedside all-in-one computers, medical panel PC and medication cart solutions. As a member of the ICP Group, the technology know-how and manufacturing expertise were inherited by PACSmate to fulfill the unique demands of the healthcare industry. PACSmate Technology Inc. is an ISO-9001 and ISO-13485 certified company since year 2011.

Our Advantages

● Continuous Technology Innovation

The patented GrayBoost® simultaneous 12-bit grayscale and GrayEasy® 30-bit deep color are PACSmate market-leading display technology. The experienced R&D teams aim to keep product innovation for better competitiveness in the market.

● Highest Product Reliability

All PACSmate medical products are compliant with stringent safety standards for the highest product reliability, including UL60601, EN60601-1, CE (EN60601-1-2) and FCC Class B.

● Diverse Product Selection

PACSmate's high-performing and cost-effective products include diagnostic monochrome/color monitors, clinical reviewing monitors and all-in-one medical panel PCs that are widely used as medical recording/ imaging terminals.

● Trusted Quality Manufacturing

All PACSmate monitors are manufactured with extreme care from panel selection to final calibration. Every aspect of each panel is carefully inspected, including luminance, viewing angle and chromaticity.

● ODM Serivces

With intensive knowledge and experiences in medical device products, PACSmate provides time-to-market ODM services to medical device manufacturers for hardware products including medical LCD monitors, laryngoscope systems, patient monitor systems and ultrasound systems.
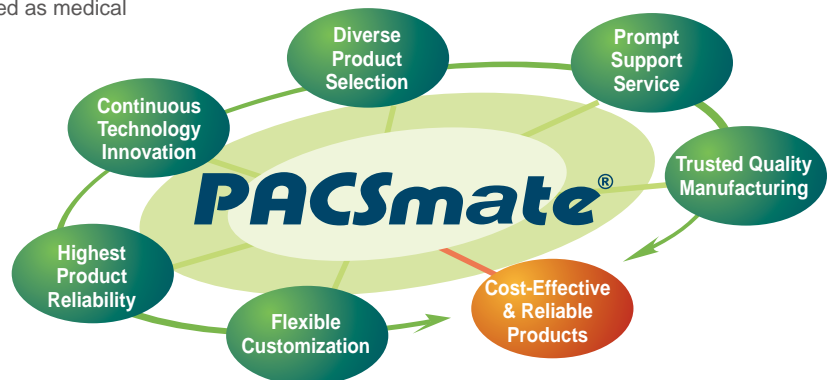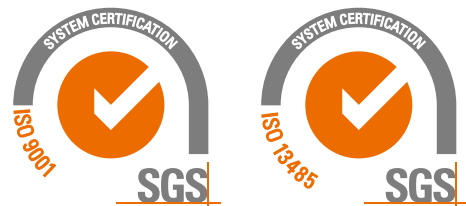
SYSTEM CERTIFICATION
ISO 9001
SGS

SYSTEM CERTIFICATION
ISO 13485
SGS

Diverse Product Selection

Prompt Support Service

Continuous Technology Innovation

Trusted Quality Manufacturing

PACSmate®

Highest Product Reliability

Flexible Customization

Cost-Effective & Reliable Products

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

Diagnostic Medical Display

High-Resolution Monochrome Monitor	MMD-5201M 12-bit 5MP	MMD-3213M 12-bit 3MP	MMD-2213M 12-bit 2MP
LCD Size	20.1"	21.3"	21.3"
Resolution	2560 x 2048	2048 x 1536	1600 x 1200
Max. Luminance	Typical: 850cd/m² Calibrated: 600cd/m²	Typical: 800cd/m² Calibrated: 600cd/m²	Typical: 1000cd/m² Calibrated: 600cd/m²
High-Resolution Color Monitor	MMD-4300C 30-bit 4MP	MMD-3213CH 30-bit 3MP	MMD-2213CH 30-bit 2MP
LCD Size	30"	21.3" Super High Brightness	21.3" Super High Brightness
Resolution	2560 x 1600	2048 x 1536	1600 x 1200
Max. Luminance	Typical : 370cd/m² Calibrated: 250cd/m²	Typical : 800cd/m² Calibrated: 500cd/m²	Typical: 950cd/m² Calibrated: 500cd/m²

● GrayBoost® 12-bit Simultaneous Grayscale

12-bit (4096 tones) image input can be all retained in 12-bit (4096 tones) image output via built-in 12-bit LUT. The PACSmate GrayBoost® technology successfully produces 12-bit image data flow through commercial dual-link graphics card, lowering total cost of ownership.
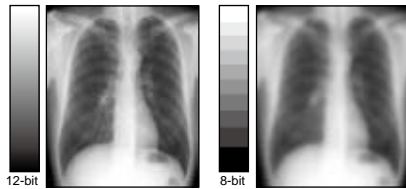
12-bit   8-bit

● User Selectable Gamma Settings

PACSmate's color medical display can be adjusted with Gamma 1.8/2.0/2.2, DICOM and user settings for different brightness conditions to achieve the optimal display quality for images from different modalities.

DICOM   Gamma 2.2   Gamma 2.0   Gamma 1.8
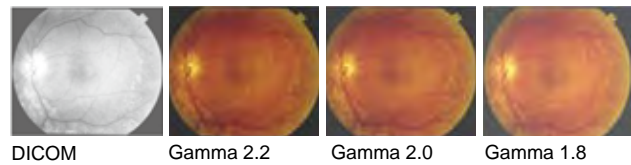
● Backlight Stabilizer

The GeniGUARD® built-in backlight stabilizer integrated in PACSmate® monitors automatically calibrates the shift of LCD brightness caused by startup drift, ambient temperature and backlight aging.

GeniGUARD®
Backlight Stabilizer

● GeniSPOT® & GeniPASS® QC Solutions

The GeniSPOT® 3-in-1 calibration system and GeniPASS® QC utility ensure the display conforming with AAPM, DIN, JIS and IEC standards all the time.

GeniSPOT® DICOM Calibration

Clinical Review Display

Model Name	MMC-2201M	MMC-2201C	MMC-1190C	MMC-1170C
Monitor Type	Monochrome	Color	Color	Color
LCD Size	20.1"	20.1"	19"	17"
Resolution	1600 x 1200	1600 x 1200	1280 x 1024	1280 x 1024
Max. Luminance (Typical)	700cd/m²	300cd/m²	300cd/m²	300cd/m²
Input Interface	VGA / DVI / Component / Composite	VGA / DVI / Component	VGA / DVI / S-Video / Component / Composite	VGA / DVI / S-Video / Component / Composite

● User Selectable Gamma Settings

PACSmate's color medical display can be adjusted with Gamma 2.2 and DICOM preset under 6500K color temperature for different brightness conditions to achieve the optimal display quality for images from different modalities.

DICOM   Gamma 2.2
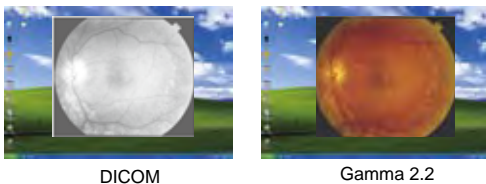
● Picture-in-Picture Function

PIP function enables a second image to be viewed in a small on-screen window. The Picture-outside-picture can be implemented for image comparison.

Flexible PIP settings:
● Upper left/right and lower left/right of window position
● Small, medium and large on-screen window setting
● Independent brightness and contrast control for PIP windows
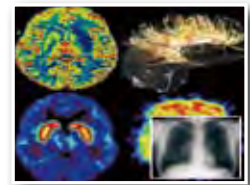
● Multiple Color Temperature Settings

A wide range of color temperatures are included in the MMC-1170C and MMC-1190C, including 3600K/4600K/5600K/6500K/7500K. The easy color temperature adjustment ensures the best display quality when viewing images from different modalities.

● Multiple Video Input Interfaces

The multiple input interfaces on selected MMC series monitors enable connection to various medical devices. The multiple inputs include:
● Single-Link DVI-D (digital)
● Component YPbPr BNC connector
● DB-15 VGA
● VGA to BNC
● Composite BNC (NTSC/PAL)

IBS-19A series

Bedside Infotainment + Point of Care = Interactive Bedside Station

PACSmate Interactive Beside Station (IBS) series is designed to improve both patient experiences and clinical efficiency with unique features. The combination of high performance computing capability and the unique LED Dash Light design offer the hospitals with endless possibilities in bedside entertainment, patient care and clinical management.

New

3.75G/HSUPA | Camera | Touch Screen | intel Embedded Alliance

Bluetooth | Wi-Fi | RFID | SCR

Patient Experiences

• VoIP Phone
• Video Conference
• Internet Access
• Movie and Music on Demand
• Gaming
• DVB-T Digital TV
• Nursing Call
• Service Ordering
• Patient Education
• Billing and Payment
• Illumination LED Reading Light
• IR Remote Control

Model Name	IBS-19A
Feature	LED Dash Light System for Visual Annunciation
LCD	19" PMVA Wide Viewing Angle LED backlight
CPU	Intel® Core™ i5 2390T 2.7GHz/Core™ i3 2100T 2.5GHz/Pentium® G620T 2.2GHz
Chipset	Intel® H61
RAM	2 x DDR3 SO-DIMM
WLAN	802.11 a/b/g/n 3T3R
2nd Display	HDMI
Optioanl Drive	Slim DVD RW
Webcam	1.3MP
Options	Smart Card Reader / RFID Reader / DVB-T Handset
DC Input	9~28V DC
AC Adaptor	120W 90~264V AC to 19V DC

Clinical Efficiency

• Visual Annunciation by the LED Dash Light
• DICOM GSDF Conformance for Referral Medical Imaging
• Smart Card Reader and RFID Integration
• WLAN and Ethernet Connection
• 3.5G HSPDA Connection
• Patient Education
• Medicine Identification by RFID
• Nursing Call
• Hospital Information System

● Innovative LED Dash Light System for Patient Room Visual Management

PACSmate IBS-19A series is the industry-first all-in-one medical computer integrated with high-brightness true color LED Dash Light System which provides maximum flexibility and unlimited possibilities for visual notification in patient bedside, patient room facility and nursing stations.

