

4 Technical specifications

Project	Describe		
Attributes			
Networking Interfaces	8x 10/100/1000Base-T(X) M12(Female), 8-Pin X-Coded Connector with 2 groups of Bypass function		
Relay Ports	M12(Female), 4-Pin D-Coded, support 1 relay alarm output		
Console Ports	M12(Female), 4-Pin D-Coded, CLI command line management port		
Power Ports	M12(Male), 5-Pin A-Coded,Dual DC power inputs for power redundancy		
LED Indicators	Power, LINK, RUN, ALM, SPD, PoE		
Performance			
Switching Capacity	16 Gbps	Max. Jumbo Frame size	16KB
Forwarding Capacity	11.9 Mpps	ACL Table	1K
Forwarding Mode	Store and Forward	VLAN Quantity	4K
Packet Buffer Memory	12 Mbit	VLAN Interface	512
RAM for CPU	2 Gbit	Routing Host	512
Flash Memory	512 Mbit	Routing Entries	64
MAC Address Table	16K	Port Queues	8
Physical			
Dimensions	205 x 147 x 56 mm		
Operating Temperature	-40 to 75°C		
Storage Temperature	-40 to 85°C		
Operating Humidity	5 to 95% Noncondensing		
Power Method	44-57VDC (M12 Male, 5-Pin A-Coded)		
Power Consumption	15W (Without PoE load); 150W (Full PoE load)		
Casing	IP40 protection, metal		
Installation	Wall-mounting		
Power over Ethernet			
PoE Ports	1-8		
PoE Standard	IEEE802.3af / IEEE802.3at		
PoE Power Budget	135W		
Max. PoE Wattage per Port	30W		
PoE Voltage	52V		
PoE Pin Assignment	V- (M12 Pin1,2), V+ (M12 Pin 3,4)		

Bypass M12 Industrial PoE Switch
POE-SW608G4BP-M12

User's Manual

3 Hardware installation

This chapter provides unpacking and installation information for the Switch.

unpacking

Open the shipping carton and carefully unpack its contents. Please consult the packing list located in the User Manual to make sure all items are present and undamaged. If any item is missing or damaged, please contact the local reseller for replacement.

- Switch 1pcs
- User's manual 1pcs
- Serial Port lines 1pcs

switch installation

For safe switch installation and operation, it is recommended that you:

- Make sure that there is proper heat dissipation and adequate ventilation around the switch.
- Do not place heavy objects on the switch.

Wall-mounting

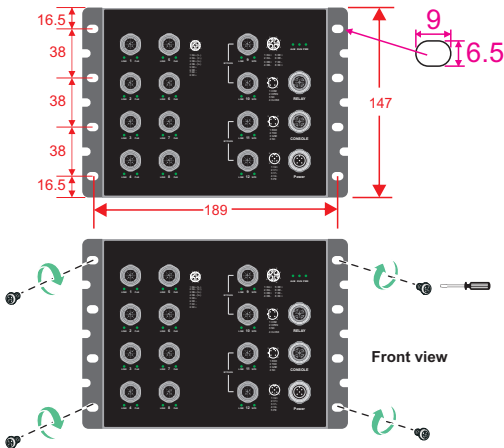
Follow the steps below to mount the switch to a wall using the screw holes.

Step 1. Prepare screws(minimum 4) for mounting the switch to a wall.

Step 2. Based on the positions of screw holes on the two side of the switch, to make screw holes on a wall accordingly.

Step 3. Insert the screws through the screw holes on the switch and screw the switch into the wall.

Step 4. To remove the switch from the wall, do the opposite from the steps above.

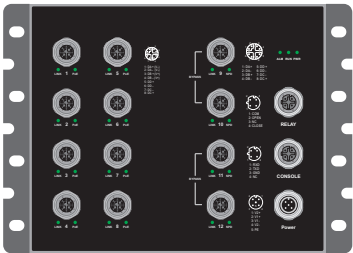


2 Product Introduction

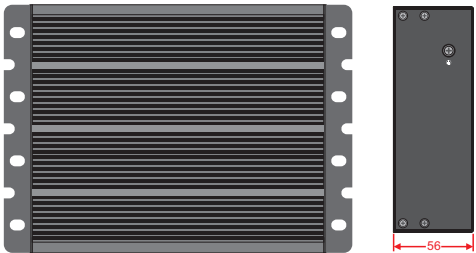
Thanks for purchasing the Industrial switch products.

This is layer L3 Industrial Ethernet switch designed for rail transit. The product conforms to the requirements of industrial standard EN50155 and EN50121. Support 8 Gigabit M12 PoE interfaces (with 2 groups of Bypass function). Ethernet interfaces use firm and reliable M12 connectors and IP40 aluminum enclosure which can adapt to usage scenario with vibration and shock. adopt wall mounting, which can meet the needs of different application sites. It is best for railway in train/track side, vehicle and mining applications. For more usage flexibilities, supports wide operating temperature from -40~75°C.

