

ADAM-4012 ADAM-4013 ADAM-4015

1-ch Analog Input Module

1-ch RTD Input Module

6-ch RTD Module with Modbus



ADAM-4012



ADAM-4013



ADAM-4015



Specifications

General

- **Power Consumption** 1.2 W @ 24 V_{DC}
- **Supported Protocols** ASCII command
- **Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG)

Analog Input

- **Channels** 1
- **Input Impedance** Voltage: 20 MΩ
Current: 125 Ω (Added by user)
- **Input Type** mV, V or mA
- **Input Range** ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V and ±20 mA
- **Accuracy** Voltage mode: ±0.1% or better
Current mode: ±0.2% or better
- **Span Drift** ±25 ppm/°C
- **Zero Drift** ±6 μV/°C

Digital Input

- **Channels** 1
Logic level 0: 1 V max.
Logic level 1: 3.5 ~ 30 V
pull up current: 0.5 mA,
10 kΩ resistor to 5 V
- **Event Counter** Max. input freq.: 50 Hz
Min. input pulse width: 1 msec.

Digital Output

- **Channels** 2, open collector to 30 V,
30 mA max. load
- **Power Dissipation** 300 mW

Common Specifications

General

- **Power Input** Unregulated 10 ~ 30 V_{DC}
- **Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG)
- **Watchdog Timer** System (1.6 second)

Analog Input

- **Resolution** 16-bit
- **Sampling Rate** 10 sample/second (total)

- **NMR @ 50/60 Hz** 100 dB
- **Isolation Voltage** 3,000 V_{DC}

Environment

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

General

- **Power Consumption** 0.7 W @ 24 V_{DC}
- **Supported Protocols** ASCII command
- **Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG)

Analog Input

- **Channels** 1
 - **Input Connections** 2 or 3-wire
 - **Input Impedance** 2 MΩ
 - **Input Type** Pt or Ni RTD
 - **RTD Types and Temperature Ranges**
- | IEC RTD 100 ohms | | | |
|------------------|--------|----|---------------------|
| Pt | -100°C | to | +100°C a = 0.00385 |
| Pt | 0°C | to | +100°C a = 0.00385 |
| Pt | 0°C | to | +200°C a = 0.00385 |
| Pt | 0°C | to | +600°C a = 0.00385 |
| JIS RTD 100 ohms | | | |
| Pt | -100°C | to | +100°C a = 0.003916 |
| Pt | 0°C | to | +100°C a = 0.003916 |
| Pt | 0°C | to | +200°C a = 0.003916 |
| Pt | 0°C | to | +600°C a = 0.003916 |
| Ni RTD | | | |
| Ni | -80°C | to | +100°C |
| Ni | 0°C | to | +100°C |
- **Accuracy** ±0.1% or better
 - **Span Drift** ±25 ppm/°C
 - **Zero Drift** ±3 μV/°C
 - **CMR @ 50/60 Hz** 150 dB

Specifications

General

- **Connectors** 2 x plug-in terminal blocks (#14 ~ 28 AWG)
- **Power Consumption** 1.2 W @ 24 V_{DC}
- **Watchdog Timer** System (1.6 s) & Communication
- **Supported Protocols** ASCII command and Modbus/RTU
- **Burn-out Detection** Yes

Analog Input

- **Channels** 6 differential
 - **Input Connections** 2, 3-wire
 - **Input Impedance** 10 MΩ
 - **Input Type** Pt, Balco and Ni RTD
 - **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
 - BA1**
 - 200°C to 600°C
 - **Accuracy** ±0.1% (Typical)
 - **CMR @ 50/60 Hz** 120 dB
 - **Span Drift** ± 25 ppm/°C
 - **Zero Drift** ± 3 μV/°C

Ordering Information

- **ADAM-4012** 1-ch Analog Input Module
- **ADAM-4013** 1-ch RTD Input Module
- **ADAM-4015** 6-ch RTD Module with Modbus

Assured Systems

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