

IS212E Series Managed Industrial Ethernet Switch Quick Installation Guide

Package Contents

When using the switch for the first time, please first check whether the packaging is intact and whether the included accessories are complete.

1. One switch
2. DIN rail mounting kit
3. Power cord (for AC-powered devices only)
4. Quick Installation Guide

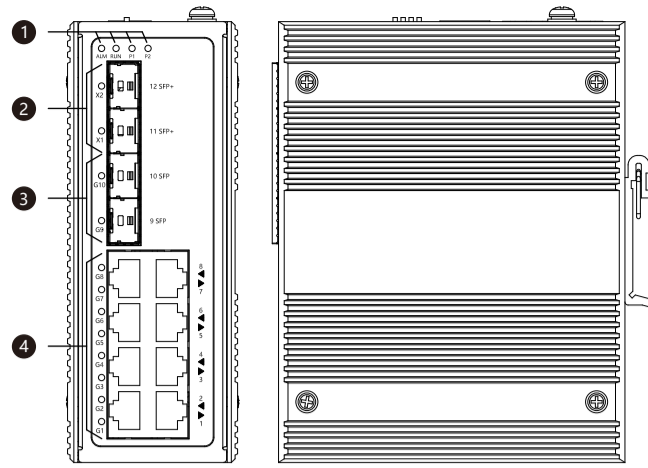
If you find that the equipment is damaged during transportation or any components are missing, please contact our company or our distributor, and we will resolve the issue properly for you as soon as possible.

Product Introduction

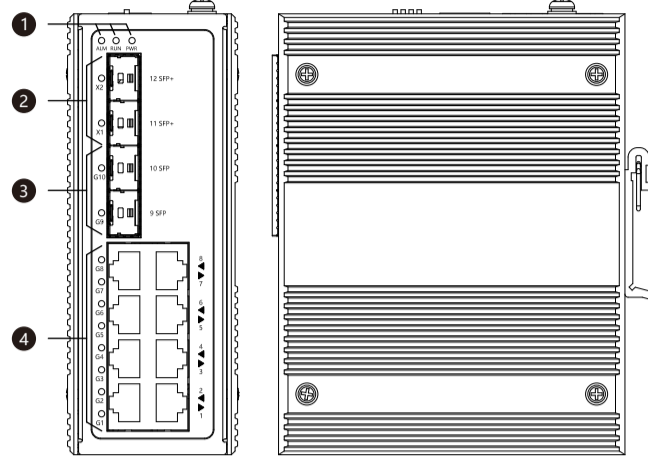
This series consists of gigabit/10-gigabit optical-electrical hybrid managed rail-mounted industrial Ethernet switches. For ease of reference, all products in this series are identified using the numbering shown on the left below in this manual. Please first confirm the product number you are using:

- Model 1. IS212E-8G2HS2XS-2P48 (8 Gigabit Ethernet ports + 2 2.5G SFP slots + 2 10G SFP+ slots, dual DC redundant power input (12~57 VDC))
- Model 2. IS212E-8G2HS2XS-1P220 (8 Gigabit Ethernet ports + 2 2.5G SFP slots + 2 10G SFP+ slots, 110/220VAC (100~240VAC) power input)