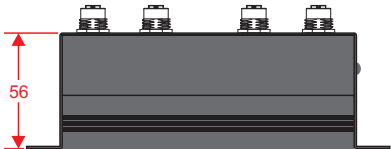
Front panel



Rear view



Side view



1 About guide

This guide provides instructions to install the Switch.



Note: The model you have purchased may appear slightly different from the illustrations shown in the document. Refer to the Product Instruction and Technical Specification sections for detailed information about your switch, its components, network connections, and technical specifications.

This guide mainly divided into 4 parts:

1. About guide: Terminology/Copyright and statement
2. Product introduction: functional overview and introduction of panel definitions
3. Hardware installation: step by step hardware installation process
4. Technical specifications

Terminology / Usage



Note: indicates important information that helps a better use of the device.



Warning: indicates potential property damage or personal injury.

Copyright and statement

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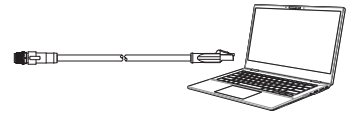
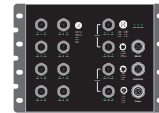
The pictures and data shown in this guide are for reference only, subject to change without notice.

Connecting to the Switch

You will need the following equipment to begin the web configuration of your device:

1. PC with a RJ-45 Ethernet connection
2. M12 Ethernet network Line

Use the M12 Ethernet Cables to any of 1-12 ports on the front panel of the switch and to the Ethernet port on the PC.



Login Web-based Management

1. To access the GUI of the switch, open a browser and type the default management address `http://192.168.0.1` in the address field of the browser, then press the Enter key.



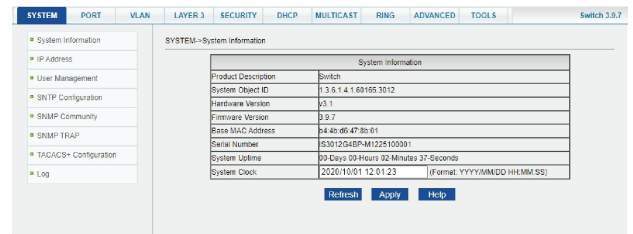
Note:

To log in to the switch, the IP address of your PC should be set in the same subnet as that of the switch. The IP address is 192.168.0.x ("x" is any number from 2 to 254), Subnet Mask is 255.255.255.0.

2. Enter admin for both the User Name and Password in the lower case letters. Then click the Login button or press the Enter key.



3. After a successful login, the main page will appear as follows, and you can click the menu on the left side to configure the corresponding functions.



LED Lamp

LED	Color	Status	Description
PWR	Green	On	The power is connected and operates properly.
		Off	The power is not connected or operates abnormally.
RUN	Green	On	The device is starting up
		Flashing	The device normal operation
LINK	Green	On	Effective port connection
		Flashing	Ongoing network activities
		Off	No effective port connection
PoE	Green	On	The current PoE output is enabled
		Flashing	Overload occurred (>30Watts) at the connected PD
		Off	The current PoE output is disabled
SPD	Green	On	Corresponding port is running on 1000M
		Off	That port is running on 10M or 100M

Gigabit Ethernet PoE Ports

- Connection format: M12(Female), 8-Pin X-Coded Connector(Auto MDI/MDIX)
- Transmission rate: 10/100/1000 Mbit/s

Illustration	Pinouts	Signal	Mark
	1	Transmit Data + (TX+)	DA+ (V-)
	2	Transmit Data (TX-)	DA- (V-)
	3	Receive Data + (RX+)	DB+ (V+)
	4	Receive Data (RX-)	DB- (V+)
	5	Bidirectional data (+)	DD+
	6	Bidirectional data (-)	DD-
	7	Bidirectional data (-)	DC-
	8	Bidirectional data (+)	DC+

RELAY Ports

Connection format: M12(Female), 4-Pin D-Coded, support 1 relay alarm output, with current load capacity of 1A@30VDC or 0.3A@125VAC

Illustration	Pinouts	Wiring Definition
	1	COM
	2	OPEN
	3	NC
	4	CLOSE

CONSOLE Ports

Connection format: M12(Female), 4-Pin D-Coded, can set some related parameters by setting the properties of the console port class.

Illustration	Pinouts	Mark	Signal
	1	RXD	Receive Data
	2	TXD	Transmit Data
	3	GND	Grounding
	4	NC	Unused

Power Ports

- Connection format: M12 5-Pin A-Coded Male Connector
- Input voltage: 44-57VDC
- Dual DC power inputs for power redundancy
- Suggest using industrial power supply
- Minimum Wire Gauge: 18AWG

Illustration	Pinouts	Function
	1	Power Input (V2+)
	2	Power Input (V1+)
	3	Power Input (V1-)
	4	Power Input (V2-)
	5	PE (ground wire)