

User Guide


8-Port*2.5G(PoE)+1*10G SFP+ PoE Switch

This document applies to the 8-Port*2.5G(PoE)+1*10G SFP+ Unmanaged PoE Switch. The 8-Port*2.5G(PoE)+1*10G SFP+ is used as an example in the product figure unless otherwise specified.

Packing List

When using the Switch for the first time, carefully open the packing box. The packing box should contain the following items:

- Switch *1
- User Manual *1
- Power Cord *1
- Accessories(Rack Mount Kit *2, Feet *4, Screw *8)

 **Note:** Precision devices are built in the device, please handle them carefully to avoid violent vibration, which may affect the performance of the device. If you find that the equipment is damaged or any parts are lost in the process of transportation, please inform us, we will give you a proper solution as soon as possible.

Chapter 1 Product Introduction

1.1 Product Overview

8-Port*2.5G(PoE)+1*10G SFP+ Switch is our self-developed Unmanaged PoE Switch product, which provides 8*100/1000/2500Mbps adaptive RJ45 ports and 1*10Gbps SFP+ fiber module expansion slot. Each RJ45 port supports MDI/MDIX auto-flip and wire-speed forwarding function. The ports 1 to 8 have PoE power supply function and support IEEE802.3af/at standard, which can be used as Power over Ethernet device and can automatically detect and identify the powered devices that meet the standard and supply power to them through the network cable. Adopting store-and-forward technology, combined with dynamic memory allocation to ensure effective bandwidth allocation to each port, easy to manage, powerful and flexible enough for users to deploy wireless access points or IP-based network surveillance cameras, ideal for WIFI coverage, Internet cafes, server rooms, etc.

Chapter 2 Product Appearance Description

2.1 Front Panel

The front panel consists of 8*100/1000/2500Mbps adaptive RJ45 ports and 1*10Gbps SFP+ slots and related indicators, as shown in the following figure:

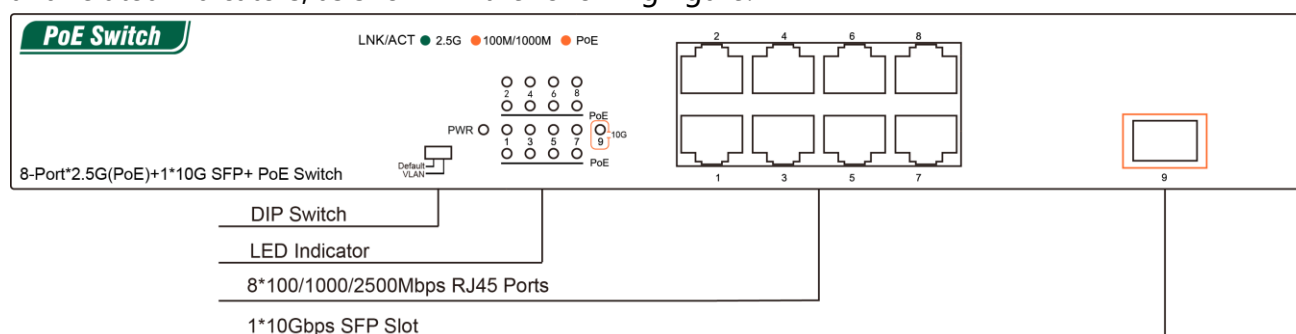


Figure 2-1 Switch front panel diagram

Ports description:

➤ 100/1000/2500Mbps RJ45 Ports

Support 100Mbps, 1000Mbps and 2500Mbps rate adaptive function, support Auto-MDI/MDIX function. Among them, ports 1-8 support PoE power supply, in line with IEEE802.3af/at standard, with a maximum output of 30W per port. Each port has a corresponding indicator, i.e. 1-8 port indicator shown on the panel above.

➤ 10Gbps SFP+ Slot

10G SFP+ 10GbE optical module is required, supporting SR/LR/LRM/ER/ZR and other models, corresponding to 9-port indicator.

