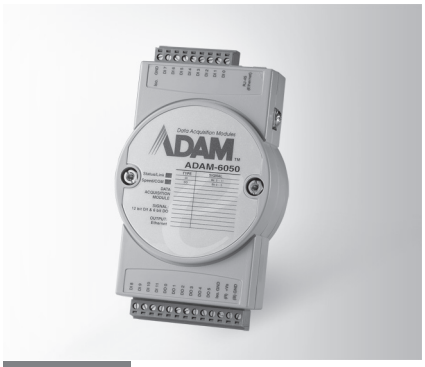
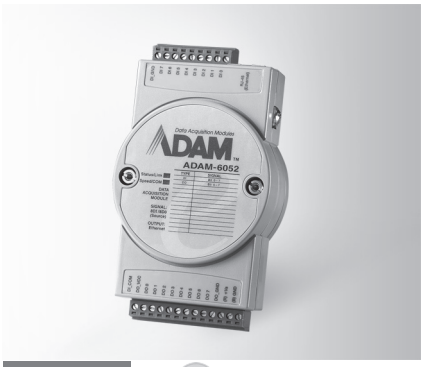
ADAM-6050
ADAM-6051
ADAM-6052

18-ch Isolated Digital I/O Modbus TCP Module
14-ch Isolated Digital I/O Modbus TCP Module with 2-ch Counter
16-ch Source-type Isolated Digital I/O Modbus TCP Module



ADAM-6050

ADAM-6051



ADAM-6052

Specifications

Digital Input

- **Channels** 12
- **Dry Contact** Logic level 0: Closed to GND
  Logic level 1: Open
- **Wet Contact** Logic level 0: 0 ~ 3 V_{DC}
  Logic level 1: 10 ~ 30 V_{DC} or floating
  Support DO type: Sink (NPN)
- **Supports 3 kHz Counter Input (32-bit + 1-bit overflow)**
- **Keep/Discard Counter Value when Power-off**
- **Supports 3 kHz Frequency Input**

Digital Output

- **Channels** 6 (sink type), open collector to 30 V, 100 mA maximum load
- **Supports 5 kHz Pulse Output**
- **Supports High-to-Low and Low-to-High Delay Output**

Ordering Information

- **ADAM-6050-D1** 18-ch Isolated DI/O Modbus TCP Module

Specifications

Digital Input

- **Channels** 12
- **Dry Contact** Logic level 0: Closed to GND
  Logic level 1: Open
- **Wet Contact** Logic level 0: 0 ~ 3 V_{DC}
  Logic level 1: 10 ~ 30 V_{DC} or floating
  Support DO type: Sink (NPN)
- **Supports 3 kHz Counter Input (32-bit + 1-bit overflow)**
- **Keep/Discard Counter Value when Power-off**
- **Supports 3 kHz Frequency Input**

Counter Input

- **Channels** 2
- **Mode** Counter, Frequency
- **Keep/Discard Counter Value when Power-off**
- **Maximum Count** 4,294,967,295 (32-bit + 1-bit overflow)
- **Input Frequency** Frequency Mode: 0.2 ~ 4500 Hz
  Counter Mode: 0 ~ 4.5 kHz

Digital Output

- **Channels** 2 (sink type), open collector to 30 V, 100 mA maximum load
- **Supports 5 kHz Pulse Output**
- **Supports High-to-Low and Low-to-High Delay Output**

Ordering Information

- **ADAM-6051-D** 16-ch Isolated DI/O with Counter Modbus TCP Module

Specifications

Digital Input

- **Channels** 8
  Dry/Wet Contact decided by switch or jumper
- **Dry Contact** Logic level 0: Open
  Logic level 1: Closed to GND
- **Wet Contact** Logic level 0: 0 ~ 3 V_{DC} or floating
  Logic level 1: 10 ~ 30 V_{DC}
  Support DO type: Source (PNP)
- **Supports 3 kHz Counter Input (32-bit + 1-bit overflow)**
- **Keep/Discard Counter Value when Power-off**
- **Supports 3 kHz Frequency Input**

Digital Output

- **Channels** 8 (Source Type)
- **Voltage Range** 10 ~ 35 V_{DC}
- **Current** 1 A (per channel)
- **Supports 5 kHz Pulse Output**
- **Supports High-to-Low and Low-to-High Delay Output**
- **Supports Over Current Protection**

Ordering Information

- **ADAM-6052-D** 16-ch Source-type Isolated DI/O Modbus TCP Module

Common Specifications

General

- **Certification** FCC, CE, UL
  *Class I, Division 2, Groups A, B, C and D Hazardous Locations
- **LAN** 1-port 10/100Base-T(X)
- **Power Consumption** 2 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 Peer-to-Peer, GCL**
- **Supports User Defined Modbus Address**
- **Supports Modbus/TCP, TCP/IP, UDP, RESTful, MQTT (D version), SNMP (D version) Protocol**

Protection

- **Power Reversal Protection**
- **Isolation Protection** 2,000 V_{DC}

Environment

- **Operating Temperature** -20 ~ 70°C (-4 ~ 158°F)
  D version -40 ~ 70°C (-40~158°F)
- **Storage Temperature** -30 ~ 80°C (-22 ~ 176°F)
  D version -40 ~ 85°C (-40~185°F)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)