

# ADAM-4050

# ADAM-4051

# ADAM-4052

**16-ch Digital I/O Module with Modbus**  
**16-ch Isolated Digital Input Module with Modbus**

**8-ch Isolated Digital Input Module**



ADAM-4050



ADAM-4051



ADAM-4052



## Specifications

### General

- **Certification** FCC, CE
- **Connectors** 2 x plug-in terminal blocks (#14 ~ 22 AWG)
- **Power Consumption** 0.2 W @ 24 V DC typ.  
0.4 W @ 24 V DC max.
- **Watchdog Timer** System (1.6 second)
- **Supported Protocols** ASCII command and Modbus/RTU

### Digital Input

- **Channels** 8
- **Input Level**
  - Dry contact: Logic level 0: Closed to GND
  - Logic level 1: Open
  - Wet contact: Logic level 0: 1 V max
  - Logic level 1: +3.5 ~ 30 V or floating
  - Pull up current: 0.5 mA, 10 kΩ resistor to 5 V
  - Support DO type: Sink (NPN) only

### Digital Output

- **Channels** 8  
open collector to 30 V, 30 mA max. load
- **Power Dissipation** 300 mW

## Specifications

### General

- **Certification** FCC, CE
- **Connectors** 2 x plug-in terminal blocks (#14 ~ 28 AWG)
- **Power Consumption** 0.7 W @ 24 V DC typ.  
1.25 W @ 24 V DC max.
- **Watchdog Timer** System (1.6 second)
- **Supported Protocols** ASCII command and Modbus/RTU
- **LED Indicators** Yes

### Digital Input

- **Channels** 16
- **Input Voltage** 50 V max
- **Input Level**
  - Dry contact: Logic level 0: Open
  - Logic level 1: Closed to GND
  - Wet contact: Logic level 0: 3 V max or floating
  - Logic level 1: 10 ~ 50 V
  - Support DO type: Sink (NPN) and Source (PNP)

- **Isolation Voltage** 2,500 V<sub>DC</sub>
- **Input Resistance** 5.2 kΩ
- **Overvoltage Protection** 70 V<sub>DC</sub>

## Specifications

### General

- **Certification** FCC, CE, UL
- **Connectors** 2 x plug-in terminal blocks (#14 ~ 22 AWG)
- **Power Consumption** 0.4 W @ 24 V<sub>DC</sub>
- **Watchdog Timer** System (1.6 second)
- **Supported Protocols** ASCII command

### Digital Input

- **Channels** 8  
(6 fully independent isolated channels, 2 isolated channels with common ground)
- **Input Level**
  - Logic level 0: 1V or floating
  - Logic level 1: 3 ~ 30 V
  - Support DO type: Sink (NPN) and Source (PNP)
- **Isolation Voltage** 5,000 V<sub>RMS</sub>
- **Input Resistance** 3 kΩ

## Common Specifications

### General

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

### Environment

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

## Ordering Information

- **ADAM-4050-F** 16-ch Digital I/O Module with Modbus
- **ADAM-4051-C** 16-ch Isolated Digital Input Module with Modbus
- **ADAM-4052-BE** 8-ch Isolated Digital Input Module