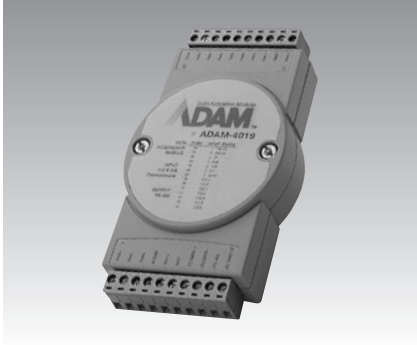


ADAM-4019 ADAM-4021 ADAM-4022T

8-channel Universal Analog Input Module

Analog Output Module

Serial Based Dual Loop PID Controller



ADAM-4019



ADAM-4021



ADAM-4022T

Specifications

Analog Output

- **Effective Resolution** 16-bit
- **Channels** 8 differential channels for individual input type
- **Input Type** thermocouple, mV, V, mA
- **Input Range** ± 100 mV, ± 500 mV, ± 1 V, ± 2.5 V, ± 5 V, ± 10 V, ± 20 mA
- **T/C Type and Temperature Range**

J	0	~	760° C
K	0	~	1370° C
T	-100	~	400° C
E	0	~	1000° C
R	500	~	1750° C
S	500	~	1750° C
B	500	~	1800° C
- **Isolation Voltage** 3000 V_{DC}
- **Fault and Overvoltage Protection** Resists overvoltage up to ± 35 V
- **Input Impedance** 20 M Ω
- **Bandwidth** 13.1 Hz @ 50 Hz, 15.72 Hz @ 60 Hz
- **Accuracy** $\pm 0.1\%$ of voltage input
- **Zero Drift** ± 30 mV/° C
- **Span Drift** ± 25 ppm/° C
- **CMR @ 50/60 Hz** 92 dB min.

Built-in Watchdog Timer

Power

- **Power Requirements** Unregulated +10 ~ +30 V_{DC}
- **Power Consumption** 1.2 W @ 24 V_{DC}

Ordering Information

- **ADAM-4019** 8-channel Universal Analog Input w/Modbus

Specifications

Analog Output

- **Effective Resolution** 12-bit
- **Output Type** mA, V
- **Output Range** 0 to 20 mA, 4 to 20 mA, and 0 to 10 V
- **Isolation Voltage** 3000 V_{DC}
- **Output Impedance** 0.5 W
- **Accuracy** $\pm 0.1\%$ of FSR for current output
 $\pm 0.2\%$ of FSR for voltage output
- **Readback Accuracy** $\pm 1\%$ of FSR
- **Resolution** $\pm 0.015\%$ of FSR
- **Zero Drift** Voltage output: ± 30 mV/° C
current output: ± 0.2 mA/° C
- **Span Temperature Coefficient** ± 25 ppm/° C
- **Programmable Output Slope** 0.125 ~ 128 mA/sec.
0.0625 ~ 64.0 V/sec.
- **Current Load Resistor** 0 to 500 W (source)

Built-in Watchdog Timer

Power

- **Power Requirement** Unregulated +10 ~ +30 V_{DC}
- **Power Consumption** 1.4 W @ 24 V_{DC}

Ordering Information

- **ADAM-4021** Analog Output Module – V or mA

Specifications

Analog Input

- **Channels** 4
- **Input Type** mA, V, Thermistor, RTD
- **Input Range** 0 to 20 mA, 4 to 20 mA, 0 to 10 V
- **Thermistor Type and Temperature Ranges**

Thermistor 3K:	0 ~ 100° C
Thermistor 10K:	0 ~ 100° C
- **RTD Type and Temperature Ranges**

Pt 100 RTD	0 to 20 mA, 4 to 20 mA, 0 to 10 V
Pt -100 ~ 100° C	
Pt 0 ~ 100° C	
Pt 0 ~ 200° C	
Pt 0 ~ 600° C	
IEC RTD 100 ohms (a = 0.00385)	
JIS RTD 100 ohms (a = 0.00392)	
Pt 1000 RTD	
Pt -40 ~ 160° C	

Analog Output

- **Channels** 2
- **Output Type** mA, V
- **Output Range** 0 to 20 mA, 4 to 20 mA, 0 to 10 V

Digital Input

- **Channels** 2
- **Dry Contact** Logic level 0-close to GND
Logic level 1-open

Digital Output

- **Channels** 2
- Open Collector to 30 V, 100 mA max. load
- 3,000 V_{DC}

Surge Protection (Power)

Built-in Watchdog Timer

- **Power Requirements** Unregulated 10 ~ 30 V_{DC}
- **Power Consumption** 4 W @ 24 V_{DC}

Ordering Information

- **ADAM-4022T** Serial Based Dual Loop PID Controller