The exclusive LED Dash Light System consists of three LED light bars with total 33 light sections which provides ultimate possibilities for configuration of different visual notifications for all kinds of occasions in the healthcare environment.

The innovation LED Dash Light System can replace the traditional LED dome light with more flexibility, saving costs and maintenance efforts.
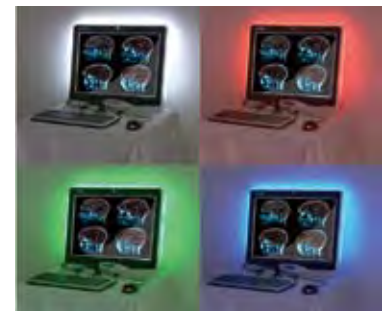
● Feature-rich Bedside Applications

Built-in high resolution auto-focus video camera

Handset for VoIP
Optional handset for VoIP phone

Digital TV
Optional DVB-T digital TV tuner with external antenna connection

Front digital MIC
Built-in high-sensitive digital microphone for video conferencing

Smart Card Reader
Built-in SCR for ID and billing applications

Nursing Call
Programmable nursing call button with LED indication light

1
IEI Mobile Solutions

2
Automation Panel Solutions

3
RISC-based Solutions

4
PACSmate Medical Solutions

5
Optional Peripherals

Medical Panel PC

Model Name	IBS-19A	POC-17i / 19i	POC-517A	POC-415A-N270	POC-415A / 417A / 419A	POC-3174B
Feature	LED Dash Light System for Visual Annunciation	High Performance	Fanless High Performance	Fanless	Fanless	Back-Up Battery (14.8V, 3800mAH) Expansion slot
LCD	19"	17" / 19"	17"	15"	15"/ 17" / 19"	17"
CPU	Intel® Core™ i5 2390T 2.7GHz/ Core™ i3 2100T 2.5GHz/ Pentium® G620T 2.2GHz	Core™ i7-620M 2.66G / Core™ i5-520M 2.4G / Core™ i3-350M 2.26G / Celeron P4500 1.86G	Intel® Core™2 Duo T9400-2.53G / T7500-2.2G / P8400-2.26G	Intel® Atom™ N270 1.6G	Intel® Celeron® M 373 1.0G with 512K L2 Cache	Intel® Core™2 Duo T7500-2.2G / CM 550-2.0G
Chipset	Intel® H61	Intel® HM55	Intel® GM45 + ICH9M	Intel® 945GSE + ICH7M	Intel® 910GMLE + ICH6M	Intel® GME965 + ICH8M
RAM	2 x DDR3 SO-DIMM Slot	2 x DDR3 SO-DIMM Slot	2 x DDR2 SO-DIMM Slot	1 x DDR2 SO-DIMM Slot	2 x DDR2 SO-DIMM Slot	2 x DDR2 SO-DIMM Slot
WLAN	802.11 a/b/g/n **3T3R**	802.11 a/b/g/n **3T3R**	802.11 a/b/g/n	802.11 a/b/g/n	802.11 a/b/g/n	802.11 a/b/g/n
Bluetooth	N/A	N/A	Yes	Yes	Yes	No
2nd Display	HDMI	VGA/HDMI	VGA/HDMI/Display port	VGA	VGA	VGA/DVI
Optical Drive	DVD RW	N/A	DVD RW	N/A	N/A	DVD RW
Expansion	N/A	N/A	N/A	N/A	N/A	1 x PCI
Power	AC 110~240 to DC 19V Power adapter	AC 110~240V to DC 12V Power Adapter	AC 110~240V to DC 12V Power Adapter	AC 110~240V to DC 12V Power Adapter	AC 110~240V to DC 12V Power Adapter	AC 110~240V to DC 12V Power Adapter
Thickness (mm)	60	72 / 76	78	61	61 / 65 / 67	122

● Value-Added UPS Advantage

The built-in battery in the POC-3/B series ensures UPS function for medical application, allowing standby power for data backup and management under sudden power shutdown situation. The PACSmate unique AUPS software provides the information of current battery status, charging status and percentage remaining, facilitating battery monitoring requirement.

● Advanced Technology Innovation

The special thermal design makes PACSmate POC-4/A ultra-slim and fanless, perfect for bedside applications. The unique Intel® Core™2 Duo platform brings advanced processing power for the POC-4/B series.

● Quick Installation Advantage

The PACSmate point-of-care series are full system panel PC with preinstalled CPU, DRAM, and HDD. The all-in-one architecture not only eases installation but also saves space.

● Best Product Reliability

The elegant ivory outlook design is perfect for the medical environment. The IP 65 dustproof and waterproof front bezel allows easy cleaning. Just using disinfectant, and the screen won't be damaged.

● Perfect Network Connection

The two Gigabit Ethernet LAN connectors and wireless 802.11a/b/g/n network connections increase redundancy and ensure reliable networks for real-time medical record processing.

● Powerful Connection Advantage

The numerous I/O interface design enables perfect connection with various medical devices. The built-in bluetooth module provides a wireless connection to a wide variety of medical peripherals.

● User-Friendly Interface

The PACSmate point-of-care panel PC series is designed with a sensitive and reliable touch screen which makes data entry much easier. The user-friendly touch screen makes the POC series a perfect information terminal.

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

*p*CART-N1 Multi-Purpose Nursing Cart with Integrated Battery

New

By PACSmate accumulated experience in digital healthcare market, the pCART-N1 nursing cart helps medical professionals to perform daily duties effectively and instantly.

● Flexible Drawer Configuration for Maximum Storage Space

3", 6" and 9" drawers can be configured by request to facilitate different requirements, rotation and hidden cable routing features.

Keyboard drawer

3" drawer with optional dividers

3" drawer with 5 medicine boxes

6" drawer with optional dividers
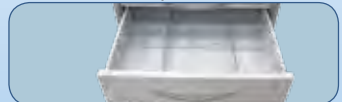
● Flexible and Solid Computer Arm

The pCart-N1 is equipped with an easy adjusting computer arm which provides maximum loading of 12 kg, computer tilt / rotation, and hidden cable routing features.

● Easy Maintenance Battery Drawer for Integration of Various Battery Solutions

Without sacrificing   any storage space, the special design of the battery drawer provides easy maintenance for battery replacement and integration of either PACSmate MBM-L400 Li-Fe or MBM-P940 Pb battery solutions for maximum 2 pieces of battery packs.
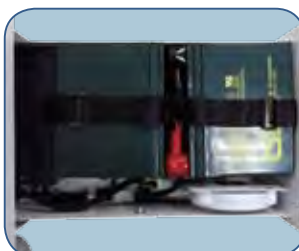
1
IEI Mobile Solutions

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Optional Peripherals

Faster and New SATA Flash Storage

The anti-vibration IEI SLC flash modules featured low power consumption, high performance and perfect reliability are best for SATA SSD and SATA DOM solutions. The SSD not only has much higher performance than the HDD, but also can be operated anytime due to the lack of moving parts such as motor, bearing or rotating head. In addition, the SSD is able to fulfill any specialized application in any harsh environment.

■ Complete Industrial SLC Solution

SLC Only

Current

	IDE PATA	SATA 1.5Gb/s	SATA 3Gb/s
Interface			
Data Transfer Rate	66/100/133 MB/sec.	1.5 Gb/s (max.)	3 Gb/s (max.)
Reliability	Fair	Better	Better
Power Consumption	Higher	Lower	Lower
Heat Delivery	Fair	Better	Better
Chipset Support after 945G/GM	No	Yes	Yes

SLC vs. MLC Comparison Table

Best Choice

SLC
(Single-Level Cell) Structure chart

Gate	
1	Floating Gate Storage Layer
0	

Source N+   N+

MLC
(Multi-Level Cell) Structure chart

Gate	
11	Floating Gate Storage Layer
10	
01	
00	

Source N+   N+

Comparison Chart : iFD SATA 2.5" 2500I & HDD

Performance testing

WIN!

Sequential Read 63.6, Sequential Write 46.4, Random Read 55.9, Random Write 67.6 (IFD 2500I /32GB)
Sequential Read 28.7, Sequential Write 28.6, Random Read 49.5, Random Write 46.2 (HDD /5400rpm/ATA)

Data Transfer Rate (MB/sec.)

Booting time testing

30sec.

WIN! 20sec.

Booting Time (sec.)   IFD 2500I /32GB   HDD /5400rpm/ATA

	SLC	MLC
Endurance (Erase cycle)	100,000	5,000-10,000
Operating Temp. Range	Support Wide Temp. -40°C~+85°C	0°C~+70°C
Power Consumption	Lower	Higher
Read/Write Performance	Better	Worse

Data Transfer Rate \ Item	IFD 2500i	HDD
Sequential Read	63.6 MB/sec.	28.7 MB/sec.
Sequential Write	46.4 MB/sec.	28.6 MB/sec.
Random Read	55.9 MB/sec.	49.5 MB/sec.
Random Write	67.6 MB/sec.	46.2 MB/sec.

Data Transfer Rate \ Item	IFD 2500i	HDD
Sec.	20 sec.	30 sec.

