

ADAM-4015 ADAM-4015T ADAM-4016

6-channel RTD Module with Modbus®

6-channel Thermistor Module with Modbus®

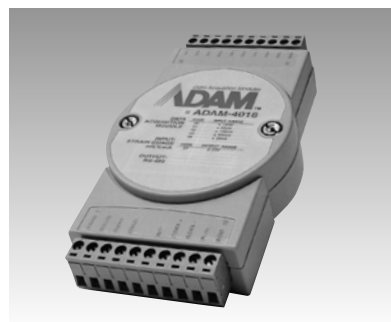
Analog Input/Output Module



ADAM-4015



ADAM-4015T



ADAM-4016



Specifications

General

- **Connectors** 2 x Plug-in terminal block (#14 ~ 28 AWG)
- **Power Consumption** 1.2 W @ 24 V_{DC}
- **Wire-Burnout Detector** Yes

Analog Input

- **Channels** 6 differential
- **Input Connections** 2 or 3 wire
- **Input Impedance** 10 MΩ
- **Input Type** Pt, Balco and Ni RTD
- **Isolation Voltage** 3000 V_{DC}
- **NMR @ 50/60 Hz** 100 dB
- **RTD Types and Temperature Ranges**
 - Pt 100 RTD:**
 - Pt -50° C to 150° C
 - Pt 0° C to 100° C
 - Pt 0° C to 200° C
 - Pt 0° C to 400° C
 - Pt -200° C to 200° C
 - IEC RTD 100 ohms (a = 0.00385)
 - JIS RTD 100 ohms (a = 0.00392)
 - Pt 1000 RTD**
 - Pt -40° C to 160° C
 - Balco 500 RTD**
 - 30° C to 120° C
 - Ni 50 RTD**
 - Ni -80° C to 100° C
 - Ni 508 RTD**
 - Ni 0° C to 100° C
- **Sampling Rate** 10 samples / sec.
- **Span Drift** ± 25 ppm/° C
- **Zero Drift** ± 3 μV/° C

Specifications

General

- **Connectors** 2 x Plug-in terminal block (#14 ~ 28 AWG)
- **Power Consumption** 1.2 W @ 24 V_{DC}
- **Wire-Burnout Detector** Yes

Analog Input

- **Channels** 6 differential
- **Input Connections** 2 or 3 wires
- **Input Impedance** 10 MΩ
- **Input Type** Thermistor
- **Isolation Voltage** 3000 V_{DC}
- **NMR @ 50/60 Hz** 100 dB
- **Sampling Rate** 10 samples / sec.
- **Span Drift** ± 25 ppm/° C
- **Thermistor Types and Temperature Ranges**
 - Thermistor 3k 0 ~ 100° C
 - Thermistor 10k 0 ~ 100° C
- **Zero Drift** ± 3 μV/° C

Specifications

General

- **Connectors** 2 x Plug-in terminal block (#14 ~ 28 AWG)
- **Power Consumption** 2.2 W @ 24 V_{DC}

Analog Input

- **Channels** 1 differential
- **Input Impedance** Voltage: 2 MΩ
Current: 125 Ω
(Added by users)
- **Input Range** ±15 mV, ±50 mV, ±100 mV, ±500 mV, ±20 mA mV and mA
- **Input Type**
- **Isolation Voltage** 3,000 V_{DC}
- **NMR @ 50/60 Hz** 100 dB
- **Sampling Rate** 10 samples/sec.
- **Span Drift** ±25 ppm/° C
- **Zero Drift** ±6 μV/° C

Analog Output

- **Accuracy** 0.05% of FSR
- **Channels** 1
- **Drift** ±50 ppm/° C
- **Drive Current** 30 mA
- **Isolation Voltage** 3000 V_{DC}
- **Output Type** V
- **Output Range** 0 ~ 10 V

Digital Output

- **Built-in TVS/ESD Protection**
- **Channels** 2, open collector to 30 V, 30 mA max. load

Common Specifications

General

- **Dimensions (WxHxD)** 70 x 122 x 30 mm
- **Enclosure** ABS + PC
- **Mounting** DIN 35 rail, stack, wall
- **Power Input** Unregulated 10~30 V_{DC}
- **Watchdog Timer** 1.6 sec. (system)

Analog Input

- **Accuracy** ±0.05% or better

- **Bandwidth** 2.62 Hz
- **CMR @ 50/60 Hz** 150 dB
- **Isolation Protection** 3000 V_{DC}
- **Resolution** 16 bits

Environment

- **Humidity** 5 ~ 95% RH
- **Operating Temperature** -10~70° C (14~158° F)
- **Storage Temperature** -25~85° C (-13~185° F)

Ordering Information

- **ADAM-4015** 6-channel RTD Input Module w/Modbus®
- **ADAM-4015T** 6-channel Thermistor Input Module w/Modbus®
- **ADAM-4016** Analog Input/Output Module

Common Specifications

Communication

- RS-485 (2-wire) to host
- Speeds: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps (ADAM-4080, ADAM-4080D only support up to 38400 bps)
- Max. communication distance: 4000 feet (1.2 km)
- Power and communication LED indicator
- ASCII command/response protocol
- Communication error checking with checksum
- Asynchronous data format:
 - Advantech protocol: 1 start bit, 8 data bits, 1 stop bit, no parity
 - Modbus protocol: 1 start bit, 8 data bits, 1 or 2 stop bit, parity check (none, odd, even) (ADAM-4100 series only)
- Up to 256 multidrop modules per serial port
- Online module insertion and removal
- Transient suppression on RS-485 communication lines

Dimensions

