

ADAM-4011/4011D

ADAM-4012

ADAM-4013

Thermocouple Input Module

Analog Input Module

RTD Input Module



ADAM-4011/4011D



ADAM-4012



ADAM-4013



Specifications

General

- **LED Indicators** 5-digit (ADAM-4011D)
- **Power Consumption** 1.2 W @ 24 V_{DC}

Analog Input

- **Input Impedance** Voltage: 2 M Ω
Current: 125 Ω
(Added by users)
- **Input Types** T/C, mV, V or mA
- **Input Range** ± 15 mV, ± 50 mV, ± 100 mV, ± 500 mV, ± 1 V, ± 2.5 V, ± 20 mA
- **T/C Type and Temperature Range**

| | | | |
|----------|---------------|----------|---------------|
| J | 0 ~ 760° C | R | 500 ~ 1750° C |
| K | 0 ~ 1370° C | S | 500 ~ 1750° C |
| T | -100 ~ 400° C | B | 500 ~ 1800° C |
| E | 0 ~ 1000° C | | |

- **Input Surge Protection** Yes
- **NMR @ 50/60 Hz** 100 dB
- **Sampling Rate** 10 samples/sec.
- **Span Drift** ± 25 ppm/° C
- **Zero Drift** ± 3 μ V/° C

Digital Input

- **Channels** 1
Logic levels 0: 1 V max. 1: 3.5~30 V
Pull up current: 0.5 mA, 10 k Ω 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

Specifications

General

- **Power Consumption** 1.2 W @ 24 V_{DC}

Analog Input

- **Input Impedance** Voltage: 2 M Ω
Current: 125 Ω
(Added by users)
- **Input Types** mV, V or mA
- **Input Range** ± 150 mV, ± 500 mV, ± 1 V, ± 5 V, ± 10 V and ± 20 mA
- **NMR @ 50/60 Hz** 100 dB
- **Span Drift** ± 25 ppm/° C
- **Zero Drift** ± 6 μ V/° 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 k Ω 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_{DC}

Analog Input

- **Input Connections** 2, 3 or 4 wire
- **Input Impedance** 2 M Ω
- **Input Type** Pt or Ni RTD
- **NMR @ 50/60 Hz** 100 dB
- **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 |

- **Sampling Rate** 10 samples/sec.
- **Span Drift** ± 25 ppm/° C
- **Zero Drift** ± 3 μ V/° C

Common Specification

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 Time** 1.6 sec. (system)
- **Connectors** 1 x Plug-in terminal block (#14~22 AWG)

Environment

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

Ordering Information

- **ADAM-4011** Thermocouple Input Module
- **ADAM-4011D** Thermocouple Input Module w/LED Display
- **ADAM-4012** Analog Input Module
- **ADAM-4013** RTD Input Module