

User Guide

48GE+4G SFP Managed Switch

This document applies to 48GE+4G SFP Managed Switch. Unless otherwise specified, 48GE+4G SFP is used as an example in the product figure.

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
- Console Cable*1
- Rack Mount Kit *2
- Screw *8
- Feet *4

 **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

The 48GE+4G SFP Switch is a Managed Switch product independently developed by our company. It provides 48*10/100/1000Mbps adaptive RJ45 ports, each supporting MDI/MDIX automatic flip and wire-speed forwarding functions, and 4*1000Mbps SFP optical module slots, and 1 Console port. Supports static routing, provides complete security policies, QoS policies, and diversified VLAN functions, and is easy to manage and maintain, meeting the networking and access requirements of enterprises, communities, hotels, office networks, and campus networks.

Chapter 2 Product Appearance Description

2.1 Front panel

The front panel consists of 48*10/100/1000Mbps adaptive RJ45 ports, 4*1000Mbps SFP slots, 1 Console port and associated indicators, as shown below:

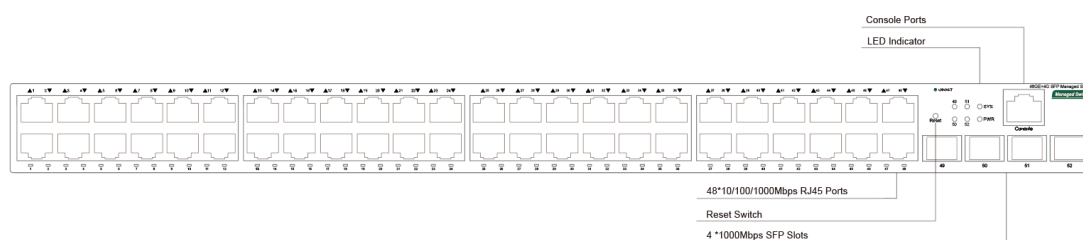


Figure 2-1 Front panel of the 48GE+4G SFP Switch

48GE+4G SFP Port description:

➤ 10/100/1000Mbps RJ45 Ports

Supports 10Mbps, 100Mbps, or 1000Mbps rate adaptation, auto-MDI /MDIX, and each port has a corresponding indicator, that is, port indicators 1-48 as shown on the panel in the figure above.

➤ 1000Mbps SFP Slots

SFP slots are independent SFP slots located on the right and upper part of the panel. Each port has a corresponding indicator, that is, the indicator 49-52 on the panel in the preceding figure.

➤ Console port

The Console port is used to connect to the serial port of a computer or other terminal device and manage or configure Switches.

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.
LNK/ACT	Green	Off: No network device is connected Steady on: A network device is connected Blinking: Data is being transferred

2.3 Rear panel

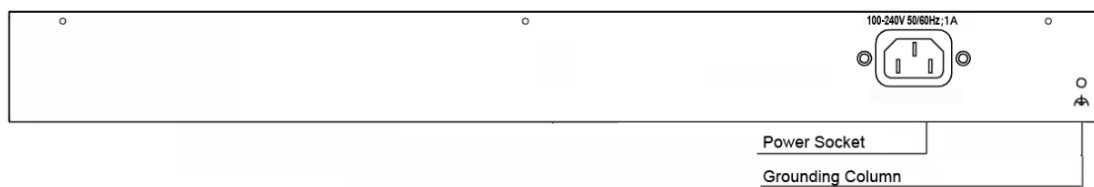


Figure 2-2 Rear panel of 48GE+4G SFP Switch

AC power port

This is an AC power socket, connect the negative plug of the power cord to this interface, and connect the positive plug to the AC power supply.

Lightning protection grounding pole

It is located to the left of the power interface. Please use wire grounding to prevent lightning strike.

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 80% and around 25 degrees Celsius. If possible, install corresponding facilities.
- 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;
- Distribution frame inside and outside the lead line to install security lightning protection device;
- 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 reliably 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).
- Power supply: Environment: operating temperature: 0°C to 40 °C relative humidity: 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.

