

# ADAM-4011 ADAM-4012 ADAM-4013

1-ch Thermocouple Input Module

1-ch Analog Input Module

1-ch RTD Input Module



ADAM-4011



ADAM-4012



ADAM-4013



## Specifications

### General

- Power Consumption 1.4 W @ 24 V<sub>DC</sub>
- Supported Protocols ASCII command

### Analog Input

- Channels 1
- Input Impedance Voltage: 2 MΩ  
Current: 125 Ω (Added by user)
- Input Type T/C, mV, V or mA
- Input Range ±15 mV, ±50 mV, ±100 mV, ±500 mV, ±1 V, ±2.5 V, ±20 mA
- Accuracy Voltage mode: ±0.1% or better  
Current mode: ±0.2% or better

### T/C Type and Temperature Range

J	0 ~ 760°C	R	500 ~ 1,750°C
K	0 ~ 1,370°C	S	500 ~ 1,750°C
T	-100 ~ 400°C	B	500 ~ 1,800°C
E	0 ~ 1,000°C		

- 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

### Digital Output

- Channels 2, open collector to 30 V, 30 mA max. load
- Power Dissipation 300 mW
- Supports high/low alarms

## Specifications

### General

- Power Consumption 1.2 W @ 24 V<sub>DC</sub>
- Supported Protocols ASCII command

### 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

## Specifications

### General

- Power Consumption 0.7 W @ 24 V<sub>DC</sub>
- Supported Protocols ASCII command

### 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

## Common Specifications

### General

- Power Input Unregulated 10 ~ 30 V<sub>DC</sub>
- 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

- CMR @ 50/60 Hz 150 dB
- NMR @ 50/60 Hz 100 dB
- Isolation Voltage 3,000 V<sub>DC</sub>

### Environment

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

## Ordering Information

- ADAM-4011 1-ch Thermocouple Input Module
- ADAM-4012 1-ch Analog Input Module
- ADAM-4013 1-ch RTD Input Module