

ADAM-6050

ADAM-6051

ADAM-6052

18-channel Isolated Digital I/O Module

16-channel Isolated Digital I/O w/Counter Module

16-channel Source Type Digital I/O Module



ADAM-6050

CE FCC



ADAM-6051

CE FCC



ADAM-6052

CE FCC

Specifications

General

- **Channels** 12 DI, 6 DO
- **Digital Input**
 - Dry Contact: Logic level 0: close to GND
Logic level 1: open
 - Wet Contact: Logic level 0: 3 V max
Logic level 1: 10~30 V_{DC}
 - Counter: Up to 3 kHz
Frequency: 0.3 ~ 3000 Hz max.
- **Digital Output** Open Collector to 30 V
200 mA max. load
Pulse Output: Up to 5 kHz

Ordering Information

- **ADAM-6050** 18-channel isolated Digital I/O module

Specifications

General

- **Channels** 12 DI, 2 DO, 2 Counter
- **Counter**
 - Maximum Count: 4,294,967,285(32 bit)
 - Input frequency: 0.3 ~ 4500 Hz max. (frequency mode)
4500 Hz max. (counter mode)
 - Isolation voltage: 2000 V_{RMS}
 - Modes: Counter, Frequency
- **Digital Input**
 - Dry Contact: Logic level 0: close to GND
Logic level 1: open
 - Wet Contact: Logic level 0 : +3 V max
Logic level 1 : +10 V to 30 V_{DC}
 - Counter: Up to 4.5 kHz
Frequency: Up to 3 kHz
- **Digital Output** Open Collector to 30 V
200 mA max. load
Pulse Output: up to 5 kHz

Ordering Information

- **ADAM-6051** 16-channel isolated Digital I/O with counter module

Specifications

General

- **Channels** 8 DI, 8 DO
- **Digital Input**
 - Dry Contact: Logic level 0: close to GND
Logic level 1: open
 - Wet Contact: Logic level 0 : +3 V max
Logic level 1 : +10 V to 30 V_{DC}
V_{DC} : 35 V
Current: 1 A
- **Digital Output: (Source Type)**

Ordering Information

- **ADAM-6052** 16-channel Source Type Digital I/O module

Common Specifications

General

- **Certifications** CE, FCC class A
- **Dimensions (WxHxD)** 70 x 112 x 25 mm
- **Connectors** 1 x RJ-45 (LAN)
Plug-in screw terminal block (I/O, and power)
- **Enclosure** ABS+PC
- **LAN** 10/100Base-T

- **LED Indicators** Power and communication
- **Mounting** DIN 35 rail, stack, wall
- **Power Consumption** 2 W (typical)
- **Power Input** Unregulated 10~30 V_{DC}

Protection

- **Power Reversal Protection**

- **Optical Isolation** 2,000 V_{RMS}

Environment

- **Humidity (Operating)** 20 ~ 95% RH (non-condensing)
- **Humidity (Storage)** 0 ~ 95% RH (non-condensing)
- **Operating Temperature** -10 ~ 70° C
- **Storage Temperature** -20 ~ 80° C

1
Software

2
IPPC

3
TPC

4
FPM

5
ATM & AWS

6
DA&C

7
cPCI

8
ADAM-3000

9
Motion Control

10
ICOM

11
Industrial Networking

12
UNO

13
ADAM-4000

14
ADAM-5000

15
ADAM-6000

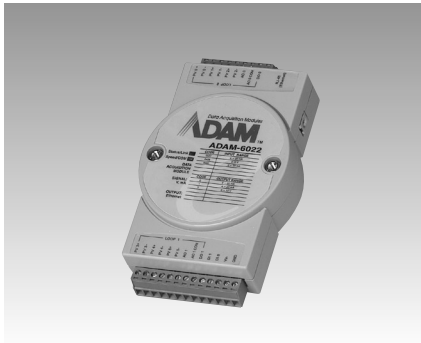
16
ADAM-8000

17
BAS

ADAM-6022 ADAM-6000

Ethernet-based Dual-loop PID Controller

Series Dimensions



ADAM-6022

CE FCC

Specifications

General

- **Dimensions (W x H x D)** 70 x 112 x 25 mm
- **Loop Number** 2 (3 AI, 1 AO, 1 DI, 1 DO for each control loop)
- **Power Consumption** 4 W (typical)
- **LAN** 10/100Base-T

Analog Input

- **Accuracy** $\pm 0.1\%$ or better
- **Bandwidth** 13.1 Hz @ 50 Hz
15.72 Hz @ 60 Hz
- **Channels** 6 differential
- **CMR @ 50/60 Hz** 92 dB min.
- **Resolution** 16 bits
- **Input Impedance** 20 M Ω
- **Input Range** 0 ~ 10 V_{DC}; 0 ~ 20 mA,
4 ~ 20 mA
- **Isolation Voltage** 2,000 V_{DC}
- **Sampling Rate** 10 samples/sec.
- **Span Drift** ± 25 ppm/ $^{\circ}$ C
- **Zero Drift** ± 6 μ V/ $^{\circ}$ C

Analog Output

- **Accuracy** 0.05% of FSR
- **Channels** 2
- **Drift** ± 50 ppm/ $^{\circ}$ C
- **Drive Voltage** 15 V_{DC} (current output)
- **Isolation Voltage** 2,000 V_{DC}
- **Output Range** 0 ~ 10 V_{DC}; 4 ~ 20 mA,
0 ~ 20 mA
- **Resolution** 12 bits

Digital Inputs

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

Digital Outputs

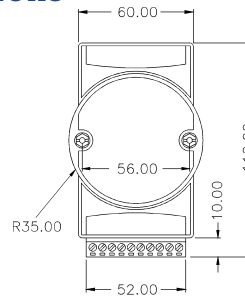
- **Channels** 2
- **Open Collector to 30 V**
100 mA max. load

Environment

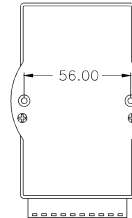
- **Humidity (Operating)** 20~95% RH, (non-cond)
- **Humidity (Storage)** 0~95% RH, (non-cond.)
- **Operating Temperature** -10~50 $^{\circ}$ C
- **Storage Temperature** -20~80 $^{\circ}$ C

Dimensions

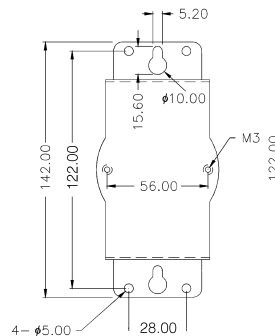
Unit: mm



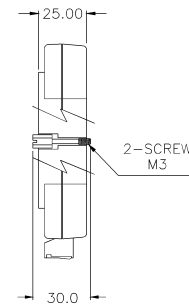
FRONT VIEW



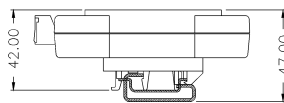
REAR VIEW



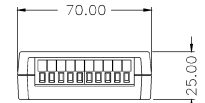
PANEL MOUNTING BRACKET



SIDE VIEW



DIN - RAIL MOUNTING ADAPTER



TOP VIEW

Ordering Information

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

Software Ordering Information

- **PCLS-OPC/MTP** Modbus/TCP OPC Server
- **AStudio-WNT/DEV** Astudio-WNI/PRO Web-enabled HMI/SCADA Software