

# 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
- 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

## 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

## 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
- 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, 3, or 4-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

## Ordering Information

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