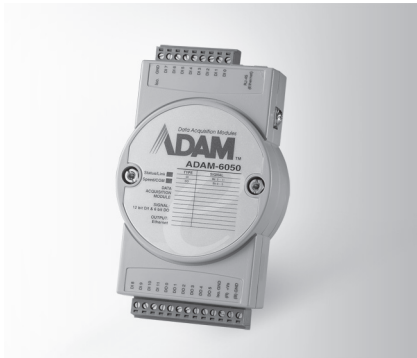# ADAM-6050
ADAM-6051
ADAM-6052

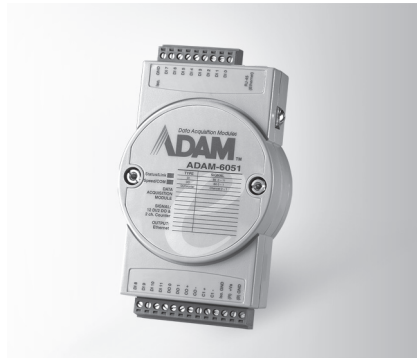**18-ch Isolated Digital I/O Modbus TCP Module**

14-ch Isolated Digital I/O Modbus TCP Module with 2-ch Counter

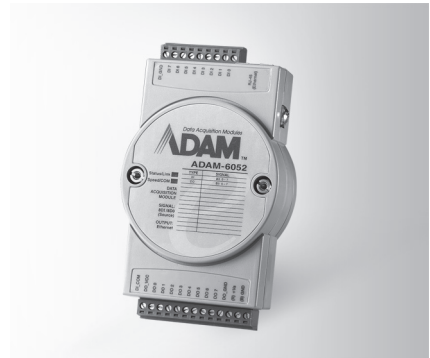**16-ch Source-type Isolated Digital I/O Modbus TCP Module**

ADAM-6050   FCC CE   RoHS COMPLIANT 2002/95/EC

ADAM-6051   FCC CE   RoHS COMPLIANT 2002/95/EC

ADAM-6052   FCC CE   RoHS COMPLIANT 2002/95/EC

Specifications

Digital Input

- **Channels**   12
- **Dry Contact**   Logic level 0: close to GND
                       Logic level 1: open
- **Wet Contact**   Logic level 0: 0 ~ 3 V_{DC}
                       Logic level 1: 10 ~ 30 V_{DC}
- **Supports 3 kHz Counter Input (32-bit + 1-bit overflow)**
- **Keep/Discard Counter Value when Power-off**
- **Supports 3 kHz Frequency Input**
- **Supports Inverted DI Status**

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**   18-ch Isolated DI/O Modbus TCP Module

Specifications

Digital Input

- **Channels**   12
- **Dry Contact**   Logic level 0: close to GND
                       Logic level 1: open
- **Wet Contact**   Logic level 0: 0 ~ 3 V_{DC}
                       Logic level 1: 10 ~ 30 V_{DC}
- **Supports 3 kHz Counter Input (32-bit + 1-bit overflow)**
- **Keep/Discard Counter Value when Power-off**
- **Supports 3 kHz Frequency Input**
- **Supports Inverted DI Status**

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

Specifications

Digital Input

- **Channels**   8
- **Dry Contact**   Logic level 0: Open
                       Logic level 1: Close to Ground
- **Wet Contact**   Logic level 0 : 0 ~ 3 V_{DC}
                       Logic level 1 : 10 ~ 30 V_{DC}
- **Supports 3 kHz Counter Input (32-bit + 1-bit overflow)**
- **Keep/Discard Counter Value when Power-off**
- **Supports 3 kHz Frequency Input**
- **Supports Inverted DI Status**

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

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Common Specifications

General

- **LAN**   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, DHCP, SNMP, HTTP and MQTT 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 ~ 80°C (-40~176°F)
- **Operating Humidity**   20 ~ 95% RH (non-condensing)
- **Storage Humidity**   0 ~ 95% RH (non-condensing)

ADVANTECH   Ethernet I/O Modules: ADAM-6000

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