Panel Design



Model 1

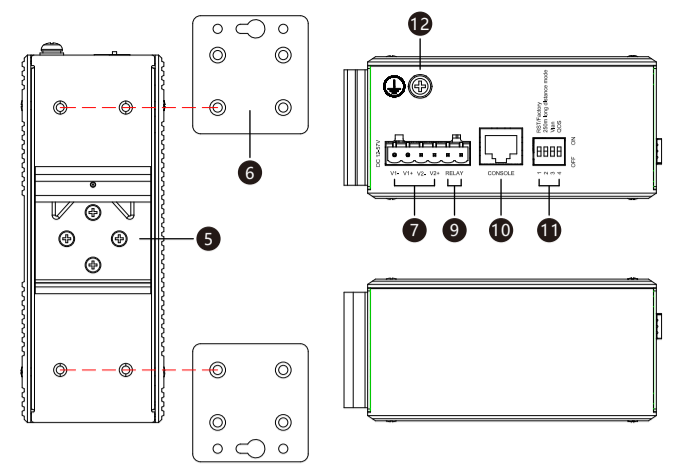


Model 2

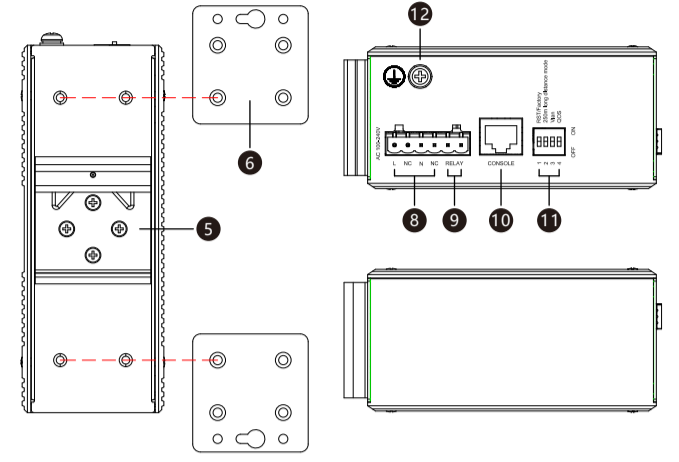
▼ Top view, bottom view and rear view

Hook the lower part of the DIN-rail mounting bracket (the side with the spring support) into the DIN rail, then snap the upper part of the bracket onto the DIN rail.

Tip:
Insert the lower part slightly, lift the device gently upward, then lock the upper part into place.



Model 1



Model 2

1. Indicator lights from left to right are:
- Device running status indicator (RUN)
- Relay alarm status indicator (ALM)
- Power input status indicator (P1/P2/PWR)
2. 10G SFP+ Slots (X1-X2) and Indicators
3. 2.5G SFP Slots (G9-G10) and Indicators
4. Gigabit Ethernet Ports (G1-G8) and Indicators
5. DIN-Rail mounting bracket
6. Wall-mounted mounting plate (optional)
7. Dual DC power input terminals (V1-, V1+, V2-, V2+)
8. Single AC power input terminals (L, N)

9. Relay alarm output terminal (RELAY)
10. CONSOLE port
11. DIP switch (1-SW-4)
12. Grounding screw (M4)

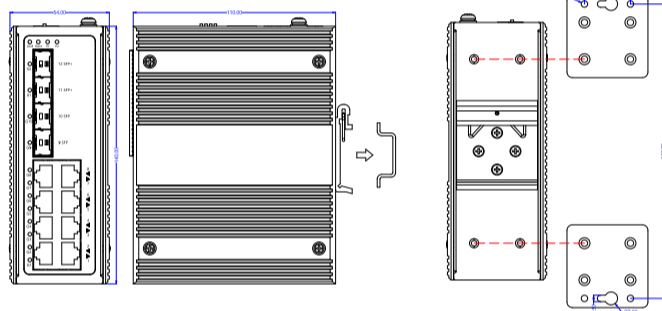
Installation Dimensions

Unit: mm



Note:

- The hanging plate on the right side of the diagram is not included as standard equipment and must be purchased separately.
- Products in this series share the same enclosure dimensions.

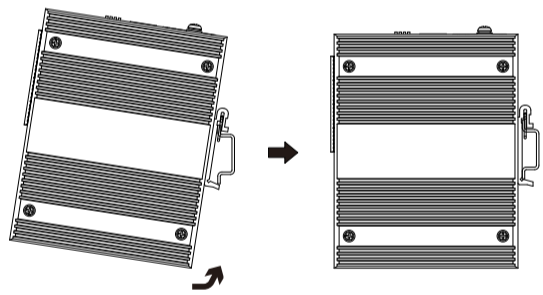


⚠ Installation Precautions:

- Do not place or install the device near water sources or damp locations. Maintain the relative humidity around the device within the range of 5% to 95% without condensation.
- Before powering on, confirm the power supply specifications supported by the device to prevent damage caused by overvoltage.
- The surface of the device becomes hot during operation. Do not touch it directly to avoid burns.

