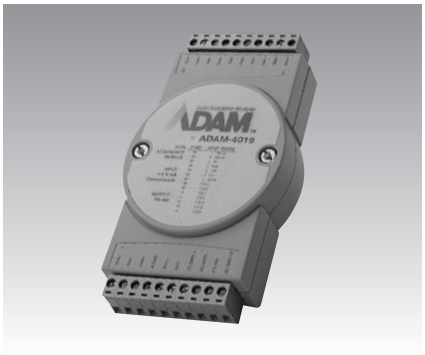
ADAM-4019
ADAM-4021
ADAM-4022T

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 MΩ
- **Bandwidth** 13.1 Hz @ 50 Hz, 15.72 Hz @ 60 Hz
- **Accuracy** ±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** ±0.1% of FSR for current output ±0.2% of FSR for voltage output
- **Readback Accuracy** ±1% of FSR
- **Resolution** ±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** 0.0625 ~ 64.0 V/sec.
- **Current Load Resistor** 0 to 500 W (source)

Built-in Watchdog Timer

Power

- **Power Requirement** Unregulated l+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
  - 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

Surge Protection (Power) 3,000 V_{DC}

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

All product specifications are subject to change without notice.

Last Updated: Jul-14-04