

ADAM-4017+ ADAM-4018+ ADAM-4019+

8-ch Analog Input Module with Modbus
8-ch Thermocouple Input Module with Modbus
8-ch Universal Analog Input Module with Modbus



ADAM-4017+



ADAM-4018+



ADAM-4019+



Specifications

General

- **Power Consumption** 1.2 W @ 24 V_{DC}
- **Watchdog Timer** System (1.6 second) & Communication
- **Supported Protocols** ASCII command and Modbus/RTU

Analog Input

- **Channels** 8 differential
- **Channel Independent Configuration** Yes
- **Input Impedance** Voltage: 20 M Ω
Current: 120 Ω
- **Input Type** mV, V, mA
- **Input Range** 0 ~ 150 mV, 0 ~ 500 mV,
0 ~ 1 V, 0 ~ 5 V, 0 ~ 10 V,
 ± 150 mV, ± 500 mV, ± 1 V,
 ± 5 V, ± 10 V, ± 20 mA,
0 ~ 20 mA, 4 ~ 20 mA

Specifications

General

- **Power Consumption** 0.8 W @ 24 V_{DC}
- **Watchdog Timer** System (1.6 second) & Communication
- **Supported Protocols** ASCII command and Modbus/RTU

Analog Input

- **Channels** 8 differential
- **Channel Independent Configuration** Yes
- **Input Impedance** Voltage: 20 M Ω
Current: 120 Ω
- **Input Type** Thermocouple, mA
- **Input Range** ± 20 mA, 4 ~ 20 mA
- **T/C Types and Temperature Ranges**

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		

- **Burnout Detection** All T/C

Specifications

General

- **Power Consumption** 1.0 W @ 24 V_{DC}
- **Watchdog Timer** System (1.6 second) & Communication
- **Supported Protocols** ASCII command and Modbus/RTU

Analog Input

- **Channels** 8 differential channels for individual input type
- **Channel Independent Configuration** Yes
- **Input Impedance** Voltage: 20 M Ω
Current: 120 Ω
- **Input Type** T/C, mV, V, mA
- **Input Range** 0 ~ 100 mV, 0 ~ 500 mV,
0 ~ 1 V, 0 ~ 2.5 V, 0 ~ 5 V,
0 ~ 10 V, ± 100 mV,
 ± 500 mV, ± 1 V, ± 2.5 V,
 ± 5 V, ± 10 V, ± 20 mA,
0 ~ 20 mA, 4 ~ 20 mA,

- **T/C Types and Temperature Ranges**

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	N	-200 ~ 1,300°C

- **Burnout Detection** 4 ~ 20 mA & all T/C

Common Specifications

General

- **Power Input** Unregulated 10 ~ 30 V_{DC}
- **Connectors** 2 x plug-in terminal block (#14 ~ 22 AWG)

Analog Input*

- **Accuracy** Voltage mode: $\pm 0.1\%$ or better
Current mode: $\pm 0.2\%$ or better
- **Resolution** 16-bit
- **Sampling Rate** 10 sample/second (total)

- **Isolation Voltage** 3,000 V_{DC}
- **Overvoltage Protection** ± 35 V_{DC}
- **CMR @ 50/60 Hz** 120 dB
- **NMR @ 50/60 Hz** 100 dB
- **Span Drift** ± 25 ppm/°C (Typical)
- **Zero Drift** ± 6 μ V/°C
- **Built-in TVS/ESD Protection**

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-4017+-F** 8-ch Analog Input Module with Modbus
- **ADAM-4018+-F** 8-ch Thermocouple Input Module w/Modbus
- **ADAM-4019+-F** 8-ch Universal Analog Input Module w/Modbus

*Please reference the user manual for the range accuracy of the thermocouple