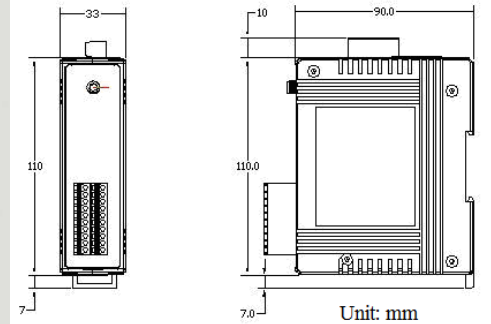# Wi-Fi Series

Wi-Fi Series Products

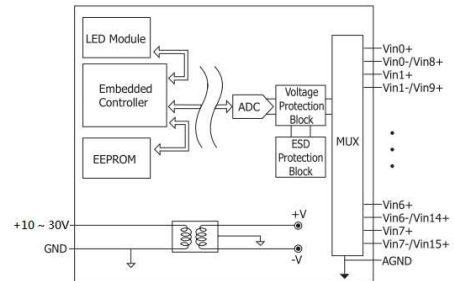## Wi-Fi Data Acquisition I/O Module (8/16 AI)

RoHS CE FC

WF-2017

Dimensions

Unit: mm

The WF-2017 is a Wi-Fi interface and 8-channel Differential/16-channel Single-Ended analog input module. The analog input range is software selectable and supports +/-10V, +/-5V, +/-1V, +/-500mV, +/-150mV, and +/-20mA. Differential and Single-ended mode is selected by jumpers. With the popularity of 802.11 network infrastructure, the WF-2017 makes an easy way to incorporate wireless connectivity into monitoring and control systems. The WF-2017 also supports Modbus/TCP and UDP protocols and the network encryption configuration, which makes perfect integration to SCADA software and offer easy and safe access for users from anytime and anywhere.

Features

- 8-channel Differential Analog Input
- 16-channel Single-ended Analog Input
- Compatible with IEEE 802.11b/g standards
- Support WEP, WPA and WPA2 wireless encryption
- Support Modbus/TCP and UDP protocols
- Support DHCP network configuration
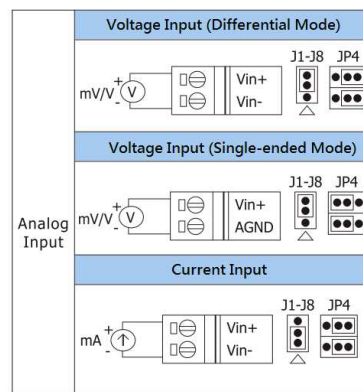- 4 kV ESD Protection
- Built-in Watchdog

Internal I/O Structure

Pin Assignment

Pin Assignment Name	Terminal No.		Pin Assignment Name
V0-/V8+	20	19	V0+
V1-/V9+	18	17	V1+
V2-/V10+	16	15	V2+
V3-/V11+	14	13	V3+
V4-/V12+	12	11	V4+
V5-/V13+	10	9	V5+
V6-/V14+	8	7	V6+
V7-/V15+	6	5	V7+
AGND	4	3	AGND
AGND	2	1	AGND

Wire Connection

Voltage Input (Differential Mode)

Voltage Input (Single-ended Mode)

Current Input

Analog Input

Hardware Specifications

Analog Input				
Channels	8-ch Differential / 16-ch Single-ended(Note), Jumper Selectable			
Input Type	Voltage : ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V			
	Current : 0 ~ +20 mA, +4 ~ +20 mA, ±20 mA (Jumper Selectable)			
Resolution	16 bit			
Accuracy	±0.1% FSR			
Sampling Rate	10 Hz (Total)			
Zero Drift	±20 µV/°C			
Span Drift	±25 ppm/℃			
Common Mode Rejection	86 dB Min.			
Normal Mode Rejection	100 dB			
Input Impedance	Differential	> 2 MΩ	Single-ended	> 1 MΩ
Overvoltage protection		240 Vrms		150 Vrms
Individual Channel Configuration	Yes			
Intra-Module Isolation, Field-to-Logic	3000 VDC			
Wi-Fi Interface				
Antenna	5 dBi (Omni-Directional)			
Output Power	8 dBm @ 11Mbps			
Receive Sensitivity	-83 dBm @ 11Mbps			
Standard Supported	IEEE 802.11b/g			
Wireless Mode	Infrastructure & Ad-hoc			
Encryption	WEP, WPA and WPA2			
Transmission Range	50 meters (LOS)			
Isolation				
Intra-module Isolation, Field-to-Logic	3000 VDC			
Power				
Input Voltage Range	10V ~ 30V			
Power Consumption	2.2W			
Mechanism				
Installation	DIN-Rail			
Dimensions	110mm x 106mm x 33mm (H x W x D)			
Environment				
Operating Temperature	-25℃ ~ +75℃			
Storage Temperature	-30℃ ~ +80℃			
Humidity	10% ~ 90%			

Note: Differential mode can be used for voltage input and current input. Single-Ended mode can be used for voltage input only.

Applications

Ordering Information

WF-2017 CR	8-channel Differential/16-channel Single-Ended Analog Input Wi-Fi I/O Module (RoHS)