Atop Technologies, Inc.

Industrial IoT Remote I/O

IO5202 Series

Hardware Installation Guide

Version 1.1
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P/N : 89900584G

☎ + 886-3-5508137
🖷 + 886-3-5508131
🌐 www.atoponline.com

Package Check List

Inside the package you will find the following items:

■ Industrial IoT remote x 1
■ 3-Pin lockable terminal block for power x 1
■ 10-Pin I/O terminal blocks x 2
■ 5-Pin lockable terminal block for serial port x 1 (-TB models only)
■ Installation guide with warranty card x 1

⚠ Never install or work on electricity or cabling during periods of lightning activity. Never connect or disconnect power when hazardous gases are present.
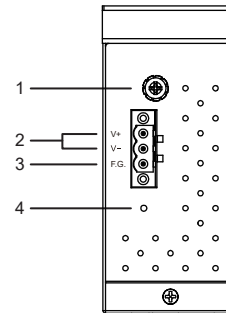
⚠ Warning: Hot surface, do not touch. RESTRICTED ACCESS AREA: The equipment should only be installed in a Restricted Access Area.

🏠 This equipment should be installed indoors and not connected directly with equipment installed outdoors.
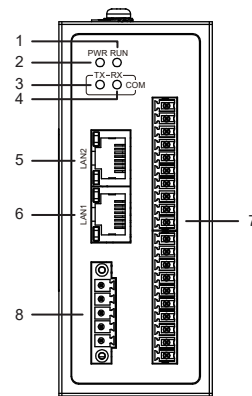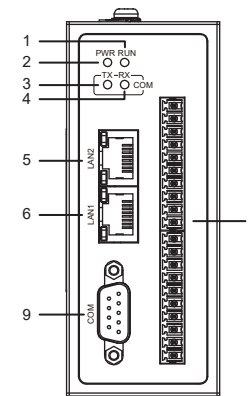
Product Layout

Top View

1. Grounding Screw
2. Terminal for Power
3. Frame Ground
4. Reset Button

IO5202-TB Series Front View
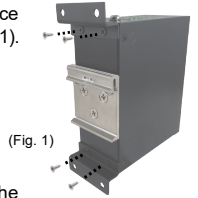

IO5202-DB Series Front View

1. System Power LED
2. System Run LED
3. COM LED-TX
4. COM LED- RX
5. 10/100 Ethernet Port 2
6. 10/100 Ethernet Port 1
7. I/O Port
8. TB-COM Port
9. DB-COM Port

Installation Overview

1. If you have purchased the wall mount kit, proceed to place the screws on the back of the device as shown in (Fig. 1).

   Wall mount screw specifications: M3 0.5p
   Screw depth: 4 mm (Max)
   Screws x 4 pcs

(Fig. 1)

2. Once the plate is firmly in place, proceed to mount the whole device as shown in (Fig.2). Refer to (Fig. 3) if you want to remove the device from the DIN-Rail.
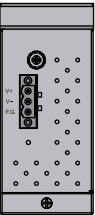

(Fig. 2)

(Fig. 3)

3. Connet the device to the LAN (switch or PC, depending on the case), taking care when using the RJ-45 connector. Afterwards, you can proceed to the device's settings.

4. Although internal grounding has been done inside, hazardous ESD can come into contact and damage your equipment. In order to ensure overall maximum performance and to protect your device, it is still strongly advised to ground the device properly.
   On the power terminal block, there is a terminal for Frame Ground. You can connect it either to grounding or to the grounding screw next to the terminal block (the one chosen should be connected at all times) (Fig. 4).

(Fig. 4)

■ The openings on the device's sides are for heat dissipation. Never obstruct, cover, or try to insert anything through them.

LED Indicators

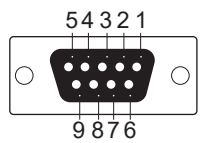| LED	Color	State	Description
PWR	Green	On	PWR is connected
		Off	PWR is disconnected
RUN	Green	On	System is booted up and running
		Off	System is still booting up or powered off
TX COM	Green	Blinking	COM 1 is transmitting
		Off	COM 1 is not transmitting
RX COM	Green	Blinking	COM 1 is receiving
		Off	COM 1 is not receiving

Power Requirements

Power input: 12 to 48 VDC; 0.8A max

Pin Assignments and Connections

10/100Base-T(X) Ethernet Pinouts

RJ-45

10/100 BASE-T(X)								
Pin	1	2	3	4	5	6	7	8
Signal	Tx+	Tx-	Rx+			Rx-		

9-Pin Male D-sub Connector for RS-232/422/485

Pin	RS-232	RS-422 and 4-wire RS-485	2-wire RS-485
1	DCD	-	-
2	RxD	TxD+	Data+
3	TxD	RxD+	-
4	DTR	-	-
5	SG	SG	SG
6	DSR	-	-
7	RTS	RxD-	-
8	CTS	TxD-	Data-
9	RI	-	-

5-Pin Terminal Block for RS-232/422/485

Pin	RS-232	RS-422 and 4-wire RS-485	2-wire RS-485
1	RxD	TxD+	Data+
2	CTS	TxD-	Data-
3	TxD	RxD+	-
4	RTS	RxD-	-
5	SG	SG	-

Jumper setting for DI/DO (8-4-0-0 model only)

Pin	2	3	4	5	6	7	8	9
Signal	DI	DI	DI	DI	DO	DO	DO	DO

⚠ To change DI/DO jumper setting, disconnect the device from power, and open the casing for modifying the jumper settings. Please refer to user manual for additional instructions.