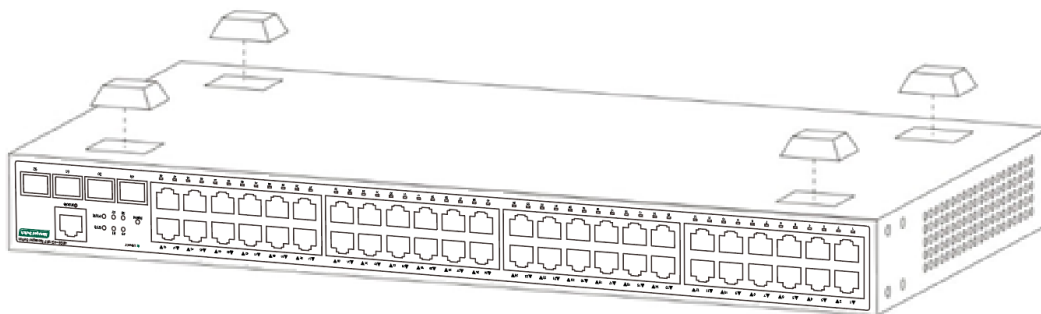


Figure 3-1 Desktop Installation Diagram

Rack mounting

- 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.

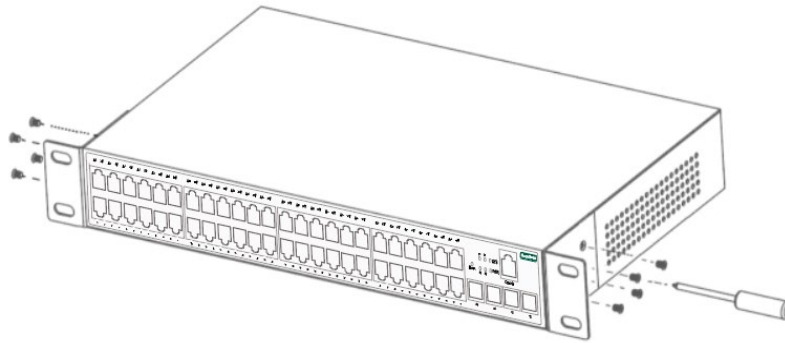


Figure 3-2 Diagram 1 of rack installation

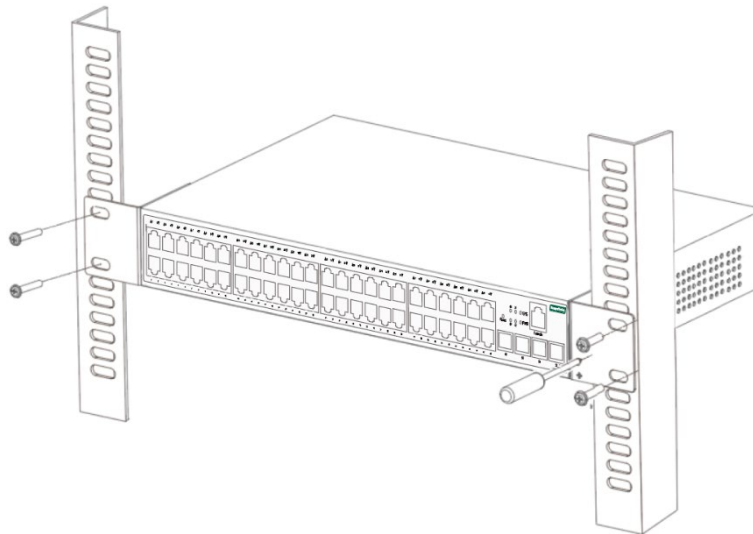


Figure 3-3 Diagram 2 of rack installation

3.4 Enabling the Switch

Plug it in first, then connect the power cord 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	48GE+4G SFP Managed Switch
Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1X, IEEE 802.1q, IEEE 802.1p, IEEE 802.1d, IEEE 802.1w, IEEE 802.3ad
Network Media(Cable)	10BASE-T: UTP category 3,4,5 cable (≤100m) 100BASE-TX: UTP category 5, 5e cable (≤100m) 1000BASE-T: UTP category 5e, 5 cable (≤100m) 100BASE-FX:MMF,SMF 1000BASE-X: MMF, SMF
MAC Address Table	16K, Auto-learning, Auto-aging
Jumbo Frame	9216Bytes
Transfer Mode	Store-and-Forward
Switching Capacity	104Gbps
Packet Forward Speed	77.38Mpps
Dimensions (L*W*H)	440*260*44mm
Input Power Supply	100~240V AC, 50/60Hz
Power Supply	60W
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