

# ADAM-6217

# ADAM-6218

# ADAM-6224

8-ch Isolated Analog Input Modbus TCP Module

6-ch Thermocouple Input Modbus TCP Module

4-ch Isolated Analog Output Modbus TCP Module



## Specifications

### Analog Input

- **Channels** 8 (differential)
- **Input Impedance** > 10 MΩ (voltage)  
120 Ω (current)
- **Input Type** mV, V, mA
- **Input Range** ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, 0~20 mA, 4~20 mA, ±20 mA
- **Span Drift** ± 30 ppm/°C
- **Zero Drift** ± 6 μV/°C
- **Resolution** 16-bit
- **Accuracy** ± 0.1% of FSR (Voltage) at 25°C  
± 0.2% of FSR (Current) at 25°C
- **Sampling Rate** 10 sample/second (total)
- **CMR @ 50/60 Hz** 92 dB
- **NMR @ 50/60 Hz** 60 dB
- **Common Mode** 200 V<sub>DC</sub>

## Ordering Information

- **ADAM-6217** 8-ch Isolated Analog Input Modbus TCP Module

## Specifications

### Analog Input

- **Channels** 6 (differential)
- **Input Impedance** > 1 MΩ (voltage)  
120 Ω (current)
- **Input Type** mV, V, mA, Thermocouple
- **Temperature Range**

<b>J</b>	-210 ~ 1,200°C	<b>R</b>	0 ~ 1,768°C
<b>K</b>	-270 ~ 1,372°C	<b>S</b>	0 ~ 1,768°C
<b>T</b>	-270 ~ 400°C	<b>B</b>	200 ~ 1,820°C
<b>E</b>	-270 ~ 1,000°C		
- **Voltage/Current Input Range** ±50 mV, ±100 mV, ±500 mV, ±1 V, ±2.5 V, ±20 mA, 0~20 mA, 4~20 mA
- **Span Drift** ± 30 ppm/°C
- **Zero Drift** ± 6 μV/°C
- **Resolution** 16-bit
- **Accuracy** ± 0.1% of FSR (Voltage) at 25°C  
± 0.2% of FSR (Current) at 25°C
- **Sampling Rate** 10 sample/second (total)
- **CMR @ 50/60 Hz** 92 dB
- **NMR @ 50/60 Hz** 60 dB
- **High Common Mode** 200 V<sub>DC</sub>

## Ordering Information

- **ADAM-6218** 6-ch Isolated Thermocouple Input Modbus TCP Module

## Specifications

### Analog Output

- **Channels** 4
- **Output Impedance** 2.1 Ω
- **Output Settling Time** 20 μs
- **Driving Load** Voltage: 2kΩ  
Current: 500 Ω
- **Programmable Output Slope** 0.125 ~ 128 mA/sec
- **Output Type** 0.0625 ~ 64 V/sec
- **Output Range** V, mA  
0 ~ 5 V, 0 ~ 10 V, ± 5 V, ± 10 V  
0 ~ 20 mA, 4 ~ 20 mA
- **Accuracy** ± 0.3% of FSR (Voltage) at 25°C  
± 0.5% of FSR (Current) at 25°C
- **Resolution** 12-bit
- **Current Load Resistor** 0 ~ 500 Ω
- **Drift** ± 50 ppm/°C
- **Digital Input**
- **Channels** 4 (Dry Contact only)
- **Dry Contact** Logic 0: Open  
Logic 1: Closed to DGND
- **Support DI Filter**
- **Support Inverted DI Status**
- **Support Trigger to Startup or Safety Value**

## Ordering Information

- **ADAM-6224** 4-ch Isolated Analog Output Modbus TCP Module

## Common Specifications

### General

- **Ethernet** 2-port 10/100 Base-TX (for Daisy Chain)
- **Protocol** Modbus/TCP, TCP/IP, UDP, HTTP, DHCP
- **Connector** Plug-in 5P/15P screw terminal blocks
- **Power Input** 10 ~ 30 V<sub>DC</sub> (24 V<sub>DC</sub> standard)
- **Watchdog Timer** System (1.6 seconds)  
Communication (Programmable)
- **Dimensions** 110 x 60 x 27 mm
- **Protection** Built-in TVS/ESD protection  
Power Reversal protection  
Over Voltage protection: +/- 35V<sub>DC</sub>  
Isolation protection: 2500 V<sub>DC</sub>
- **Power Consumption** ADAM-6217: 3.5W @ 24 V<sub>DC</sub>  
ADAM-6218: 3.5W @ 24 V<sub>DC</sub>  
ADAM-6224: 6W @ 24 V<sub>DC</sub>

### Features

- Daisy chain connection with auto-bypass protection
- Remote monitoring and control with smart phone/pad
- Group configuration capability for multiple module setup
- Flexible user-defined Modbus address
- Intelligent control ability by Peer-to-Peer and GCL function
- Multiple protocol support: Modbus TCP, TCP/IP, UDP, HTTP, DHCP
- Web language support: XML, HTML 5, JavaScript
- System configuration backup
- User Access Control

### Environment

- **Operating Temperature** -10 ~ 70°C (14 ~ 158°F)
- **Storage Temperature** -20 ~ 80°C (-4 ~ 176°F)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)