

ADAM-4012 ADAM-4013 ADAM-4015

1-ch Analog Input Module

1-ch RTD Input Module

6-ch RTD Module with Modbus



ADAM-4012



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)



ADAM-4013



Specifications

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



ADAM-4015



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
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 - Balco 500 RTD**

-30°C	to	120°C
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 - Ni 50 RTD**

Ni	-80°C	to	100°C
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 - Ni 508 RTD**

Ni	0°C	to	100°C
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 - BA1**

-200°C	to	600°C
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- 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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