➤ DIP Switch

Default: Factory default mode, normal communication between ports 1~9;

VLAN: In isolated mode, ports 1~8 of the switch are isolated from each other. Port 1~8 can only communicate with port 9 to secure the network. In this mode, please connect port 9 to the central switching device.

Note: After the Settings are changed, the PoE Switch does not need to be manually restarted for the Settings to take effect (online).

2.2 LED Indicator

The LED indicators of the Switch are shown in the following table. Users can monitor the work and running status of the Switch conveniently and quickly through the following indicators:

LED	Color	Function
PWR	Green	Off: No Power supply. Light: Indicates the Switch has power.
1-8 Port (LNK/ACT)	Green	Off: No Power supply. Light: Connected 2.5Gbps network devices. Blink: Data being transferred.
	Orange	Off: No Power supply. Light: Connected 1000Mbps network devices. Blink: Data being transferred.
9 Port (LNK/ACT)	Green	Off: No 10Gbps network devices connected. Light: Connected 10Gbps network devices. Blink: Data being transferred.
	Orange	Light: Connected 1000Mbps network devices. Blink: Data being transferred.
PoE	Orange	Off: Port is not powering the peer device. Light: There are powered equipment connected to it and normal power supply. Blinking: Abnormal power supply from the port to the counterpart device.

2.3 Rear panel

The rear panel of a Switch shows the AC power port. The power input ranges from 100 - 240V AC at 50/60 Hz.

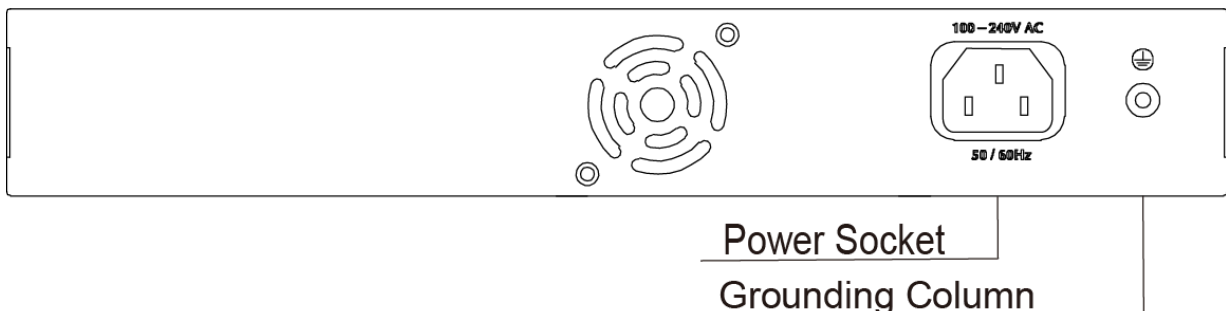


Figure 2-2 Diagram of the rear panel of the switch

AC Power Port

AC power outlet, the negative plug of the power cord to this interface, the positive plug to the AC power.

Grounding Column


Located on the right side of the power connector, please use a wire to ground to prevent lightning strikes.

⚠️ Precautions: The product has provision for a permanently connected protective grounding conductor, this conductor need to install to building earth by a skilled person.

Chapter 3 Installation Guide

This chapter helps users correctly install and safely use Switches.

3.1 Installation Precautions

 **Precautions:** To avoid equipment damage and personal injury, observe the following precautions:

- The Switch room should be dry and ventilated, free from corrosive gases and strong electromagnetic interference.
- The humidity of the Switch equipment room should be lower than 90%. Install proper devices when possible.
- The grounding of the Switch shall comply with the grounding requirements described in this manual, and shall be separately and well grounded.
- The Switch voltage should be stable to prevent abnormal operation of the Switch caused by power supply voltage mutation, fluctuation and other phenomena;
- Keep a proper distance between the Switch and other devices. Do not stack other devices with the Switch.
- The connection cable between the Switch and the distribution frame should be standardized and reasonable, and the distribution frame (box) jumper wire should be concise and clear to prevent the phenomenon of parallel lines and wires;
- To avoid the danger of electric shock, do not open the chassis without authorization; If any fault occurs, contact professional maintenance personnel.