2 x 10-Pin Terminal block for I/O

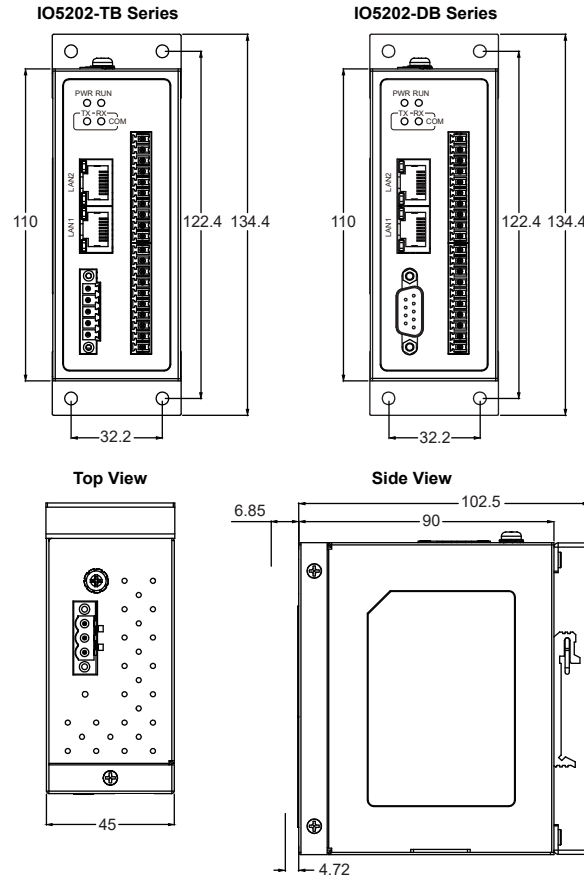| Pin	A	B	C	D	E
1	COM (DI-Wet)	AI0+	COM (DI-Wet)	AI0+	AI0+
2	DI0	AI0-	DIO0	AI0-	AI0-
3	DI1	AI1+	DIO1	AI1+	AI1+
4	DI2	AI1-	DIO2	AI1-	AI1-
5	DI3	AI2+	DIO3	AI2+	AI2+
6	DI4	AI2-	DIO4	AI2-	AI2-
7	DI5	AI3+	DIO5	AI3+	AI3+
8	DI6	AI3-	DIO6	AI3-	AI3-
9	DI7	GND	DIO7	COM (DI-Wet)	GND
10	GND	GND	GND	DI0	GND
11	GND	GND	GND	DI1	GND
12	DO0	GND	GND	DI2	GND
13	DO1	AI4+	Rly0_C	DI3	AO0+
14	DO2	AI4-	Rly0_NO	DI4	AO0-
15	DO3	AI5+	Rly1_C	DI5	AO1+
16	DO4	AI5-	Rly1_NO	GND	AO1-
17	DO5	AI6+	Rly2_C	Rly0_C	AO2+
18	DO6	AI6-	Rly2_NO	Rly0_NO	AO2-
19	DO7	AI7+	Rly3_C	Rly1_C	AO3+
20	GND	AI7-	Rly3_NO	Rly1_NO	AO3-

⚠ Before connecting the I/O terminal block, please refer to the user manual.

Field Maintenance and Service

If the device requires servicing of any kind, you may need to disconnect and remove it from its mounting. The initial installation should be done in a way that makes this as convenient as possible.

■ Voltage/Power lines should be properly insulated as well as other cables. Be careful when handing to avoid tripping.

■ Do not under any circumstances insert foreign objects of any kind into the heat dissipation holes located on the different surfaces of the device. This may not only harm the internal layout but might cause harm to you as well.

■ Do not under any circumstances open the device casing for any reason. Please contact your dealer for any repair needed or follow the instructions on your User's Manual.

Mechanical Dimensions (Unit=mm)

IO5202-TB Series

IO5202-DB Series

Top View

Side View

※ The wall mount kit illustrated in this document is for reference only and is not included in the package.

Default Setting

Username: admin
Password: default

		LAN1	LAN2
	IP address	10.0.50.100	192.168.1.1
	Subnet mask	255.255.0.0	255.255.255.0
	Default gateway	10.0.0.254	192.168.1.254

Warranty Policy

Atop Customer Services and Support

1. Please contact your local dealers or Atop Technical Support Center at the following numbers.
+ 886-3-550-8137 (Atop Taiwan)

2. Please report any problems via Atop's website or email
🌐 www.atoponline.com ✉ service@atop.com.tw