

ADAM-4019+ ADAM-4021 ADAM-4022T

8-channel Universal Analog Input Module with Modbus®

Analog Output Module

Serial Based Dual Loop PID Controller

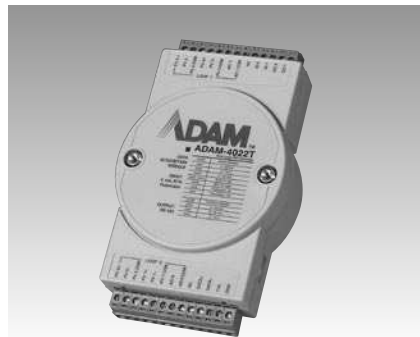
NEW



ADAM-4019+



ADAM-4021



ADAM-4022T



Specifications

Analog Input

- **Effective Resolution** 16-bit
- **Channels** 8 differential channels for individual input type
- **Input Type** Thermocouple, mV, V, mA
- **Input Range** +/-1V, +/-2.5V, +/-5V, +/-10V, +/-100mV, +/-500mV, +/-20mA, +4~20mA
- **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
- **Burn-out Detection** +4~20mA & All T/C
- **Isolation Voltage** 3000 V_{DC}
- **Fault and Over-voltage Protection** Resists over-voltage 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** ±3 µV/°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** 1.0 W @ 24 V_{DC}

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 Ω
- **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 µV/°C
current output: ±0.2 µA/°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 Ω (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 Pt -100 ~ 100° C
 - Pt 0 ~ 100° C
 - Pt 0 ~ 200° C
 - Pt 0 ~ 600° C
 - IEC RTD 100 ohms (α = 0.00385)
 - JIS RTD 100 ohms (α = 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}

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