■ IEI SATA Flash Module Selection

Item	IFM-3000IS (WS) IFM-3000ILVS (WLVS) IFM-3000ILPS (WLPS)	iFD-2510IS (WT)
Picture		
Capacity	128MB~8GB	8GB~128GB
Interface	SATA 1.5Gb/s	SATA 3Gb/s
IDE Transfer Mode	PIO Mode 0-4 MwDMA Mode 0-2 UltraDMA Mode 0-2	PIO Mode 0-4 UltraDMA Mode 0-6
Data Transfer Rate	Read-24MB/sec. ; Write-14MB/sec.	Read-60MB/sec. ; Write-40MB/sec.
Operating Temp.	-0°C~+70°C ; -40°C~+85°C	iFD-2510IS: 0°C~+70°C iFD-2510WT: -40°C~+85°C
Storage Temp.	-55°C~+95°C	-55°C~+95°C
Humidity	10%~95%, non-condensing	10%~95%, non-condensing
Vibration	15G (7~2000Hz)	20G (7~2000Hz)
Shock	1500G/10 ms	1500G/0.5 ms
ECC Technology	High reiability based on the internail ECC function	
MTBF	>3,000,000 hours	>2,000,000 hours
R/W Endurance	2,000,000 times	2,000,000 times
Wear-Leveing	Support	Support
DC Input Voltage	+5V single power supply operation	+5V single power supply operation
Power Mode	Auto stand-by and sleep mode	
Power Consumption	200 mA	
Enclosure Material	PC mechanical cover	Metal mechanical cover
Dimensions(WxLxH)	20.5 x 39.2 x 8 mm	69.63 x 99.88 x 9.3 mm
Certificate	RoHS / CE / FCC	

Ordering Information

● **Industrial SATA Flash Card**

Part No.	Interface	Capacity
IFM-3000IS-XXXXX	Vertical SATA 1.5Gb/s 7 pin	128MB~8GB
IFM-3000WS-XXXXX	Vertical SATA 1.5Gb/s 7 pin	128MB~8GB
IFM-3000ILVS-XXXXX	Vertical SATA 1.5Gb/s 7 pin	128MB~8GB
IFM-3000WLVS-XXXXX	Vertical SATA 1.5Gb/s 7 pin	128MB~8GB
IFM-3000ILPS-XXXXX	Horizontal SATA 1.5Gb/s 7 pin	128MB~8GB
IFM-3000WLPS-XXXXX	Horizontal SATA 1.5Gb/s 7 pin	128MB~8GB

● **Industrial SATA 2.5" Flash Disk**

Part No.	Interface	Capacity
IFD-2510IS-XXXXX	SATA 3Gb/s 7+15 pin	8GB~128GB
IFD-2510WT-XXXXX	SATA 3Gb/s 7+15 pin	8GB~64GB

XXXXX=Capacity-128MB/256MB/512MB/1GB/2GB/4GB/8GB/ 16GB/32GB/64GB/128GB
I= Standard grade opertion temp.: 0°C~70°C
W=Industrial grade opertion temp.: -40°C~85°C

Intelligent DC UPS Module

12V/9~36V DC Input, 12V DC Output Uninterruptible Power Supply Module with Diagnostics

- VESA 75 or VESA 100 mounting
- 9-36V input through terminal or power jack, or 12V through power jack only
- Battery status and charge monitoring utility. Remote network management capabilities

Features
- 60W (5A @ 12V) or 100W (8.3A @ 12V) output
- 28Wh or 56Wh, for more than 140 minutes operation time (depending on panel PC power requirements)
- Rugged metal enclosure for standard VESA 75/100 mounting
- Web-based, remote network management, no software installation required
- Local PC-based monitoring software for input detection and battery status monitoring
- Auto shut down when battery low
- Remote DC output on/off switch for external switch installation
- Provides stable power to the PC during line sags and spikes and absorbs power surges and transients, protecting expensive equipment

New

Model Name	AUPS-A10 / AUPS-A20	AUPS-B10 / AUPS-B20	AUPS-C20
Input Power	AUPS-A10 (12V)	AUPS-B10 (12V)	9~36V
	AUPS-A20 (9~36V)	AUPS-B20 (9~36V)	x
Dimensions	150 x 95 x 34 mm	170 x 150 x 34 mm	233x197x 59mm
Battery Capacity	28 Wh (Watt/Hour)	56 Wh (Watt/Hour)	200 Wh (Watt/Hour)
Output Power	60W (5A@12V)	100W (8.3A@12V)	100W (8.3A@12V)
VESA Support (mm)	75 x 75	75 x 75 / 100 x 100	75 x 75 / 100 x 100

■ Intelligent UPS Module

High Energy Density / Lightweight / Compact DC to DC UPS & Power Module

Protect your panel PC from electrical damage and greatly reduce the risk of losing data.
The UPS module serves as temporary power during a short break in power and allows a safe system shutdown for longer periods of power loss.

D. Networking UPS Management Port by RJ-45 Ethernet

A. Dual Power Input Connector

1.DC 9V~36V input by terminal block (Only AUPS-A20 / AUPS-B20)

2. (1) Only 12V input by DC jack (AUPS-A10 / AUPS-B10)
   (2) Wide 9V~36V input by DC jack (AUPS-A20 / AUPS-B20)

B. Battery Status USB Console Port

C. DC Power Button DC Remote Power Button
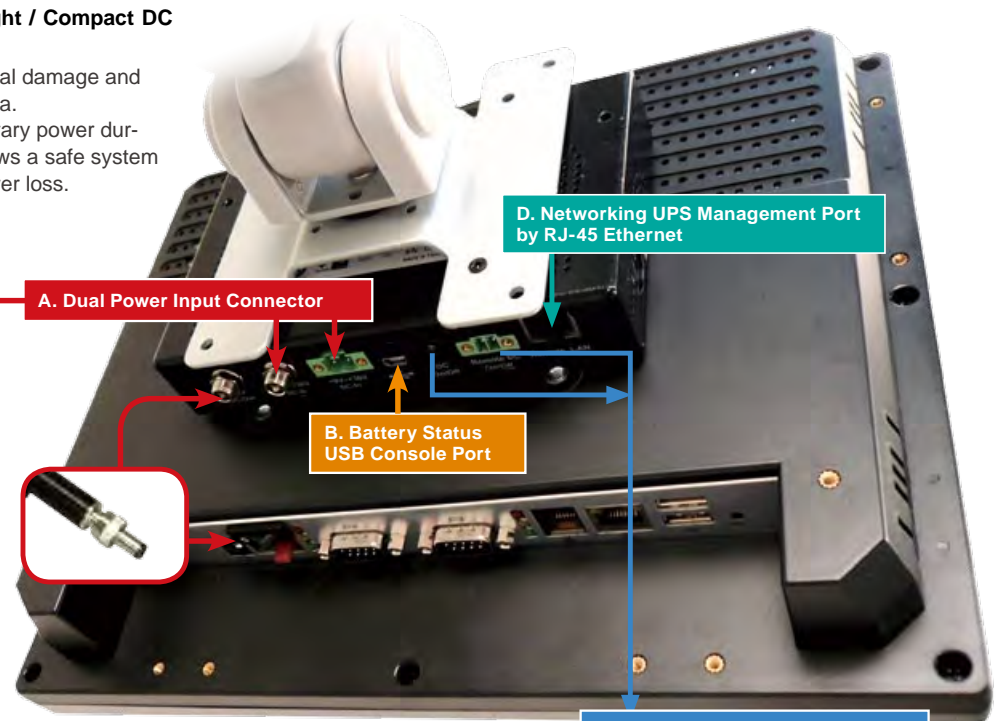
LED Signal Table			
	LED 1	LED 2	LED 3
Color	Green	Yellow	Orange
Function	Power Input	Charging Status	Battery Status
Dark	DC Power Out		
Light	DC Power In	Discharging	Battery Full
Blinking		Charging	Battery Low
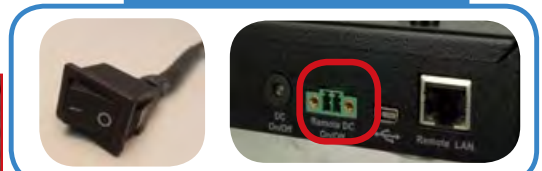
1 IEI Mobile Solutions

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3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

■ AUPS Network Administration Tool

● Network Remote Management Anywhere

AUPS IP address

● Network Remote Management Software

Battery Capacity Status

Power On/OFF

Email Status Report

IEIUPS!

Send E-Mail

UPS Status Monitoring

Remote control DC output ON/OFF via web interface.

● Intelligent Software Utility

The remote management software utility and application program allows users to easily get the status of the AUPS and to control the AUPS power functions from anywhere with internet connection.

Click ALARM to get each AUPS status via internet

Network Remote Management Software

• STATUS
• Send E-mail
• Board configuration

■ AUPS Local USB Utility Tool

Battery Monitoring Utility

Monitor the Most Critical Battery Functions on the Local Machine

The battery monitoring utility provides AUPS status monitoring and configuration ability. Uninterruptible Power Systems is a significant product that serves as emergency power when you suffer from electric event.

Battery Monitoring Utility
Networking Remote Management

• Battery detection
• Battery capacity status
• Battery charge
• DC input indicator
• Battery indicator
• Temperature warning
• Low battery alarm
• Connection port status

DC Input only

Charging 50%

Charging 100%

Normal Icon

Capacity 50%

Capacity 100%

BATTERY STATUS
• BAT.A shows Battery status real time monitoring

Battery type
Battery usage remaining time

Battery capacity bar

Real-time information update

AUPS STATUS
• STATUS shows DC / Battery power input

DC Input Detection

Battery Status Detection

LAN CONFIGURATION
• LAN shows system IP Address information

ABOUT
• About shows AUPS Utility information

SETTING
• SETTING shows Connection Detection port

Auto Shutdown

Auto-Scan Connection port

System shutdown condition according to battery capacity setting

Meanwhile, IEI also provides AUPS API SDK and command list for customer programming under DOS or Linux system.