 **Safety Tips:**

- Use a three-hole socket with safe grounding, and ensure that the PGND cable of the power socket is properly grounded.
- Ensure sufficient space for heat dissipation and ventilation of the Switch. Do not place heavy objects on the Switch.

3.2 Installation Environment

Before installation, make sure that the proper working environment is available, including power requirements, adequate space, proximity to other equipment to be connected, and other equipment in place. Please confirm the following installation requirements:

- Ensure the stability of the workbench and good grounding;
- Check whether cables and connectors required for installation are in place (less than 100m).
- Environment requirements: The operating temperature ranges from 0°C to 40°C and the relative humidity ranges from 5% to 90%.

3.3 Installation

Desktop installation

- Place the bottom of the Switch face up on a large enough stable desktop;
- Tear off the attached sticky paper on the surface of the footpad and paste the footpad into the groove at the bottom of the chassis of the Switch to prevent external vibration;
- Carefully position the Switch upright on the workbench;

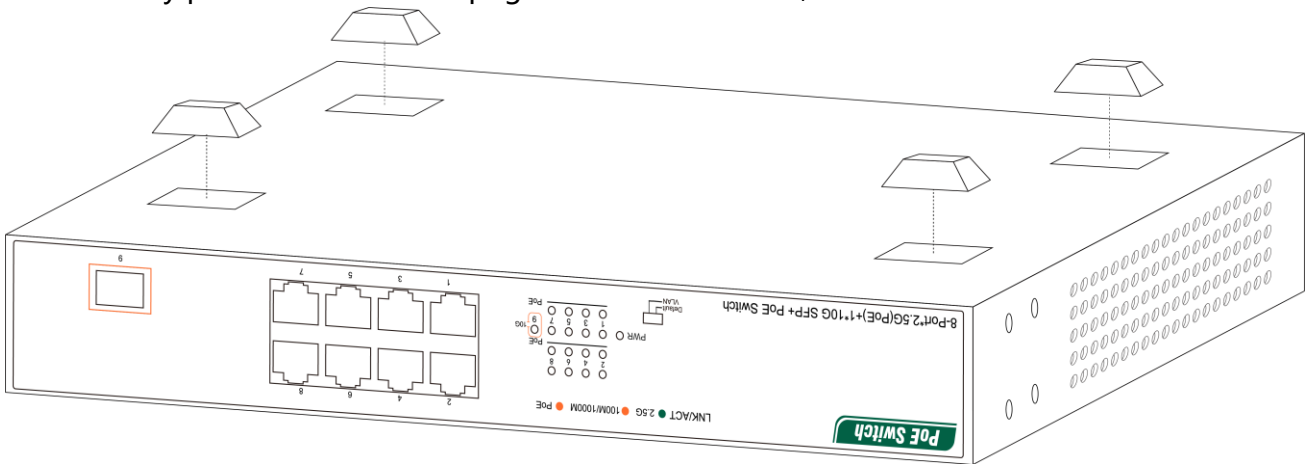


Figure 3 - 1 Desktop Installation Diagram

Rack mounted

- Check the grounding and stability of the EIA-19inch cabinet;
- Fix mounting ears to both sides of the front panel of the Switch using screws. Place the Switch on a bracket of the cabinet and move the Switch along the guide rails of the cabinet to a proper position;
- Use screws to fix mounting ears to the guide rails at both ends of the cabinet to ensure that the Switch is securely installed on the brackets in the cabinet slots. The mounting ear of the device is not used for weight bearing, it is only used for fixation;
- When installing devices in a cabinet, brackets (fixed on the cabinet) are provided below the device chassis to support devices.

