

AIO-448SI

Remote I/O with 2-port ethernet switch

- 9-36VDC power input
- Firmware update over the TCP via MioControl Utility
- User-definable Modbus TCP Slave addressing
- Supports RESTful API for IIoT applications
- Supports MQTT for IIoT applications
- 2-port Ethernet switch for daisy-chain topologies
- Friendly configuration via web browser
- Latch programming for outputs 50 ms to 65535 ms.
- Operating temperature -10 to 70°C



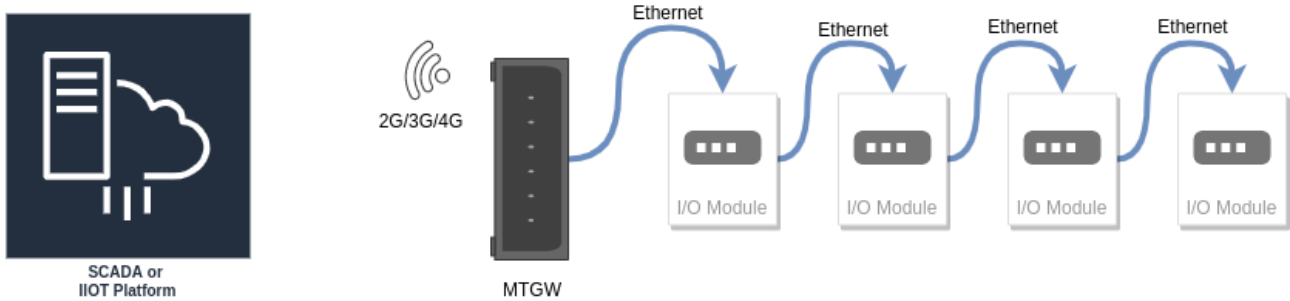
The MTIO modules support the most often-used protocols for retrieving I/O data, making it capable of handling a wide variety of applications. They can be used with Modbus TCP for OT engineering. RESTfull API and MQTT can be used for IIOT platforms.

It can be configured easily with web browser or Modbus TCP. Thanks to the redundant, the firmware can be updated safely with MIOControl Utility. You can run MIOControl Utility in MTGW, in PC with Windows OS or Linux OS.

Outputs can be programmed as latching in 50 ms to 65535 ms.

Daisy-Chained Connection

MIO modules come with two switched ethernet ports to extend local network with ethernet devices. You don't need additional ethernet interface in your field.



Specifications

Input/Output Interface

Analog Input	8
RTD	1
Digital Input Channels	4
Digital Output Channels	4
Isolation	3k VDC or 2k Vrms
Button	For reset and factory default functions

Digital Inputs

Connector	Terminal Block
Counter Frequency	250 Hz
Dry Contact	On: Short to GND Off: Open
I/O Mode	DI or Counter
Sensor Type	Dry contact Wet contact (NPN or PNP)
Wet Contact (DI to COM)	10-30 VDC (Optional 110 VDC)

Digital Outputs

Connector	Terminal Block
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Current Rating	500 mA per channel
I/O Mode	DO or latch output
I/O Type	Sink
Over-Current Protection	1.5 A per channel @ 25°C
Over-Temperature Shutdown	175°C (typical), 150°C (min.)
Over-Voltage Protection	35 VDC
Pulse Output Frequency	500 Hz (max.)

Analog Inputs

Accuracy	±0.1% FSR @ 25°C ±0.3% FSR @ -10 to 70°C
Built-in Resistor for Current Input	120 ohms
Connector	Terminal Block
I/O Mode	Voltage/Current(Software Selectable)
I/O Type	Differential
Input Impedance	10 mega-ohms (min.)
Input Range	-10 to 10 VDC 0 to 10 VDC -5 to 5 VDC 0 to 5 VDC -2.5 to 2.5 VDC 0 to 20 mA 4 to 20 mA
Resolution	16 bits

RTD Input

Accuracy	±0.1% FSR @ 25°C ±0.3% FSR @ -10 to 70°C
Connector	Terminal Block
Input Connection	2-3 or 4 Wire
Sensor Type	PT100 (-40°C to 160°C)
Resolution	0.1°C

Ethernet Interface

10/100BaseT(X) Ports	1 MAC address with 2 switched
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(RJ45 connector)	ethernet port
Magnetic Isolation Protection	1.5 kV (built-in)

LED Interface

LED Indicators	Power, Ready, Com, AIs(8), DIs(4), DOs(4)
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Power Parameters

Power Connector	Terminal Block
Input Voltage	9 to 36 VDC

Physical Characteristics

Housing	Plastic
Dimensions	35 x 102 x 117 mm
Weight	200 g
Installation	DIN-rail mounting
Wiring	I/O cable; 16 to 26 AWG Power cable; 12 to 24 AWG

Environmental Limits

Operating Temperature	-10 to 70°C
Storage Temperature	-40 to 85°C
Ambient Relative Humidity	5 to 95% (non-condensing)