AUPS API Content

Inti()
AUPS Close()
WriteCommand()
ReadCommand()
Error Code Definition()

AUPS API SDK

AUPS API.pdf
AUPSAPI.dll
AUPSAPI.h
AUPSAPI.lib

Linux

AUPS API SDK/Content

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IEI Mobile
Solutions

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Automation
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Optional
Peripherals

AUPS Module Specifications

Model Name		AUPS-A10	AUPS-A20	AUPS-B10	AUPS-B20	AUPS-C20
	VESA Type	VESA 75	VESA 75	VESA 75 and 100	VESA 75 and 100	VESA 75 and 100
Input Data	Input voltage Uinated/range	DC +12V	DC +9V~+36V	DC +12V	DC +9V~+36V	DC +9V ~ +28V
	Input current rated	1. Adapter is 12V-6A (Load is 60W) 2. Battery is 6V-12A (Load is 60W)		1. Adapter is 12V-9A (Load is 100W) 2. Battery is 12V-9A (Load is 100W)		
	Standby power consumption	0.3A (0.2A if Network Management disabled)				
	Operation with charging current	500mA				
	Operation with charging power consumption	6W		10W		
	Charging time with system ON/OFF	8hrs / 2hrs (Battery empty)				
Output Data	Output voltage for normal operation	DC +12V +/-5%				
	Output voltage for battery operation(approx.)	6~8.4V DC6 V (exhaustive discharge protection)		12~16.8V DC12 V (exhaustive discharge protection)		
	Output current	0A~5A		0A~8.3A		0A~7.6A
	Efficiency (nominal operation) / power loss at Vin=12V, Iout=80% of full loading	89%	93%	95%	94%	90%
Protection	Short-circuit protection	Yes				
	Exhaustive discharge protection	1. Battery low is 10% of battery capacity 2. Shutdown 5% of battery capacity (Default) 3. The end of battery discharge voltage is 6V				
	EMC / Safety certification	CE, FCC				
Monitoring	Ethernet interface	Web-based, specification 10/100Mbps with RJ-45 connection, Cat. 5 cable				
	USB interface	PC-capable, specification 2.0 with full speed, i.e. 2 Mbit/s. Standard 4-core shielded cable, USB Series "mini B" connector to DC-UPS				
Physical	Dimensions (LxWxH)	152mm x 96mm x 28mm		174mm x 147mm x 35mm		233mm x 197mm x 59mm
	Weight	1.2 kg		1.8 kg		3.8 kg
LED Indicator	Green	DC power input				
	Yellow	Battery charging				
	Orange	Bettery discharging				
Environment	Operating Tem.	0°C~40°C				
	Storage Tem.	-20°C~50°C				

Note1: Connecting DC input constantly is recommended. Battery will be drained after 14 hours.
Note2: System power consumption + AUPS charging power consumption = Total watts of power source

Battery Module Specifications

Model Name		AUPS-A10	AUPS-A20	AUPS-B10	AUPS-B20	AUPS-C20
	Battery Model Name	BAT-LI-2S2P3800		BAT-LI-4S2P3800		BAT-LI-4S2P3800(x4)
Battery	Battery type	Li-Ion 2S2P 7.4V		Li-Ion 4S2P 14.8V		Li-Ion 4S2P 14.8V
	Battery capacity	7.4V 3800 mAH		14.8V, 3800 mAH		14.8V, 3800 mAH(x4)
	Maximum charge voltage	8.4V		16.8V		16.8V
	The end of discharging voltage	5.6V		11.2V		11.2V
	Recommended charging current (max.)	2A		2A		2A
	System continuous discharging current (max.)	7.6A		7.6A		7.6A
	The end of charge condition	250mA / 1Min		200mA / 1Min		200mA / 1Min
	Discharge protection	Under voltage protection / Over current protection				
	Charge protection	Over voltage protection / Over current protection				
	Ambient temperature	0°C~40°C				
	Storage temperature	-20°C~60°C				
	Self-discharge rate	340uA~440uA				
	Dimensions (LxWxH)	139mm x 47mm x 26mm		165mm x 76mm x 26mm		165mm x 76mm x 26mm
	Weight	236g		450g		450g
	Cycle life	300 charge / discharge cycles				
	Backup	60W / 10Min		100W / 10Min		100W / 10Min
	Safety class	CE, FCC				CE, FCC

Note: Replacing battery module every 2 years is recommended.

Selection Table for UPS Modules and Main Buffering Time

AFOLUX PPC	AUPS-A10	AUPS-A20	AUPS-B10	AUPS-B20
Under 50W solution				
AFL-057-LX (15W~20W)	145min	145min	290min	290min
AFL-07A-N270 (20W~25W)	100min	100min	200min	200min
AFL-08AH-N270 (25W~30W)	70min	70min	140min	140min
AFL-10A-N270 (25~30W)	70min	70min	140min	140min
AFL-10A-9103 (40W~45W)	50min	50min	100min	100min
AFL-10A-LX (25W~30W)	70min	70min	140min	140min
AFL-12A-LX (25W~30W)	70min	70min	140min	140min
AFL-12B-CX2 (38W~42W)	50min	50min	100min	100min
AFL-12A-N270 (25W~30W)	70min	70min	140min	140min
AFL-12B-9103 (45W~48W)	45min	45min	90min	90min
50W ~ 100W solution				
AFL-15B-915-CM370 (58W~63W)	-	-	35min	35min
AFL-15C-9652-T7500 (65W~70W)	-	-	30min	30min
AFL-17B-915-CM370 (75W~80W)	-	-	25min	25min
AFL-17C-9652-T7500 (85W~90W)	-	-	20min	20min
AFL-19B-915-CM370 (75W~80W)	-	-	25min	25min
AFL-19C-9652-T7500 (85W~90W)	-	-	20min	20min

Note: The backup time could be varied on different models or operating temperature.
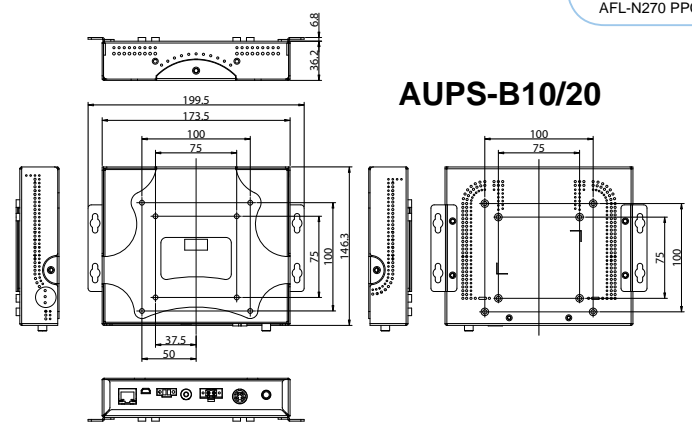
BAT-LI-2S2P3800   BAT-LI-4S2P3800

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2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

AUPS Mechanical Drawing (Unit: mm)

AUPS-A10/20

AUPS-B10/20

AUPS-C20

DC Power Cable (DC plug to DC plug) with lock
32000-115300-RS

Remote Switch Cable
32000-124600-RS

USB Connection Cable
32000-115500-RS
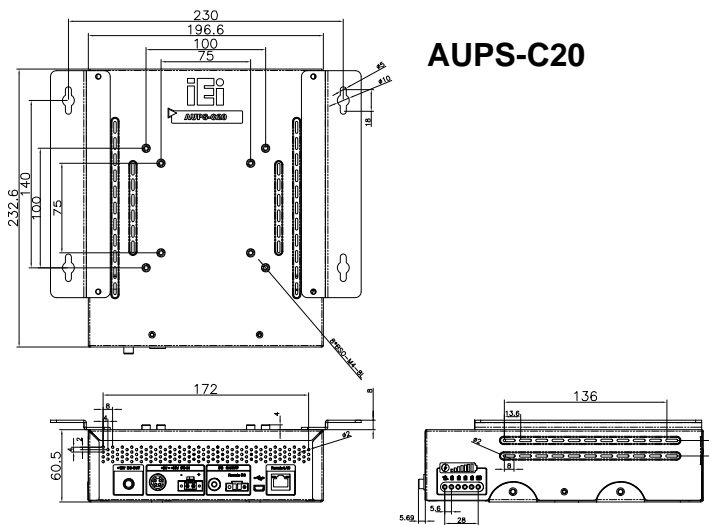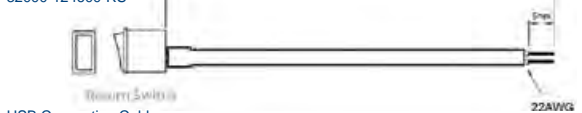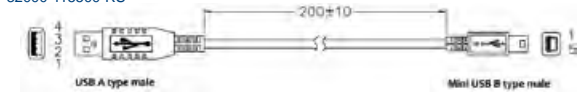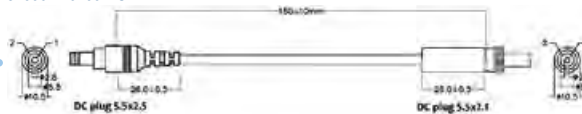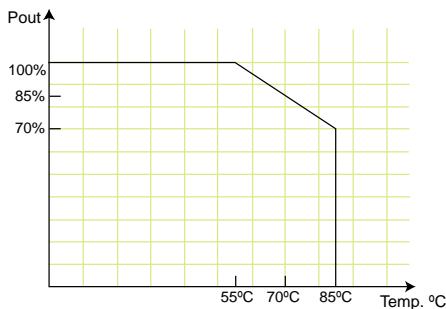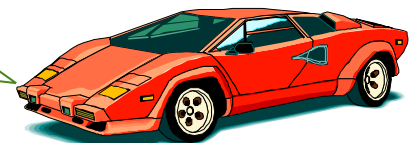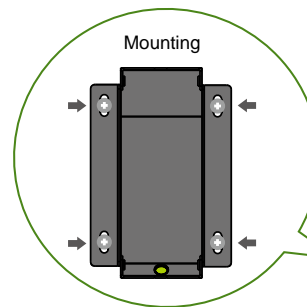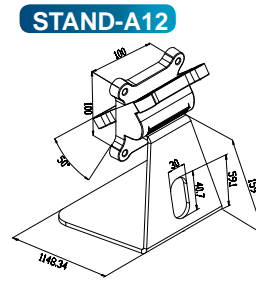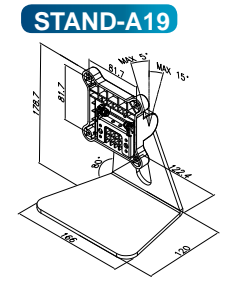