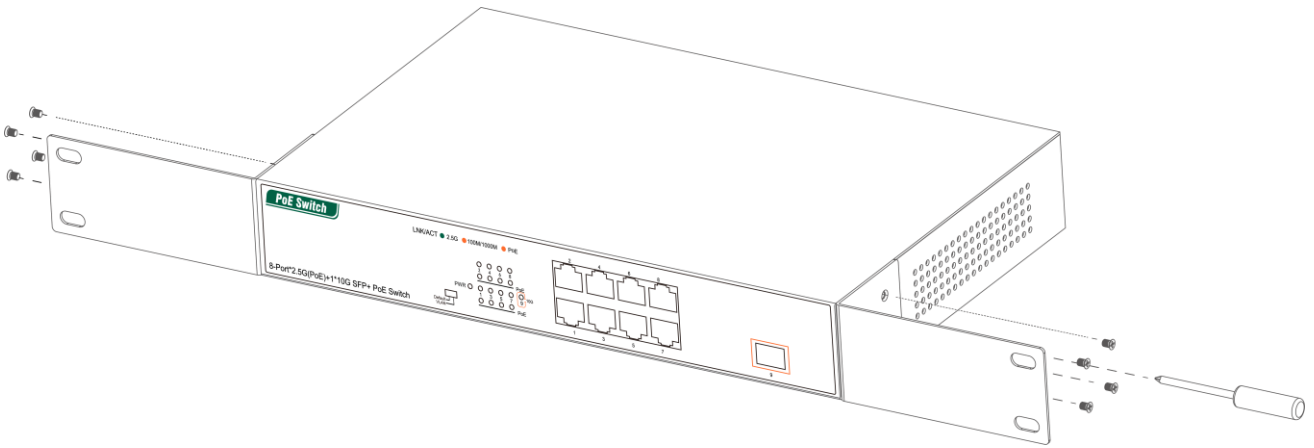


Figure 3-2 Diagram 1 of rack installation

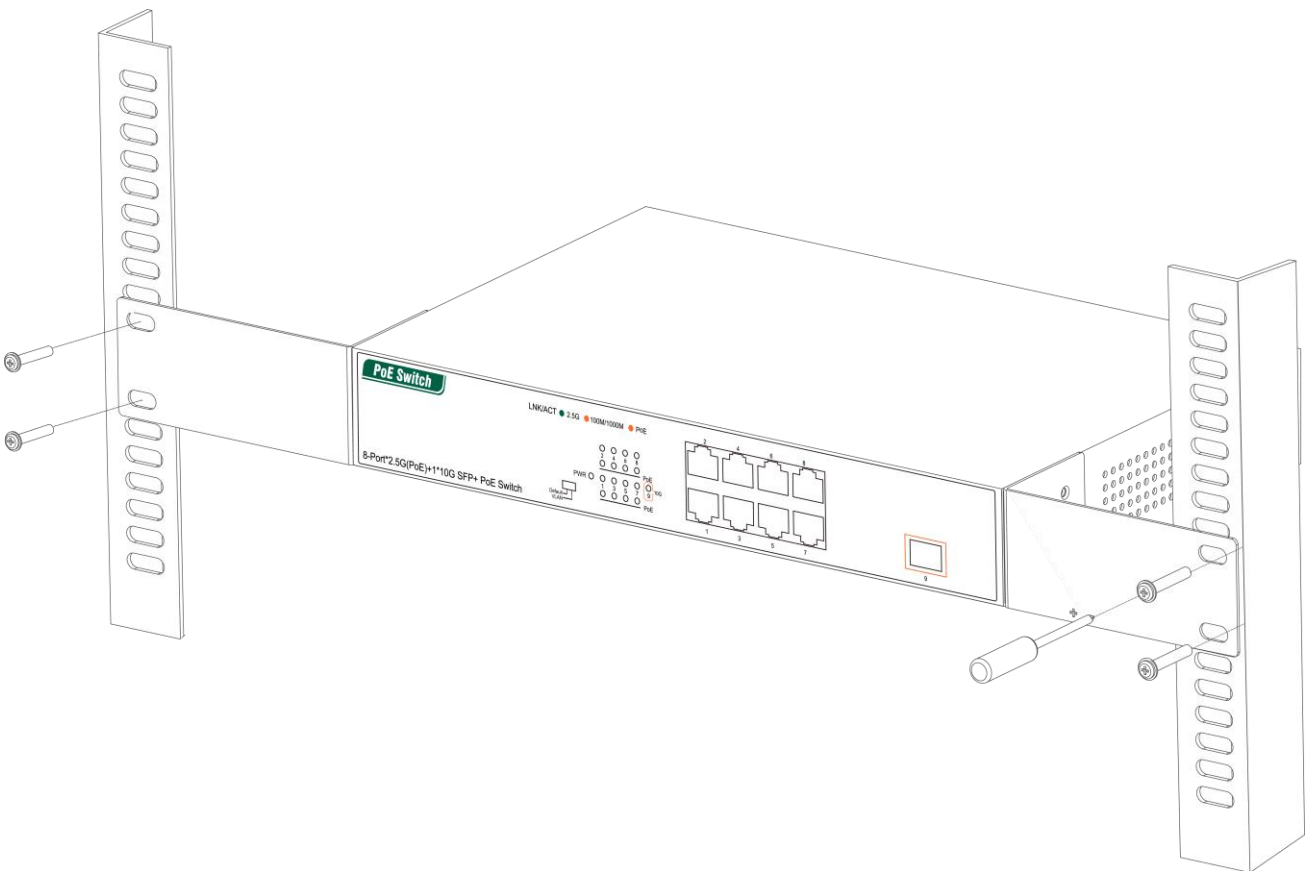


Figure 3-3 Diagram 2 of rack installation

3.4 Enabling the Switch

Connect the power cord, plug in, and turn on the power. After the Switch is started, the Switch automatically initializes. If all port indicators are on and off, the system is successfully reset. The power LED indicator is steady on.

Note: Before powering on the device, ensure that the voltage is correct; otherwise, the device may be damaged. (Power input range: 100-240V AC 50/60Hz).

Appendix: Technical Specifications

Model	8-Port*2.5G(PoE)+1*10G SFP+ PoE Switch
Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.3bz, IEEE 802.3ae, IEEE802.3af, IEEE802.3at