Install the DIN rail

Adopt 35mm standard DIN-rail mounting, which is very convenient for most industrial applications. The installation steps are as follows:



- Step 1 Check that the DIN-Rail mounting connector supplied with the device is securely installed.
- Step 2 Hook the lower part of the DIN-rail mounting bracket (the side with the spring support) into the DIN rail, then snap the upper part of the bracket onto the DIN rail.
Tip:
Insert the lower part slightly, lift the device gently upward, then lock the upper part into place.
- Step 3 Check and confirm that the product is securely mounted on the DIN rail. Installation is complete.

Dismantling the DIN Rail

- Step 1 Power off the device.
- Step 2 Gently lift the device upwards, first remove the upper part of the DIN rail mounting bracket from the DIN rail, then remove the lower part. Disassembly is complete.

⚠ Wiring Precautions:

- Power-on operation: First insert the power terminal of the power cord into the power port of the device, then plug in the power plug to power on the device.
- Power-off operation: Unplug the power plug first, then remove the terminal wiring part. Please pay attention to the above operation sequence.

Connect the power supply

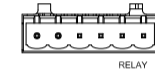
▼ Dual DC power supply

Model 1 supports a dual DC power supply scheme and is equipped with 6 input terminals with a 5.08 mm pitch. The power supply occupies the left 4 positions, providing two independent DC power supply systems, P1 and P2. The terminal definitions are: V1-, V1+, V2-, V2+. The power supply features reverse polarity protection; reverse connection will not power on the device but will not cause damage. Rated voltage: 12/24/48 VDC; operating voltage range: 12~57 VDC.

▼ Single AC Power Supply

Model 2 supports a single AC power supply scheme and is equipped with 6 input terminals with a 5.08 mm pitch. The power supply occupies the first and third positions on the left. The terminal definitions are: L, N. The power supply is non-polarity, and the device can still operate normally even with reverse connection. Rated voltage: 110/220 VAC; Operating voltage range: 100~240 VAC.

Connect the relay



This device supports 1-channel relay alarm output. It is equipped with a 6-position input terminal block with a 5.08 mm pitch. The relay occupies the right 2 positions. The relay can output DC power alarms or network abnormality alarms, and can be connected to external alarm lamps, buzzers, or other switching value acquisition devices to promptly alert operators when an alarm occurs. The default status of the relay is shown in the figure below.

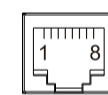
Set the DIP switch



Equipped with a 4-position DIP switch for function configuration, where "ON" indicates the enable active state. A power cycle is required after changing the DIP switch status. The definitions of the DIP switch are as follows:

DIP switch setting	Definition	Operation
1	Restart / Restore Factory Settings	Toggle to ON and hold for more than 1 second → Device reboot Toggle to ON and hold for more than 10 seconds → Restore factory settings and auto reboot
2	250m Long-Distance Mode	When switched to ON, the Ethernet port will automatically switch to 10M speed with 250-meter transmission
3	One-Click VLAN Isolation	When switched to ON, the downlink ports are isolated from each other
4	One-Click QoS Enable	When switched to ON, the switch automatically performs hierarchical classification

Connect the Console port



Equipped with one program debugging port based on RS232 serial port, which can be connected to a PC for CLI command management of the device. The interface adopts an RJ45 connector, and the RJ45 pin definition is as follows:

Pin Number	2	3	5
Pin Definition	TXD	RXD	GND

Check the LED indicators

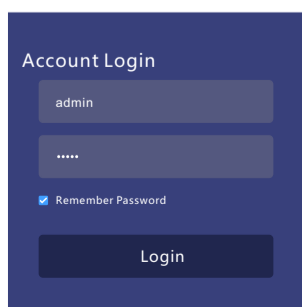
LED indicators are provided to monitor the operating status of the device, greatly simplifying troubleshooting. The detailed status of each indicator is shown in the table below:

