

# ADAM-6022

# ADAM-6024

## Ethernet-based Dual-loop PID Controller

## 12-ch Isolated Universal Input/Output Modbus TCP Module



ADAM-6022



### Specifications

#### General

- **Loop Number** 2 (3 AI, 1 AO, 1 DI, 1 DO for each control loop)

#### Analog Input

- **Channels** 6 (differential)
- **Input Range**  $\pm 10 V_{DC}$ , 0 ~ 20 mA, 4 ~ 20 mA

#### Analog Output

- **Channels** 2
- **Output Type** V, mA
- **Output Range** 0 ~ 10  $V_{DC}$ , 4 ~ 20 mA, 0 ~ 20 mA

#### Digital Input

- **Channels** 2
- **Dry Contact** Logic level 0: close to GND  
Logic level 1: open
- **Wet Contact** Logic level 0: 0 ~ 3  $V_{DC}$   
Logic level 1: 10 ~ 30  $V_{DC}$

#### Digital Output

- **Channels** 2, open collector to 30 V, 100 mA max. load
- **Power Dissipation** 300 mW for each module

### Ordering Information

- **ADAM-6022** Ethernet-based Dual-loop PID Controller



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### Specifications

#### Analog Input

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#### Analog Output

- **Channels** 2
- **Output Type** V, mA
- **Output Range** 0 ~ 10  $V_{DC}$ , 4 ~ 20 mA, 0 ~ 20 mA

#### Digital Input

- **Channels** 2
- **Dry Contact** Logic level 0: close to GND  
Logic level 1: open
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#### Digital Output

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- **Power Dissipation** 300 mW for each module

#### Supports

- **Peer-to-Peer (Receiver only)**
- **GCL (Receiver only)**

### Ordering Information

- **ADAM-6024** 12-ch Isolated Universal I/O Modbus TCP Module

### Common Specifications

#### General

- **Certification** CE, FCC, UL
- **LAN** 10/100Base-T(X)
- **Power Consumption** 4 W @ 24  $V_{DC}$
- **Connectors** 1 x RJ-45 (LAN), Plug-in screw terminal block (I/O and power)
- **Watchdog** System (1.6 second) and Communication (programmable)
- **Power Input** 10 ~ 30  $V_{DC}$
- **Supports Modbus/TCP, TCP/IP, UDP, RESTful (D version), MQTT (D version), SNMP (D version)**

#### Analog Input

- **Input Impedance** 20 M $\Omega$
- **Accuracy**  $\pm 0.1\%$  of FSR
- **Resolution** 16-bit
- **Sampling Rate** 10 sample/second
- **CMR @ 50/60 Hz** 90 dB
- **NMR @ 50/60 Hz** 60 dB
- **Span Drift**  $\pm 25$  ppm/ $^{\circ}$ C
- **Zero Drift**  $\pm 6$   $\mu$ V/ $^{\circ}$ C

#### Analog Output

- **Accuracy**  $\pm 0.1\%$  of FSR
- **Resolution** 12-bit
- **Drift**  $\pm 50$  ppm/ $^{\circ}$ C
- **Current Load Resistor** Max. 500 $\Omega$
- **Voltage Load Resistor** Min. 1K  $\Omega$

#### Protection

- **Isolation Protection** 2,000  $V_{DC}$
- **Built-in TVS/ESD Protection**
- **DI Over Voltage Protection** 35  $V_{DC}$
- **Power Reversal Protection**

#### Environment

- **Operating Temperature** -10 ~ 50 $^{\circ}$ C (14 ~ 122 $^{\circ}$ F)  
D version: -40 ~ 70 $^{\circ}$ C (-40~158 $^{\circ}$ F)
- **Storage Temperature** -20 ~ 80 $^{\circ}$ C (-4 ~ 176 $^{\circ}$ F)  
D version: -40 ~ 80 $^{\circ}$ C (-40~176 $^{\circ}$ F)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)