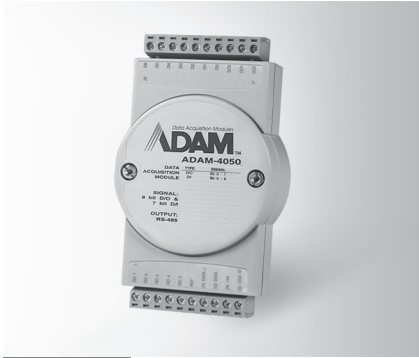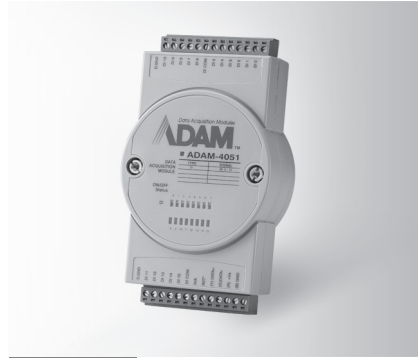# ADAM-4050
ADAM-4051
ADAM-4052

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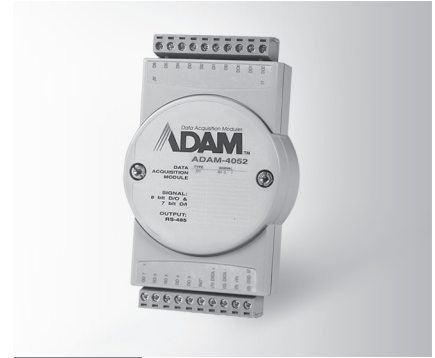
8-ch Isolated Digital Input Module

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_{DC}
- **Input Resistance** — 5.2 kΩ
- **Overvoltage Protection** — 70 V_{DC}

Specifications

General

- **Certification** — FCC, CE, UL
- **Connectors** — 2 x plug-in terminal blocks (#14 ~ 22 AWG)
- **Power Consumption** — 0.4 W @ 24 V_{DC}
- **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_{RMS}
- **Input Resistance** — 3 kΩ

Common Specifications

General

- **Power Input** — Unregulated 10 ~ 30 V_{DC}

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

ADVANTECH | RS-485 I/O Modules: ADAM-4000