

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



ADAM-6024



Specifications

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}
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Digital Output

- **Channels** 2, open collector to 30 V, 100 mA max. load
- **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 Ω
- **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** ± 25 ppm/ $^{\circ}$ C
- **Zero Drift** ± 6 μ V/ $^{\circ}$ C

Analog Output

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

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)