DC Power Cable (DC plug to DC plug) without lock
32000-120400-RS

Connector for AFOLUX
Panel PC:
AFL-LX PPC series
AFL-LXPOS PPC series
AFL-CX2 PPC series
AFL-9103 PPC series
AFL-N270 PPC series

DC Power Cable (DC plug to mini DIN)
32000-115400-RS
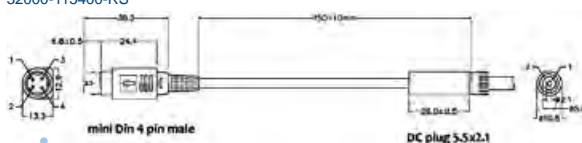
Connector for AFOLUX
Panel PC:
AFL-915 PPC series
AFL-965 PPC series

Ordering Information

Part No.	Description
AUPS-A10-R11	VESA 75, DC 12V input, 12V output 60W UPS module with 3800mAH, 2S2P Li-ion battery
AUPS-A20-R11	VESA 75, DC 9~36V input, 12V output 60W UPS module with 3800mAH, 2S2P Li-ion battery
AUPS-B10-R11	VESA 100, DC 12V input, 12V output 100W UPS module with 3800mAH, 2S4P Li-ion battery
AUPS-B20-R11	VESA 100, DC 9~36V input, 12V output 100W UPS module with 3800mAH, 2S4P Li-ion battery
AUPS-C20-R10	VESA 100, DC 9~36V input, 12V output 100W UPS module with 3800mAH, W/O battery
BAT-LI-2S2P3800 (AUPS-A10/20)	Smart battery; TE9IC032K1002; Lithium ion battery (S2P); 7.4V; 3800mAh; RoHS
BAT-LI-4S2P3800 (AUPS-B10/B20/C20)	Smart battery; TE9IC042K1002; Lithium ion battery (4S2P); 14.8V; 3800mAh; RoHS

Packing List

Item	DC power cable, 150mm, male 4-pin mini-DIN to DC plug 5.0 x 2.1 (AUPS-B10/B20 only)	DC power cable, 150mm, DC plug 5.5 x 2.1 to DC plug 5.0 x 2.5 without lock	DC power cable, 150mm, DC plug 5.5 x 2.1 to DC plug 5.0 x 2.5 with lock	USB cable, 200mm, USB type A male to mini USB	Remote switch cable, 1200mm	Screw kit	Utility CD (including utility software and user's guide)
Part Number	32000-115400-RS	32000-120400-RS	32000-115300-RS	32000-115500-RS	32000-124600-RS	44013-030041-RS	7B000-000087-RS
Q'ty	1	1	1	1	1	1	1

1 IEI Mobile Solutions

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4 PACSmate Medical Solutions

5 Optional Peripherals

IDD-930160-KIT

60 W DC/DC Converter Module for AFOLUX Panel PC and Monitor

Specifications

- Input voltage: 9-30 VDC
- Input current: Max. 8.2 A at 9 VDC
- Output: 12 V@5 A
- Max. total output: 60W
- Performance characteristics:
  Noise and ripple: <120 mV
  Line regulation: <2.5%
  Load regulation: <2.5%
- Transient toggle rate: 250 Hz (50% duty ratio)
- Transient current step:
From 0% to 50% and 50% to 100% of max current
- Efficiency: typ. 95% (Vin=12 V, 80% of full load)
- Dimensions: 42 mm x 103 mm x 31 mm
- Mounting kit: 12 mm x 80 mm
- Cable length: 180 cm
- Operating temperature: -10°C~55°C
- Load down protection

Dimensions (Millimeters)

Typical Applications

AFOLUX Panel PC 7"~15"
AFOLUX Monitor Series

IDD-930160-KIT

Mounting

Connects to car cigarette lighter
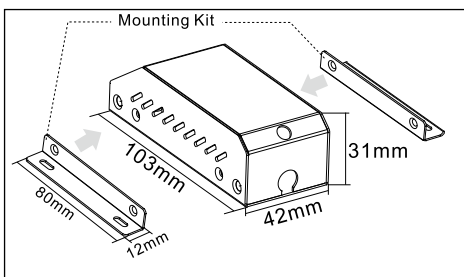
Packing Information

1 x IDD-930160-KIT-R10
1 x Mounting kit
1 x Screw kit
1 x Anti-slip strip
1 x Utility CD

Ordering Information

Part No.	Description
IDD-930160-KIT-R10	60 W DC/DC 9-30 VDC input vehicle power adapter

IEI Quick Mounting Technology

100mm
75mm
100mm
75mm
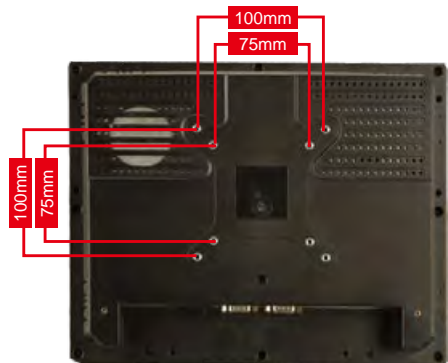
Compliant with VESA Mounting Standards
IEI panel solutions have four mounting holes compliant with the VESA (Video Electronics Standards Association) mounting standard (75mm x 75mm/100mm x 100mm) on the rear panel for stand mounting and other mounting methods.

MOUNT

1. *Stand Mounting*
2. *V-STAND*
3. *ARM*
4. *Wall Mounting*
5. *In-Wall Mounting*
6. *Panel Mounting*
7. *Rack Mounting*
8. *Din Mounting*

1. Stand Mounting

▌ VESA 75/100 Easy Stand

Tilt Forward/Backward

STAND-A/Bxx

Tilt Forward/Backward

STAND-C12   STAND-C19

STAND-A08

STAND-B08
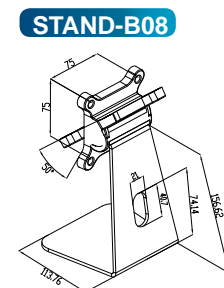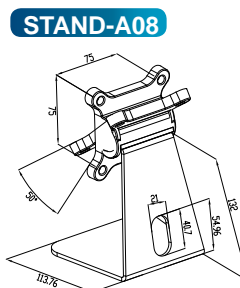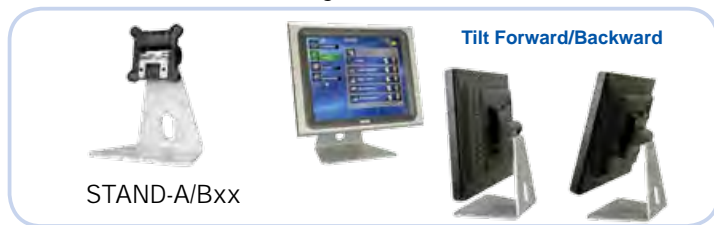
STAND-A19

STAND-A12

Ordering Information

Part Number	Description
STAND-A08	5.6"~8.4" VESA 75x75mm PPC/monitor stand, support up to 5 kg, Silver color, RoHS
STAND-B08	5.6"~8.4" VESA 75x75mm PPC/monitor stand, support up to 5 kg, Silver color, RoHS
STAND-C12	5.7" ~ 12.1" VESA 100x100mm, 75x75mm PPC/Monitor Stand, support up to 7.5kg, Black color, RoHS
STAND-A12	10"~12.1" VESA 100x100mm PPC/monitor stand, support up to 5 kg, Silver color, RoHS
STAND-A19	12.1"~19" VESA 100x100mm PPC/monitor stand, support up to 7.5 kg, Silver color, RoHS
STAND-C19	15" ~ 19" VESA 100x100mm, 75x75mm PPC/Monitor Stand, support up to 15 kg, Black color, RoHS

▌ VESA 75/100 Universal Stand

Ordering Information

Part No.	Description
STAND-100-RS	• Material: Heavy-duty steel • Adjustable display angle • 3kg to 8kg loading capacity • Color: White (Pantone 413C)
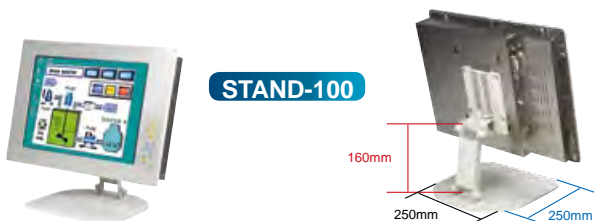
Ordering Information

Part No.	Description
STAND-210-R11	• Support VESA 75/100 standard • Weight capacity from 7kg~10kg
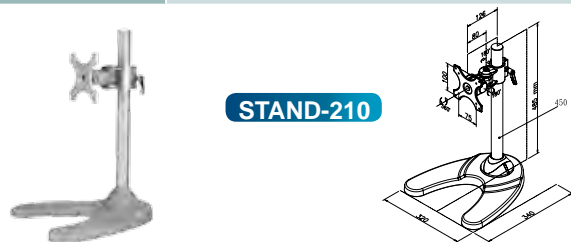
STAND-100

