

ADAM-4011/4011D

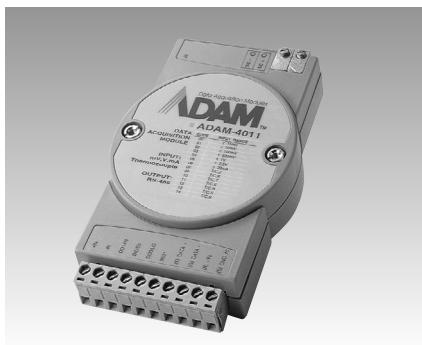
ADAM-4012

ADAM-4013

Thermocouple Input Module

Analog Input Module

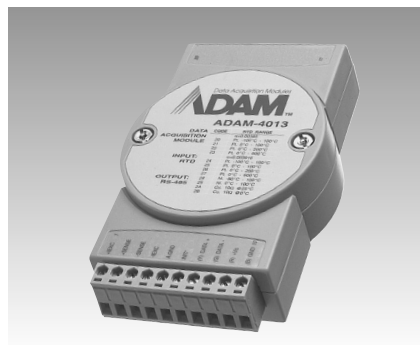
RTD Input Module



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

ADAM 4000/4100 Series

Common Specifications

Communication

- RS-485 (2-wire) to host
- Speeds: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps (ADAM-4080, ADAM-4080D only support up to 38400 bps)
- Max. communication distance: 4000 feet (1.2 km)
- Power and communication LED indicator
- ASCII command/response protocol
- Communication error checking with checksum
- Asynchronous data format:
 Advantech protocol: 1 start bit, 8 data bits, 1 stop bit, no parity
 Modbus protocol: 1 start bit, 8 data bits, 1 or 2 stop bit, parity check (none, odd, even) (ADAM-4100 series only)
- Up to 256 multidrop modules per serial port
- Online module insertion and removal
- Transient suppression on RS-485 communication lines

Dimensions

