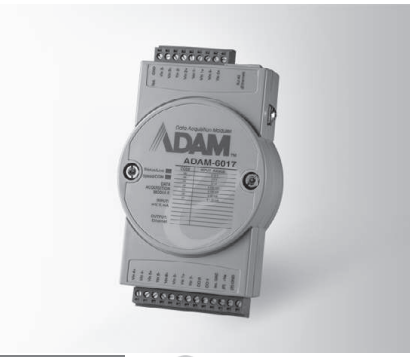
ADAM-6015
ADAM-6017
ADAM-6018+

7-ch Isolated RTD Input Modbus TCP Module
8-ch Isolated Analog Input Modbus TCP Module with 2-ch DO

8-ch Isolated Thermocouple Input Module



ADAM-6015



ADAM-6017



ADAM-6018+

Specifications

Analog Input

- **Channels** 7 (differential)
- **Input Impedance** > 10 MΩ
- **Input Connections** 2 or 3 wire
- **Input Type** Pt, Balco and Ni RTD
- **RTD Types and Temperature Ranges**

Pt 100	-50°C	~	150°C
	0°C	~	100°C
	0°C	~	200°C
	0°C	~	400°C
	-200°C	~	200°C
Pt 1000	-40°C	~	160°C

Supports both IEC 60751 ITS90 (0.0385 W/W/°C) and JIS C 1604 (0.0392 W/W/°C)

Balco 500	-30°C	~	120°C
Ni 518	-80°C	~	100°C
	0°C	~	100°C

- **Accuracy** ± 0.1 % or better
  High speed mode ±0.5% or better
- **Span Drift** ± 25 ppm/°C
- **Zero Drift** ± 6 µV/°C
- **Resolution** 16-bit
- **Sampling Rate**
  10 sample/ second (total)
  High speed mode:1K sample/second (total)
  CMR @ 50/60 HZ 90dB
  NMR @ 50/60 HZ 60dB
  *** high speed mode does not support CMR/NMR**
- **Wire Burnout Detection**

Ordering Information

- **ADAM-6015** 7-ch Isolated RTD Input Modbus TCP Module

Specifications

Analog Input

- **Channels** 8 (differential)
- **Input Impedance** > 10 MΩ (voltage)
  120 Ω (current)
- **Input Type** mV, V, mA
- **Input Range** ±150mV , ±500mV , ±1 V , ±5V , ±10V, 0 ~ 150mV, 0 ~ 500mV , 0 ~ 1V , 0 ~ 5V , 0 ~ 10V, 0 ~ 20mA , 4 ~ 20mA , ±20mA
- **Accuracy** ±0.1% (voltage)
  ±0.2% (current)
- **Span Drift** ±25 ppm/°C
- **Zero Drift** ±6 µV/°C
- **Resolution** 16-bit
- **Sampling Rate** 10 or 100 sample/ second (total)
  CMR @ 50/60 HZ 90dB
  NMR @ 50/60 HZ 67dB
- **Common-Mode Voltage** 350V_{DC}

Digital Output

- **Channels** 2, open collector to 30 V, 100 mA max. load
- **Power Dissipation** 300 mW for each module
- **Output Delay** On: 100µs
  Off: 150µs

Ordering Information

- **ADAM-6017** 8-ch Isolated AI with 2-ch DO Modbus TCP Module

Specifications

Analog Input

- **Channels** 8 (differential)
- **Input Type** Thermocouple
- **Thermocouple Type and Range:**

J	0 ~ 760°C	**R**	500 ~ 1,750°C
K	0 ~ 1,370°C	**S**	500 ~ 1,750°C
T	-100 ~ 400°C	**B**	500 ~ 1,800°C
E	0 ~ 1,000°C		

- **Accuracy@25°C** Type J,K,E,R,S: ±0.1% FSR Max
  Type B: ±0.15% FSR Max
  Type T: ±0.2% FSR Max
- **Span Drift** ±25 ppm/°C
- **Zero Drift** ±6 µV/°C
- **Resolution** 16-bit
- **Sampling Rate** 10 sample/ second (total)
- **Wire Burnout Detection**

Ordering Information

- **ADAM-6018+** 8-ch Isolated Thermocouple Input Module

Common Specifications

General

- **Certification** CE, FCC, UL
  *Class I, Division 2, Groups A, B, C and D Hazardous Locations for ADAM-6015 and ADAM-6017
- **LAN** 10/100Base-T(X)
- **Power Consumption** 2.5 W @ 24 V_{DC} (ADAM-6015)
  2.7 W @ 24 V_{DC} (ADAM-6017)
  1 W @ 24 V_{DC} (ADMA-6018+)
- **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**
- **Supports GCL**
- **Supports Modbus/TCP, TCP/IP, UDP, RESTful**
- **Supports MQTT (D version), SNMP (D version) Protocols (ADAM-6017 and ADAM-6018+)**

Protection

- **Isolation Protection** 2,000 V_{DC}
- **Built-in TVS/ESD Protection**
- **Power Reversal Protection**

Environment

- **Operating Temperature** -10 ~ 70°C (14 ~ 158°F)
  -40 ~ 70°C (-40~158°F)
  (D version)
- **Storage Temperature** -20 ~ 80°C (-4 ~ 176°F)
  -40 ~ 85°C (-40~185°F)
  (D version)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)

All product specifications are subject to change without notice.