160mm

250mm   250mm

STAND-210

450

1
IEI Mobile Solutions

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RISC-based Solutions

4
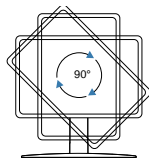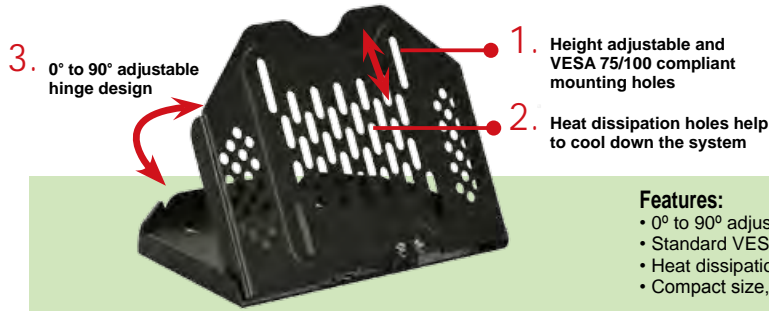PACSmate Medical Solutions

5
Optional Peripherals

STAND-B19

Portrait/Landscape

Height Adjustment (13 cm)

Right/Left Pan (270°)

Forward/Backward Tilt (+25°/-5°)

100 mm
75 mm

100 mm
75 mm

11.4"
(284 mm)

5.2"
(130 mm)

15.9"
(397 mm)

13.5"
(338.5 mm)

8.6"
(216 mm)

Top View

Front View

Side View

Range of Motion

5" (13 cm) height adjustment

270° right/left pan

35° (+25°/-5°) tilt

display rotates 90°
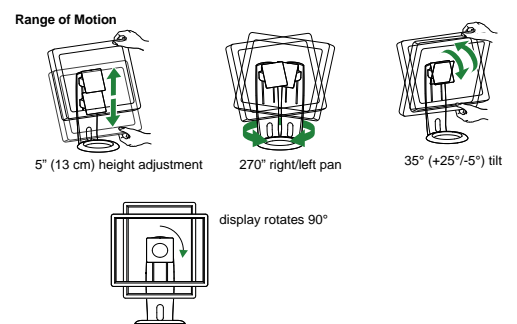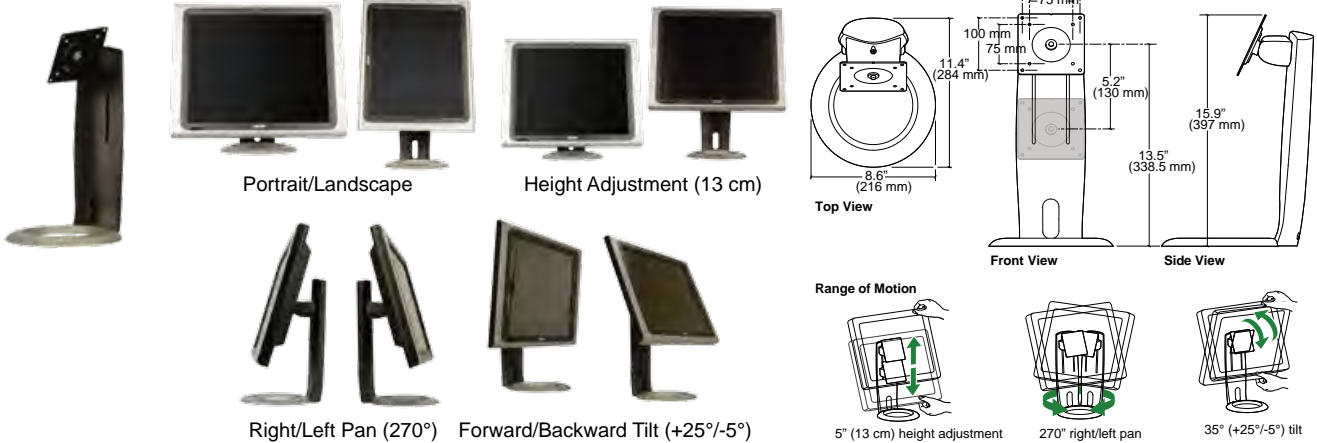
Ordering Information

Part No.	Description
STAND-B19-RS	15"~19" VESA 75x75mm/100x100mm PPC/Monitor Stand, support from 2.7KG to 7.3KG, Black, RoHS

VESA 100/200 Lift Stand

STAND-A26

VESA 100/200 Lift Stand	Model
200x100mm	STAND-A26-R11

For 90° rotation, bezel size must not exceed 35" (889 mm).

90°

90°   0°

14.5"
(368 mm)

20.4"
(518 mm)

Front View

5"
(127 mm)

17.63"
(448 mm)

9.5"
(241 mm)

11-1/2"
(292 mm)

Side View

25.8"
(655 mm)

25.8"
(655 mm)

Top View

+25°

- 5°

5"
(127 mm)

Front View

Side View

Top View

360°
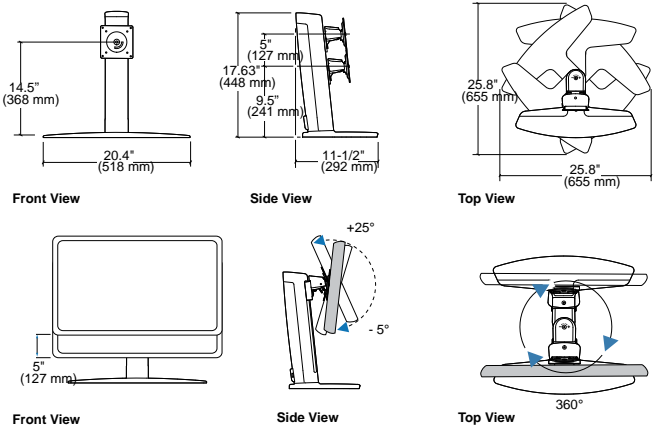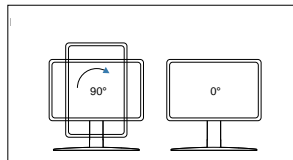
Ordering Information

Part No.	Description
STAND-A26-R11	19"~26" VESA 75x75mm / 100x100mm / 200x100mm / 200x200mm PPC / Monitor Stand, support from 7.3KG to 16.3KG, Black color, RoHS

VESA 100/200/400 Mobile Stand

VESA 100/200/400 Mobile Stand	Model
400x200mm	STAND-M100-R10

STAND-M100

745
40~705

80~500

40

650
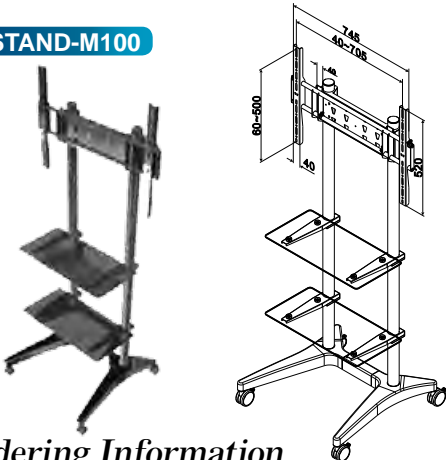
Ordering Information

Part No.	Description
STAND-M100	26"~42" VESA 100x100mm/200x100mm/200x200mm/400x200mm/400x400mm PPC/Monitor Stand, support up to 100KG, Black, RoHS

Light POS Stand

Light POS Stand	Model
	STAND-POS12
	STAND-POS15

STAND-POS12

316.3mm

85.0mm

169mm

STAND-POS15

430mm

235mm

89.5mm
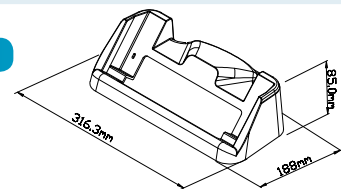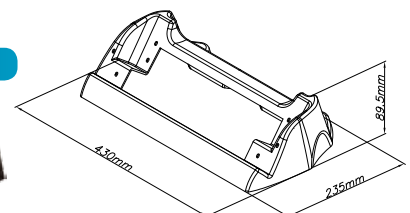
Ordering Information

Part No.	Description
STAND-POS12	AFL-12A/B PPC Stand, Gray color, RoHS
STAND-POS15	AFL-15A/B PPC Stand, Black color, RoHS

2. V-STAND

VESA Multi-Mounting Stand

IEI patented multi-mounting V-Stand allows wall, ceiling, desk, rear and side mounting to meet diverse applications. Its 0° to 90° adjustable hinge design provides optimal viewing in various environments, such as kitchen, room or shelf.

VESA	Model
75 x 75mm	VSTAND-A07
75 x 75mm / 100 x 100mm	VSTAND-A10
	VSTAND-A12

VSTAND-A07
(For 5.6"~7" AFL series)

VSTAND-A10
(For 8.4"~10.4" AFL series)

VSTAND-A12
(For 12.1" AFL series)

3. 0° to 90° adjustable hinge design

1. Height adjustable and VESA 75/100 compliant mounting holes

2. Heat dissipation holes help to cool down the system

Features:
• 0° to 90° adjustable hinge design allows comfortable viewing
• Standard VESA 75/100 compliance
• Heat dissipation holes
• Compact size, easy to use for mounting anywhere

A. **One fits all solution**

The V-Stand is a compact and tilt adjustable mounting stand providing mobility and ergonomic comfort to fit common wall mounting and ceiling mounting situations.

