

# ADAM-6050

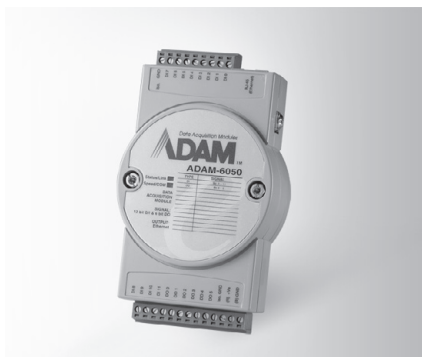
# ADAM-6051

# ADAM-6052

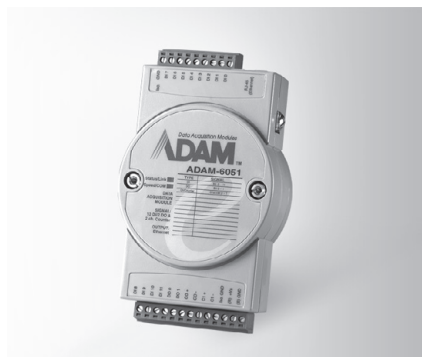
## 18-ch Isolated Digital I/O Modbus TCP Module

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

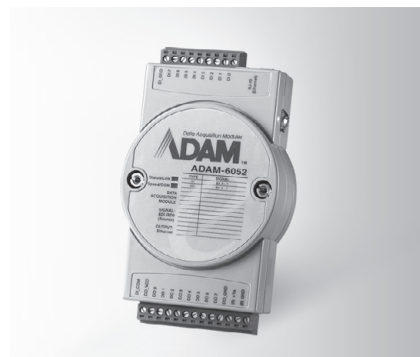
## 16-ch Source-type Isolated Digital I/O Modbus TCP Module



ADAM-6050



ADAM-6051



ADAM-6052



### Specifications

#### Digital Input

- Channels 12
- Dry Contact Logic level 0: close to GND  
Logic level 1: open
- Wet Contact Logic level 0: 0 ~ 3 V<sub>DC</sub>  
Logic level 1: 10 ~ 30 V<sub>DC</sub>
- 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<sub>DC</sub>  
Logic level 1: 10 ~ 30 V<sub>DC</sub>
- 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: close to GND  
Logic level 1: open
- Wet Contact Logic level 0: 0 ~ 3 V<sub>DC</sub>  
Logic level 1: 10 ~ 30 V<sub>DC</sub>
- 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<sub>DC</sub>
- 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

## Common Specifications

#### General

- Certification FCC, CE, UL  
\*Class I, Division 2, Groups A, B, C and D Hazardous Locations 10/100Base-T(X)
- LAN 2 W @ 24 V<sub>DC</sub>
- Power Consumption 1 x RJ-45 (LAN), Plug-in screw terminal block (I/O and power)
- 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<sub>DC</sub>
- 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<sub>DC</sub>

#### 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)

\* For ADAM-6050 and ADAM-6052