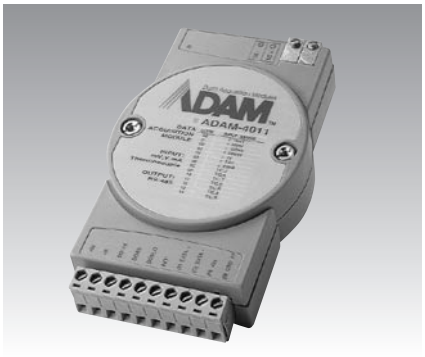
ADAM-4011
ADAM-4012
ADAM-4013

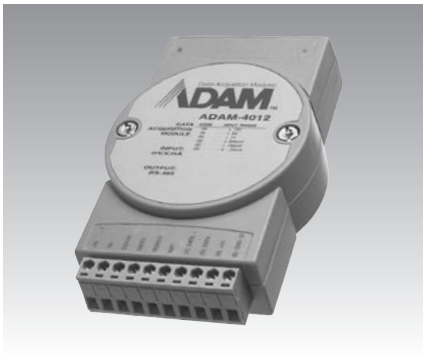
1-ch Thermocouple Input Module

1-ch Analog Input Module

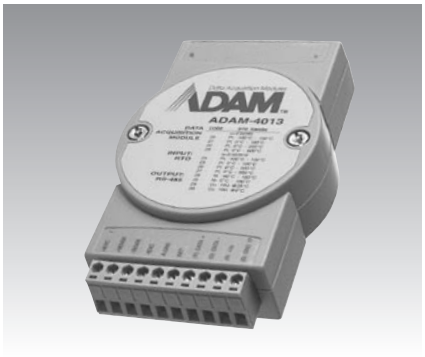
1-ch RTD Input Module



ADAM-4011



ADAM-4012



ADAM-4013

Specifications

General

- **Power Consumption** 1.4 W @ 24 V_{DC}
- **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 ~ 1750° C
K	0 ~ 1370° C	**S**	500 ~ 1750° C
T	-100 ~ 400° C	**B**	500 ~ 1800° C
E	0 ~ 1000° 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

Specifications

General

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

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
- **CMR @ 50/60 Hz** 150 dB
- **NMR @ 50/60 Hz** 100 dB
- **Isolation Voltage** 3000 V_{DC}

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