

# 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<sub>DC</sub>
  - 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<sub>RMS</sub>
  - 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<sub>DC</sub>
  - 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<sub>DC</sub>  
V<sub>DC</sub> : 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<sub>DC</sub>

### Protection

- **Power Reversal Protection**

- **Optical Isolation** 2,000 V<sub>RMS</sub>

### 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

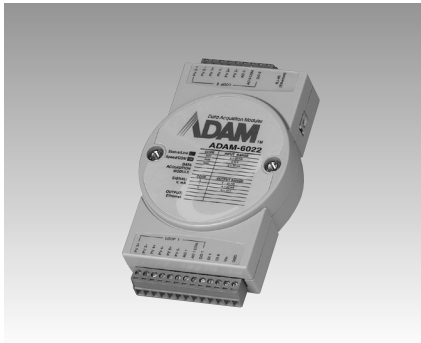
17  
BAS

# 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 $\Omega$
- **Input Range** 0 ~ 10 V<sub>DC</sub>; 0 ~ 20 mA,  
4 ~ 20 mA
- **Isolation Voltage** 2,000 V<sub>DC</sub>
- **Sampling Rate** 10 samples/sec.
- **Span Drift**  $\pm 25$  ppm/ $^{\circ}$ C
- **Zero Drift**  $\pm 6$   $\mu$ V/ $^{\circ}$ C

#### Analog Output

- **Accuracy** 0.05% of FSR
- **Channels** 2
- **Drift**  $\pm 50$  ppm/ $^{\circ}$ C
- **Drive Voltage** 15 V<sub>DC</sub> (current output)
- **Isolation Voltage** 2,000 V<sub>DC</sub>
- **Output Range** 0 ~ 10 V<sub>DC</sub>; 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<sub>DC</sub>

#### Digital Outputs

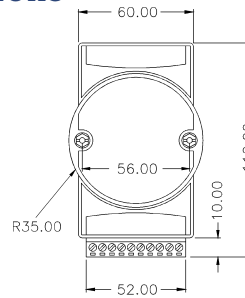
- **Channels** 2
- **Open Collector to 30 V**  
100 mA max. load

#### Environment

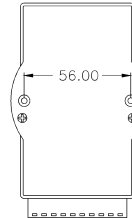
- **Humidity (Operating)** 20~95% RH, (non-cond)
- **Humidity (Storage)** 0~95% RH, (non-cond.)
- **Operating Temperature** -10~50 $^{\circ}$ C
- **Storage Temperature** -20~80 $^{\circ}$ C

### Dimensions

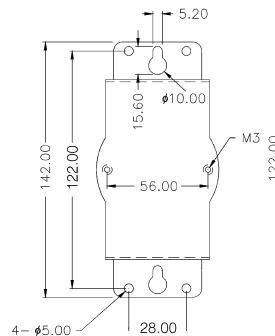
Unit: mm



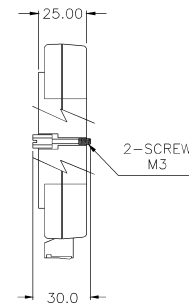
FRONT VIEW



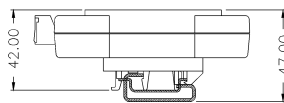
REAR VIEW



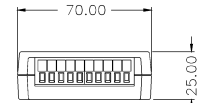
PANEL MOUNTING BRACKET



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