Wall Mounting

Entry-Master Systems   Back Office POS System

Ceiling Mounting

Car PC   Medical Control Panel

B. **0° to 90° excellent adjustability**

You can change the angle of the stand from 0° to 90° to reach almost any point with ergonomic features for comfortable viewing.
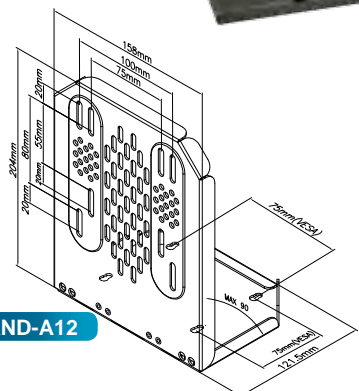
No Hinge Limitation!

POS System   Self-ordering System
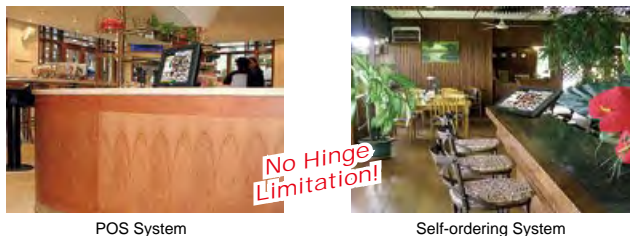
C. **Space saving and easy installation**

1: Tighten the screws in the rear of the AFOLUX PPC VESA mounting holes

2: Select the position to mount stand kit

3: Plug in the system to operate

Compact size provides mobility
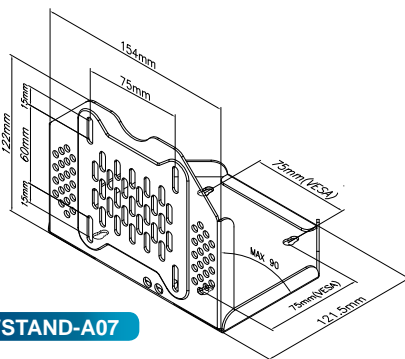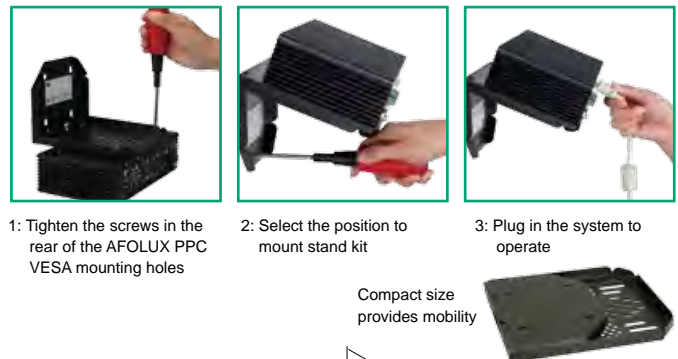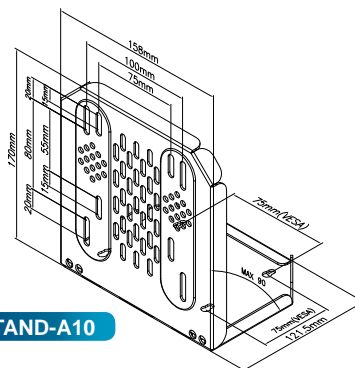
VSTAND-A07

VSTAND-A10

VSTAND-A12

Ordering Information

Part No.	Description
VSTAND-A07	LCD monitor / PPC stand V type, for AFL series, VESA 75, 0°~90° degree adjustable hinge, support up to 2.5 kg, RoHS
VSTAND-A10	LCD monitor / PPC stand V type, for AFL series, VESA 75/100, 0°~90° degree adjustable hinge, support up to 3 kg, RoHS
VSTAND-A12	LCD monitor / PPC stand V type, for AFL series, VESA 75/100, 0°~90° degree adjustable hinge, support up to 3.5 kg, RoHS

1 IEI Mobile Solutions

2 Automation Panel Solutions

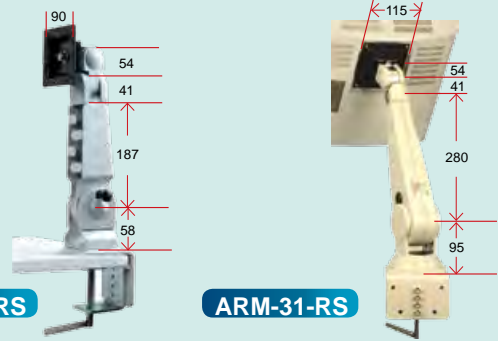**3** RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals

3. ARM

VESA 75/100 Desk ARM

VESA	Model
75x75mm/100x100mm	ARM-11-RS
	ARM-31-RS

Ordering Information

Part No.	Description
ARM-11-RS	LCD Monitor / PPC ARM, VESA 75/100, 3kg~6kg, RoHS
ARM-31-RS	LCD Monitor / PPC ARM, VESA 75/100, 7kg~14kg, RoHS

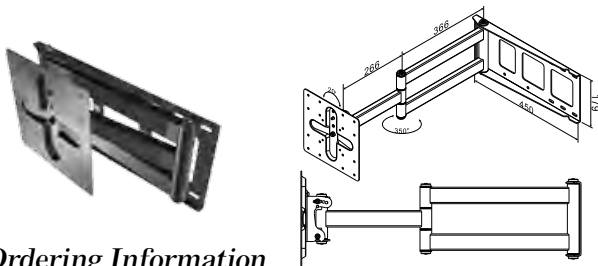**ARM-11-RS**   **ARM-31-RS**

VESA 200 Wall ARM

VESA	Model
200x100mm	ARM-50-R10

Ordering Information

Part No.	Description
ARM-50-R10	LCD Monitor/PPC Wall ARM, VESA 75x75mm/100x100mm/200x100mm/200x200mm, Loading capacity up to 50Kg, RoHS

VESA 400 Ceiling ARM

VESA	Model
400 x 200mm	CEILMT-135-R10
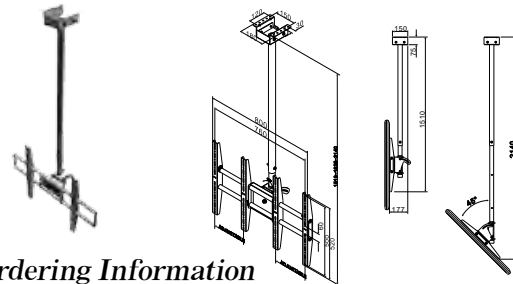
Ordering Information

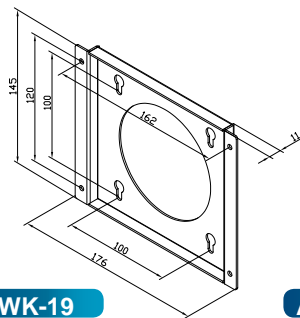| Part No.	Description
CEILMT-135-R10	LCD Monitor/PPC Universal LCD TV Ceiling Mount, VESA 400x200mm/400x400mm, Loading capacity up to 135Kg, RoHS

4. Wall Mounting

VESA 75/100 Wall Mounting

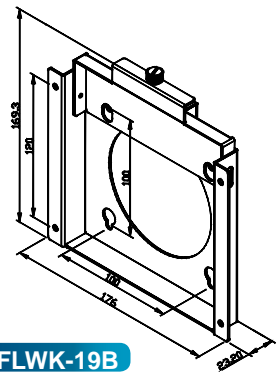| VESA	Model
75x75mm 100x100mm	AFLWK-12
	AFLWK-19
	AFLWK-19B

Secure the panel by fastening the retention screw of the bracket.
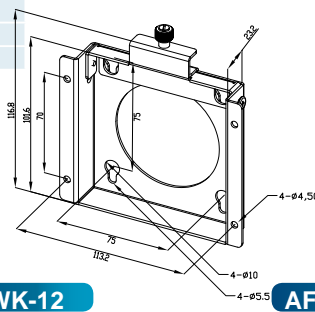
AFLWK-12   **AFLWK-19**   **AFLWK-19B**

Ordering Information

| Part No.	Description
AFLWK-12	5.6"~12" VESA 75x75mm PPC/Monitor Wall Mount Kit with Retention Screw, Silver color, RoHS
AFLWK-19	15"~19" VESA 100x100mm PPC/Monitor Wall Mount Kit, Silver color, RoHS
AFLWK-19B	15"~19" VESA 100x100mm PPC/Monitor Wall Mount Kit with Retention Screw, Silver color, RoHS

VESA 200 Wall Mounting

VESA	Model
400 x 200mm	WK-80-R10
200 x 100mm	

Ordering Information

Part No.	Description
WK-80	LCD Monitor/PPC Universal LCD TV Fixed Wall Mount, VESA compliant, Loading capacity up to 80Kg, RoHS