Last updated: 12-Jan-2023

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ADAM-6022
ADAM-6024

Ethernet-based Dual-loop PID Controller

12-ch Isolated Universal Input/Output Modbus TCP Module



ADAM-6022

Specifications

General

- **Loop Number** 2 (3 AI, 1 AO, 1 DI, 1 DO for each control loop)

Analog Input

- **Channels** 6 (differential)
- **Input Range** ±10 V_{DC}, 0 ~ 20 mA, 4 ~ 20 mA

Analog Output

- **Channels** 2
- **Output Type** V, mA
- **Output Range** 0 ~ 10 V_{DC}, 4 ~ 20 mA, 0 ~ 20 mA

Digital Input

- **Channels** 2
- **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}

Digital Output

- **Channels** 2, open collector to 30 V, 100 mA max. load
- **Power Dissipation** 300 mW for each module

Ordering Information

- **ADAM-6022** Ethernet-based Dual-loop PID Controller



ADAM-6024

Specifications

Analog Input

- **Channels** 6 (differential)
- **Input Range** ±10 V_{DC}, 0 ~ 20 mA, 4 ~ 20 mA

Analog Output

- **Channels** 2
- **Output Type** V, mA
- **Output Range** 0 ~ 10 V_{DC}, 4 ~ 20 mA, 0 ~ 20 mA

Digital Input

- **Channels** 2
- **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}

Digital Output

- **Channels** 2, open collector to 30 V, 100 mA max. load
- **Power Dissipation** 300 mW for each module

Supports

- **Peer-to-Peer (Receiver only)**
- **GCL (Receiver only)**

Ordering Information

- **ADAM-6024** 12-ch Isolated Universal I/O Modbus TCP Module

Common Specifications

General

- **Certification** CE, FCC, UL
- **LAN** 10/100Base-T(X)
- **Power Consumption** 4 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 Modbus/TCP, TCP/IP, UDP, RESTful (D version), MQTT (D version), SNMP (D version)**

Analog Input

- **Input Impedance** 20 MΩ
- **Accuracy** ±0.1% of FSR
- **Resolution** 16-bit
- **Sampling Rate** 10 sample/second
- **CMR @ 50/60 Hz** 90 dB
- **NMR @ 50/60 Hz** 60 dB
- **Span Drift** ±25 ppm/° C
- **Zero Drift** ±6 μV/° C

Analog Output

- **Accuracy** ±0.1% of FSR
- **Resolution** 12-bit
- **Drift** ±50 ppm/° C
- **Current Load Resistor** Max. 500Ω
- **Voltage Load Resistor** Min. 1KΩ

Protection

- **Isolation Protection** 2,000 V_{DC}
- **Built-in TVS/ESD Protection**
- **DI Over Voltage Protection** 35 V_{DC}
- **Power Reversal Protection**

Environment

- **Operating Temperature** -10 ~ 50° C (14 ~ 122° F)
  D version: -40 ~ 70° C (-40~158°F)
- **Storage Temperature** -20 ~ 80° C (-4 ~ 176° F)
  D version: -40 ~ 80° C (-40~176° F)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)

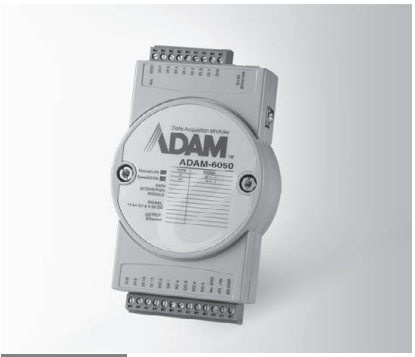
All product specifications are subject to change without notice.