LED	Indicator	Status Description
P1/P2/PWR	Solid on	Power connected and operating normally
	Off	Power not connected or operating abnormally
ALM	Solid on	Power and Port Link Alarm
	Off	No power or port link alarms
RUN	Solid on	Device is powering up or abnormal
	Off	Device is not powered on or abnormal
	Blinking	Blinks once per second, indicating the device is operating normally.
Link/Act (1-10, X1-X2)	Solid on	A valid network connection has been established on the Ethernet port
	Blinking	The Ethernet port is in network active status
	Off	No valid network connection has been established on the Ethernet port

Log in to the WEB interface

Supports WEB management and configuration. A computer can access the device through an Ethernet interface. The steps to log in to the device configuration interface using an Internet Explorer browser are as follows.

- Step 1 Configure the IP addresses of the computer and the device so that they are on the same network segment, and ensure mutual network accessibility between the computer and the device.
- Step 2 Enter the device's IP address in the address bar of the computer browser.
http://192.168.100.1
- Step 3 Enter the device's username and password in the login window, as shown in the figure below.



- Step 4 Click the "OK" button to log in to the WEB interface of the device.

Description:

- The default IP address of the device is "192.168.100.1".
- The default username and password of the device are both "admin".
- If the username or password is lost, the device can be restored to factory settings via the DIP switch or management software. After restoring factory settings, all modified configurations on the device will be cleared. Please back up the configuration file in advance.

Specifications

Panel	
10G SFP+ Slot	1G/2.5G/10G Base-X adaptive or forced mode, SFP+ slot
2.5G SFP Slot	1G/2.5G Base-X adaptive or forced mode, SFP slot
Gigabit electrical port	10/100/1000Base-T(X), RJ45, automatic rate control, full/half duplex mode, MDI/MDI-X auto-detection
Console port	CLI command management port (RS-232), RJ45
Alarm Port	6-pin terminal block with 5.08 mm pitch, the relay occupies the right 2 positions. Supports 1-channel relay alarm output, with a current load capacity of 1A @ 24VDC or 0.5A @ 120VAC.
Indicator	Power indicator, Run indicator, Port indicator, Alarm indicator
Switching Attributes	
Backplane Bandwidth	33Gbps
Buffer Size	4Mbit
MAC Address Table	16K
Panel	
DC Power Supply	12/24/48VDC (12~57VDC), dual redundant power input, with built-in overcurrent protection.
AC Power Supply	110/220VAC/DC (100~240VAC) power input, with built-in overcurrent protection.
Access Terminal	6-pin terminal block with 5.08 mm pitch, the power supply occupies the left 4 positions.

Power Consumption	
Model 1	No load at normal temperature -25°C: 5.68W@48VDC
	Full load at normal temperature -25°C: 12.86W@48VDC
	No load at high temperature -75°C: 7.66W@48VDC
	Full load at high temperature -75°C: 15.00W@48VDC
Model 2	No load at normal temperature -25°C: 6.40W@220VAC
	Full load at normal temperature -25°C: 13.80W@220VAC
	No load at high temperature -75°C: 7.70W@220VAC
	Full load at high temperature -75°C: 15.30W @ 220VAC
Operating Environment	
Operating Temperature	-40~75°C
Storage Temperature	-40~85°C
Operating Humidity	5% ~ 95% (non-condensing)
IP Rating	Ip40 (Metal Enclosure)

Warranty Terms

This product is covered by a 5-year free warranty starting from the manufacturing date. During the warranty period, if the product malfunctions under normal usage conditions and the failure is not caused by human factors, our company provides free repair or replacement.



The following situations are not covered by the warranty:

- Damage caused by improper installation, use or maintenance in violation of the instructions
- Damage caused by environmental factors such as lightning strike, surge, strong electromagnetic interference, water ingress, excessive dust, etc
- Unauthorized disassembly, modification or repair
- Damage caused by force majeure (fire, earthquake, flood, etc.)



Disposal and Recycling
This product is electrical and electronic equipment. Do not dispose of it as unsorted municipal waste. Please recycle it in accordance with local environmental laws and regulations to minimize its impact on the environment.