WK-80
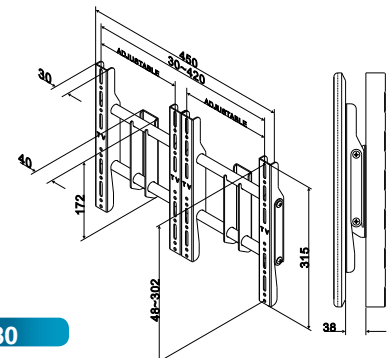
1 IEI Mobile Solutions
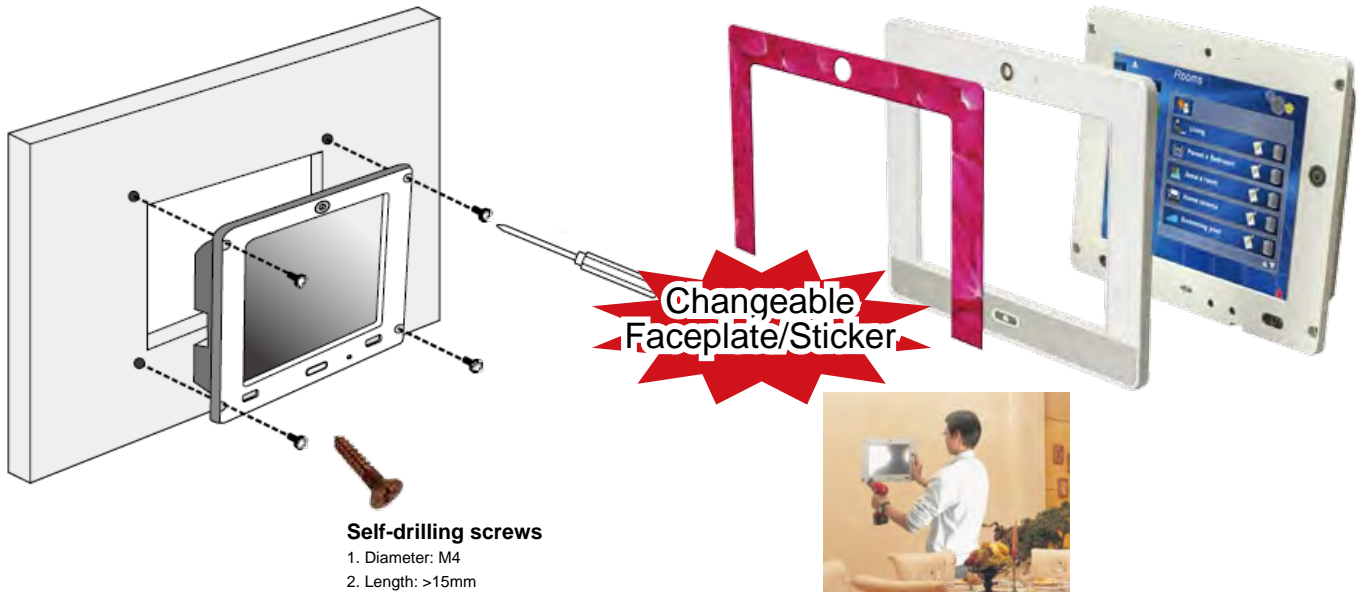**2** Automation Panel Solutions
3 RISC-based Solutions
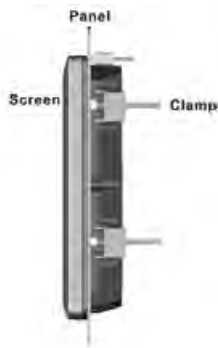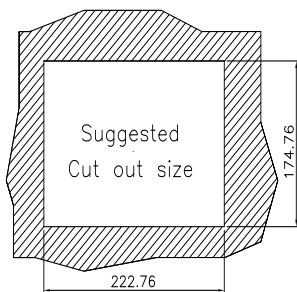**4** PACSmate Medical Solutions
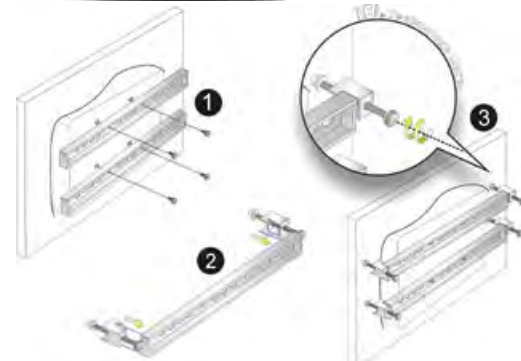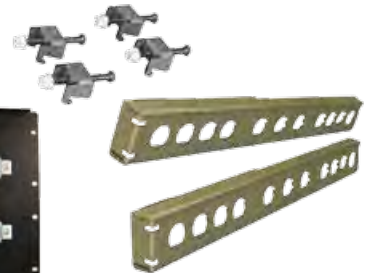**5** Optional Peripherals

5. In-Wall Mounting

Changeable Faceplate/Sticker

Self-drilling screws
1. Diameter: M4
2. Length: >15mm

AFL-4 Series

6. Panel Mounting

Type A

Suggested Cut out size

174.76

222.76

Panel

Screen

Clamp

Type B

7. Rack Mounting

Rack / Cabinet bracket

Screen

Clamp

Rack / Cabinet bracket
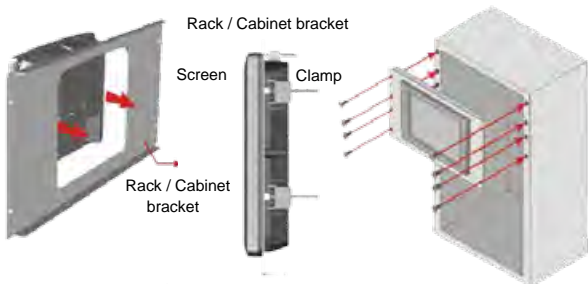
Ordering Information

Part No.	Description
AFLRK-xx	For AFOLUX PPC/Monitor Series

8. Din Mounting

Ordering Information

Part No.	Description
DK-84MS	For 6.5"~8.4" Industrial Aluminum Panel PCs/Industrial Monitors

IEI LCD Product Mounting Solution Table

AFOLUX Panel PC

Model	AFL-057A-LX	AFL-057A-Zxxx	AFL-07A-LX	AFL-07A-N270	AFL-08AH-LX	AFL-08AH-N270	AFL-F08A-N270	AFL-08B-N270
Panel Mount Kit	AFLPK-12							
Wall Mount Kit	AFLWK-12							
Rack Mount Kit	AFLRK-057		AFLRK-07		AFLRK-08			
ARM	ARM-11-RS / ARM-31-RS							
Stand	STAND-A08 / STAND-C12 / STAND-100-RS				STAND-A08 / STAND-100-RS			
VSTAND	VSTAND-A07				VSTAND-A10			

Model	AFL-W10A-N270	AFL-10A-LX	AFL-10A-N270	AFL-12A-LX	AFL-12A-N270	AFL-15A(E)-N270	AFL-15i(E)-HM55	AFL-W15A-N270
Panel Mount Kit	AFLPK-12					AFLPK-15	AFLPK-15B	
Wall Mount Kit	AFLWK-19	AFLWK-12				AFLWK-19		
Rack Mount Kit	AFLRK-W10	AFLRK-10		AFLRK-12		AFLRK-15-R11	AFLRK-15B-R11	AFLRK-W15
ARM	ARM-11-RS / ARM-31-RS			ARM-11-RS / ARM-31-RS		ARM-11-RS / ARM-31-RS		
Stand	STAND-A12 / STAND-100-RS			STAND-A12 / STAND-POS12 / STAND-100-RS		STAND-A19 / STAND-POS15 / STAND-210-R11		STAND-A19 / STAND-B19 / STAND-210-R11
VSTAND	VSTAND-A10			VSTAND-A12		N/A	N/A	N/A

Model	AFL-W15A-GM45	AFL-17D-N270	AFL-17i-HM55	AFL-17D-GM45	AFL-19i-HM55
Panel Mount Kit	AFLPK-15B	AFLPK-17D			AFLPK-19B
Wall Mount Kit	AFLWK-19				
Rack Mount Kit	AFLRK-W15	AFLRK-17D-R11	AFLRK-17B-R11	AFLRK-17D-R11	N/A
ARM	ARM-11-RS / ARM-31-RS1				
Stand	STAND-A19 / STAND-B19 / STAND-210-R1				
VSTAND	N/A	N/A	N/A	N/A	N/A

AFOLUX GEN 2 Panel PC

Model	AFL2-W07A-N26	AFL2-08A-N26	AFL2-W10A-N28	AFL2-10A-N28	AFL2-12A-D525 AFL2-12A-HM65	AFL2-W15A-N270	AFL2-15A-H61	AFL2-W15B-H61	AFL2-17A-H61	AFL2-W19A-H61	AFL2-W21A-H61
Panel Mounting	AFL2PK-08A		AFL2PK-10A		AFLPK-15	AFL2PK-W15A-R10	N/A	AFL2PK-W15B	AFL2PK-17A	AFL2PK-W19A	N/A
Wall Mounting	AFLWK-12					AFLWK-19 AFLWK-19B					AFLWK-19 AFLWK-19B
Rack Mounting	AFL2RK-W07A	AFL2RK-08A	AFL2RK-W10A	AFL2RK-10A	AFL2RK-12	N/A	N/A	AFL2RK-W15B	AFL2RK-17A	N/A	N/A
Stand	STAND-A08 STAND-B08 STAND-C12		STAND-C12 STAND-B19		STAND-A12 STAND-A19 STAND-B19 STAND-C12	STAND-A19 STAND-B19 STAND-C19 STAND-210-R11	STAND-A19 STAND-B19 STAND-C19 STAND-210-R11	STAND-A19 STAND-B19 STAND-C19 STAND-210-R11	STAND-A19 STAND-B19 STAND-C19 STAND-210-R11 STAND-A26-R11	STAND-A19 STAND-B19 STAND-C19 STAND-210-R11 STAND-A26-R11	STAND-A21
V-Stand	VSTAND-A07		VSTAND-A10		VSTAND-A12	N/A	N/A	N/A	N/A	N/A	N/A
ARM	N/A	N/A	N/A	N/A	ARM-11-RS	ARM-11-RS ARM-31-RS	ARM-11-RS ARM-31-RS		ARM-31-RS		ARM-41-RS
Hybrid Card Reader	AFL2P-08AMSI-U-R10		AFL2P-12AMSI-U-R10			N/A	AFL2P-15AMSI-U-R10	AFL2P-W15BMSI-U-R10	AFL2P-W19AMSI-U-R10		N/A
Magnetic Stripe Reader	AFL2P-08AMSR-U-R10		AFL2P-12AMSR-U-R10			N/A	AFL2P-15AMSR-U-R10	AFL2P-W15BMSR-U-R10	AFL2P-W19AMSR-U-R10		AFL2P-W21AMSR-U-R10

1 IEI Mobile Solutions

2 Automation Panel Solutions

3 RISC-based Solutions

4 PACSmate Medical Solutions

5 Optional Peripherals