Last updated: 13-Aug-2021

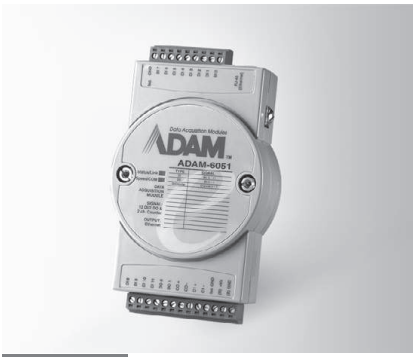
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ADAM-6050
ADAM-6051
ADAM-6052

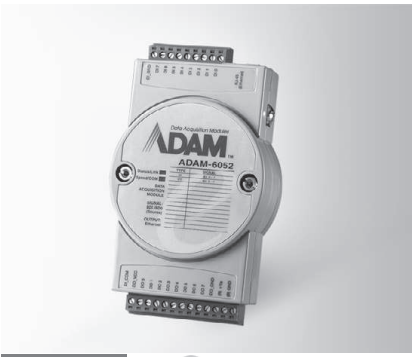
18-ch Isolated Digital I/O Modbus TCP Module
14-ch Isolated Digital I/O Modbus TCP Module with 2-ch Counter
16-ch Source-type Isolated Digital I/O Modbus TCP Module



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_{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-D1** 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-D** 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 GND
- **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-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** 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)

* For ADAM-6050 and ADAM-6052

All product specifications are subject to change without notice.

Last updated: 26-Oct-2022

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ADAM-6060
ADAM-6066

6-ch Digital Input and 6-ch Relay Modbus TCP Module

6-ch Digital Input and 6-ch Power Relay Modbus TCP Module



ADAM-6060 ADAM-6066

Specifications

General

- **LAN** 10/100Base-T(X)
- **Power Consumption** 2 W @ 24 V_{DC} (ADAM-6060)
  2.5 W @ 24 V_{DC} (ADAM-6066)
- **Connectors** 1 x RJ-45 (LAN), Plug-in screw terminal block (I/O and power)
- **Watchdog Timer** System (1.6 second) and Communication (programmable)
- **Power Input** 10 ~ 30 V_{DC}
- **Supports Peer-to-Peer**
- **Supports GCL**
- **Supports Modbus/TCP, TCP/IP, UDP, DHCP,SNMP, HTTP and MQTT Protocol**

Digital Input

- **Channels** 6
- **Dry Contact** Logic level 0: close to GND
  Logic level 1: open
- **Wet Contact** Logic level 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**

Relay Output (Form A)

- **Channels** 6
- **Contact Rating (Resistive)** ADAM-6060: 120 V_{AC} @ 0.5 A
  30 V_{DC} @ 1 A
  ADAM-6066: 250 V_{AC} @ 5 A
  30 V_{DC} @ 3 A
- **Breakdown Voltage** 500 V_{AC} (50/60 Hz)
- **Relay On Time** 7 ms
- **Relay Off Time** 3 ms
- **Total Switching Time** 10 ms
- **Insulation Resistance** 1 GΩ min. at 500 V_{DC}
- **Maximum Switching Rate (at rated load)** 20 operations/minute
- **Supports Pulse Output**

Protection

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

Environment

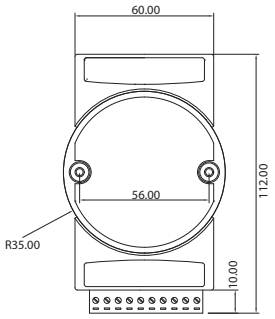
- **Operating Temperature** -10 ~ 70°C (14 ~ 158°F)
  -40 ~ 70°C (-40~158°F) for D version
- **Storage Temperature** -20 ~ 80°C (-4 ~ 176°F)
  -40 ~ 80°C (-40~176°F) for D version
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)

Ordering Information

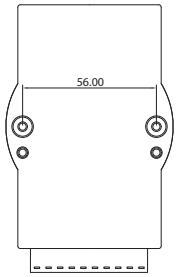
- **ADAM-6060** 6-ch DI and 6-ch Relay Modbus TCP Module
- **ADAM-6066** 6-ch DI and 6-ch Power Relay Modbus TCP Module

ADAM-6000 Series Dimensions

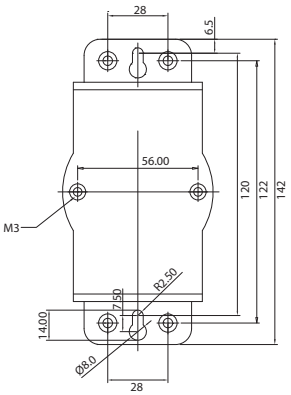
Unit: mm



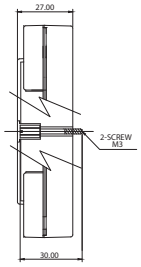
Front View



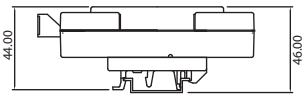
Rear View



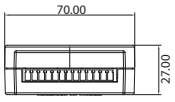
Wall Mounting View



Side View



DIN-Rail Mounting View



Top View

ADAM-6000 Series Common Specifications

General

- **Dimensions (W x H x D)** 70 x 120 x 30 mm
- **Enclosure** ABS+PC
- **Mounting** DIN 35 rail, stack, wall

All product specifications are subject to change without notice.

Last updated: 27-Jun-2018

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