Network Media(Cable)	100BASE-TX: UTP category 5, 5e cable (≤100m) 1000BASE-TX UTP category 5e, 5 cable (≤100m) 2.5GBASE-TX UTP category 5e, 5 cable (≤100m) 1000BASE-X: MMF, SMF 10GBASE-X: MMF, SMF 10GBASE-SR: OM1/OM2/OM3 or above MMF (2m ~ 300m) 10GBASE-LR: IEC's B1.1 and B1.3 SMF (2m ~ 10000m)
MAC Address Table	4K, Auto-learning, Auto-updating
Packet Buffer	8.1Mbit
Transfer Mode	Store-and-Forward
Jumbo Frames	12K Byte
Switching Capacity	60Gbps
Packet Forward Speed	44.64Mpps
Dimensions (L*W*H)	280*180*44mm
PoE Port	Port1~8
PoE Power On RJ45	1/2 (+) 3/6 (-)
PoE Power Output	30W (MAX)
PoE Power Budget	130W
Power Supply	150W
Input Voltage	AC 100-240V 50/60Hz
Temperature	Operating Temperature: 0°C ~ 40 °C Storage Temperature: -40 °C ~70°C
Humidity	Operating Humidity: 10% ~ 90% non-condensing Storage Humidity: 5% ~ 90% non-condensing