

# ADAM-4021

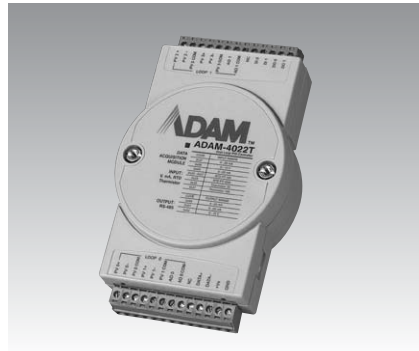
# ADAM-4022T

# ADAM-4024

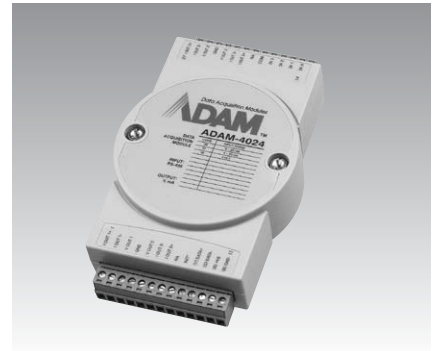
1-ch Analog Output Module  
 2-ch Serial Based Dual Loop PID Controller with Modbus®  
 4-ch Analog Output Module with Modbus



ADAM-4021



ADAM-4022T



ADAM-4024



## Specifications

### General

- Connectors 2 x Plug-in terminal block (#14 ~ 22 AWG)
- Power Consumption 1.4 W @ 24 V<sub>DC</sub>
- Watchdog Timer System (1.6 second)
- Support Protocol 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 3000 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

## Specifications

### General

- Connectors 2 x Plug-in terminal block (#14 ~ 28 AWG)
- Power Consumption 4 W @ 24 V<sub>DC</sub>
- Watchdog Timer System (1.6 second)
- Support Protocol ASCII command and Modbus/RTU

### Analog 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 3K: 0 ~ 100° C  
Thermistor 10K: 0 ~ 100° C
- RTD Type and Temperature Ranges Pt 100 RTD Pt 0 ~ 100° C  
Pt 0 ~ 600° C Pt 0 ~ 200° C  
IEC RTD 100 ohms (a = 0.00385)  
JIS RTD 100 ohms (a = 0.00392)
- Pt 1000 RTD Pt -40 ~ 160° C
- Resolution 16-bit
- Sampling Rate 10 sample/second
- Isolation Voltage 3000 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 3000 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
- Support Protocol 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
- Accuracy ±0.1 % of FSR for current output  
±0.1 % of FSR for voltage output
- Current Load Resistor 0 to 500 Ω (source)
- Resolution 12-bit
- Isolation Voltage 3000 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: +1V max  
Logic level 1: 10 ~ 30 V<sub>DC</sub>
- Isolation Voltage 3000 V<sub>DC</sub>

## Common Specifications

### General

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

### Environment

- Humidity 5 ~ 95% RH
- Operating Temperature -10 ~ 70° C  
(14 ~ 158° F)
- Storage Temperature -25 ~ 85° C  
(-13 ~ 185° F)

## Ordering Information

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

- 1 PAC & Software
- 2 BAS
- 3 UNO
- 4 RS-485 I/O
- 5 Ethernet I/O
- 6 TPC
- 7 IPPC
- 8 FPM
- 9 AWS
- 10 Plug-in I/O
- 11 CompactPCI
- 12 Signal Conditioning
- 13 USB I/O
- 14 Motion Control I/O
- 15 Ethernet Switch
- 16 EDG
- 17 ICOM