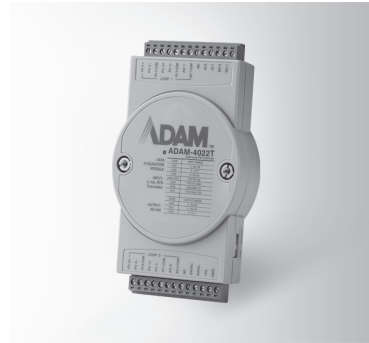


# ADAM-4021 ADAM-4022T ADAM-4024

- 1-ch Analog Output Module
- 2-ch Serial Based Dual Loop PID Controller with Modbus
- 4-ch Analog Output Module with Modbus



ADAM-4021



ADAM-4022T



ADAM-4024



## Specifications

### General

- Connectors: 2 x plug-in terminal blocks (#14 ~ 22 AWG)
- Power Consumption: 1.4 W @ 24 V<sub>DC</sub>
- Watchdog Timer: System (1.6 second)
- Supported Protocols: ASCII command

### Analog Output

- Channels: 1
- Output Impedance: 0.5 Ω
- Output Range: 0 ~ 20 mA, 4 ~ 20 mA, 0 ~ 10 V
- Output Type: mA, V
- Accuracy: ±0.1% of FSR for current output  
±0.2% of FSR for voltage output
- Current Load Resistor: 0 to 500 Ω (source)
- Resolution: 12-bit
- Isolation Voltage: 3,000 V<sub>DC</sub>
- Programmable Output Slope: 0.125 ~ 128 mA/sec.  
0.0625 ~ 64.0 V/sec.
- Readback Accuracy: ±1% of FSR
- Span Temperature Coefficient: ±25 ppm/°C
- Zero Drift: Voltage output: ±30 μV/°C  
Current output: ±0.2 μA/°C

## Common Specifications

### General

- Power Input: Unregulated 10 ~ 30 V<sub>DC</sub>

### Environment

- Operating Humidity: 5 ~ 95% RH
- Operating Temperature: -10 ~ 70°C (14 ~ 185°F)
- Storage Temperature: -25 ~ 85°C (-13 ~ 185°F)

## Specifications

### General

- Connectors: 2 x plug-in terminal blocks (#14 ~ 28 AWG)
- Power Consumption: 4 W @ 24 V<sub>DC</sub>
- Watchdog Timer: System (1.6 second)
- Supported Protocols: ASCII command and Modbus/RTU

### Analog Input (Only AI0 and AI2 are the PID input)

- Channels: 4
- Input Type: mA, V, Thermistor, RTD
- Input Range: 0 ~ 20 mA, 4 ~ 20 mA, 0 ~ 10 V
- Thermistor Type and Temperature Ranges: Thermistor 3 K (NTC): 0 ~ 100°C  
Thermistor 10 K (NTC): 0 ~ 100°C
- RTD Type and Temperature Ranges: Pt 100 RTD: Pt 0 ~ 100°C, Pt -100 ~ 100°C, Pt 0 ~ 600°C, Pt 0 ~ 200°C  
IEC RTD 100 ohms (α = 0.00385)  
JIS RTD 100 ohms (α = 0.00392)  
Pt 1000 RTD: Pt -40 ~ 160°C
- Resolution: 16-bit
- Sampling Rate: 10 sample/second
- Isolation Voltage: 3,000 V<sub>DC</sub>

### Analog Output

- Channels: 2
- Output Range: 0 ~ 20 mA, 4 ~ 20 mA, 0 ~ 10 V
- Output Type: mA, V
- Resolution: 12-bit
- Isolation Voltage: 3,000 V<sub>DC</sub>

### Digital Input

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

### Digital Output

- Channels: 2
- Power Dissipation: Open Collector to 30 V, 30 mA max. load  
300 mW

## Specifications

### General

- Connectors: 2 x plug-in terminal blocks (#14 ~ 28 AWG)
- Power Consumption: 3 W @ 24 V<sub>DC</sub>
- Watchdog Timer: System (1.6 second) & Communication
- Supported Protocols: ASCII command and Modbus/RTU

### Analog Output

- Channels: 4
- Output Impedance: 0.5 Ω
- Output Range: 0 ~ 20 mA, 4 ~ 20 mA, ±10 V
- Output Type: mA, V (Differential)
- Accuracy: ±0.1% of FSR for current output  
±0.1% of FSR for voltage output
- Current Load Resistor: Max. 500 Ω (source)
- Voltage Load Resistor: Min. 1K Ω
- Resolution: 12-bit
- Isolation Voltage: 3,000 V<sub>DC</sub>
- Programmable Output Slope: 0.125 ~ 128 mA/sec.  
0.0625 ~ 64.0 V/sec.
- Span Temperature Coefficient: ±25 ppm/°C
- Zero Drift: Voltage output: ±30 μV/°C  
Current output: ±0.2 μA/°C

### Digital Input

- Channels: 4
- Input Level: Logic level 0: 1 V max.  
Logic level 1: 10 ~ 30 V<sub>DC</sub>
- Isolation Voltage: 3,000 V<sub>DC</sub>

## Ordering Information

- ADAM-4021: 1-ch Analog Output Module
- ADAM-4022T: 2-ch Serial Based Dual Loop PID Controller w/ Modbus
- ADAM-4024: 4-ch Analog Output Module with Modbus

## Assured Systems

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