

# 10 Gigabit Layer 3 Managed PoE Switch



24G PoE+4\*10G SFP/48G PoE+4\*10G SFP



### **Product Introduction**

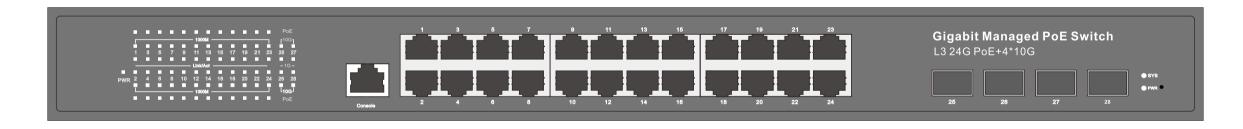
The 10 Gigabit three-layer managed PoE switch is independently developed and designed for the needs of building a high-performance 10 Gigabit network. It provides a comprehensive security protection system, perfect QoS strategy and rich VLAN functions. It has simple management and maintenance. It can be applied to the core layer of small and medium-sized enterprises, communities and schools.

#### **Characteristic**

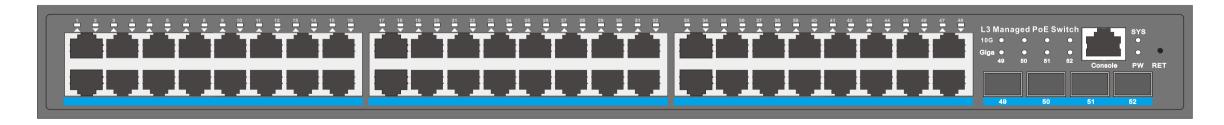
- ◆ Add a variety of IPv6 Based Applications to easily adapt to modern and complex network management applications.
- ◆ Support IEEE 802.1Q VLAN, and users can divide VLANs flexibly according to their needs.
- ◆ Support voice VLAN, configure QoS parameters for voice data stream, improve transmission priority of voice data stream and ensure call quality.
- ◆ Support QoS, support three priority modes based on port, 802.1p and DSCP, and optimize bandwidth configuration.
- ◆ Support ACL, filter data packets by configuring matching rules, processing operations and time permissions, and provide flexible security access control policies.
- ◆ Support IGMP V1 / V2 / V3 multicast protocol and IGMP snooping to meet the requirements of multi terminal HD video monitoring and video conference access.
- ◆ Support multicast VLAN and multicast filtering, efficiently transmit data, save network bandwidth and reduce network load.
- ◆ Support port monitoring, copy a data packet of the monitored port to the monitoring port to realize network monitoring.
- ◆ Support equipment management and maintenance through web interface.
- ◆ Support port aggregation, effectively increase link bandwidth, realize link backup and improve link reliability.
- ◆ Support static routing.

#### **Schematic Diagram Of Front panel**

1、24 10/100/1000Base-TX PoE+4 10000M SFP optical ports rack type



2、48 10/100/1000Base-TX PoE+4 10000M SFP optical ports rack type



**RET**: network establishment port

PWR indicator: on indicates that the switch is connected to the power supply

SYS indicator: CPU status indicator. It flashes once per second after initialization.

Giga indicator: when on, it indicates that the transmission rate of the corresponding port is 1000M

1G indicator: when on, it indicates that the transmission rate of the corresponding port is 1000M

10G indication: high indicates that the transmission rate of the corresponding port is 10000M



## **Schematic Diagram Of Rear Panel**

1、24G PoE+4\*10G SFP rack mounted rear panel



2、48G PoE+4\*10G SFP rack mounted rear panel



**Single phase three wire socket:** Connect the power supply of the switch, insert the attached power cord into this port, and the supported input voltage is 100-240Vac, 50 / 60Hz

Grounding: Special grounding wire shall be used for connection

#### **Product Installation**

#### **Matters Needing Attention**

To avoid equipment damage and personal injury caused by improper use, please follow the following precautions:

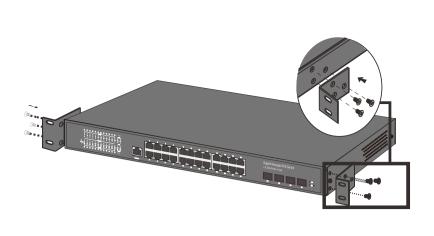
- During installation, keep the power off, wear anti-static wrist, and ensure that the anti-static wrist is in good contact with the skin to avoid potential damagehidden danger;
- The switch can work normally only under the correct power supply. Please confirm that the power supply voltage is consistent with the voltage marked by the switch;
- Before the switch is powered on, please make sure that the power circuit will not be overloaded, so as not to affect the normal operation of the switch or even cause unnecessary damage;
- In order to avoid the risk of electric shock, do not open the shell when the switch is working, and do not open it by yourself even when it is not charged;
- Before cleaning the switch, pull out the power plug of the switch. Do not wipe it with wet fabric or clean it with liquid;
- The equipment installed in the rack is generally from bottom to top to avoid overload installation;
- Avoid placing other heavy objects on the surface of the switch to avoid accidents;

#### **Install Switch**

#### **Mounting To Rack**

- 1. Check the grounding and stability of the frame
- 2.Install the two L-shaped brackets in the accessories on both sides of the switch panel and fix them with the screws provided in the accessories, as shown in Figure 3.1.1
- 3. Place the switch in the appropriate position in the rack and supported by the bracket.
- 4.Fix the type bracket on the guide groove fixed at both ends of the rack with screws to ensure that the switch is stably and horizontally installed on the rack, as shown in Figure 3.1.2





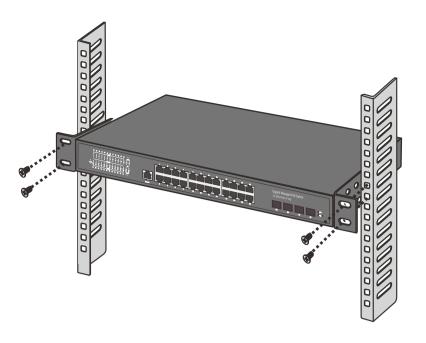


Figure 3.1.1 installation diagram of switch

Figure 3.1.2 installation diagram of switch

## **Install To Desktop**

When there is no 19 inch standard cabinet, the switch is usually placed on a clean desktop. The operation is relatively simple. Please follow the following instructions:

- 1. Confirm that the platform is large, stable and firm enough to bear the weight of switches and accessories;
- 2. Place the bottom of the switch upward on the platform;
- 3. Remove the rubber protective paper of the four foot pads one by one and stick them in the circular grooves at the four corners of the bottom of the casing;
- 4. Turn the switch over and place it on the desktop smoothly.

## **Product Connection**

1. The connection process between the switch and the opposite Ethernet port is as follows:

Connect one end of the network cable to the switch and the other end to the opposite equipment, as shown in Figure 3.2.1

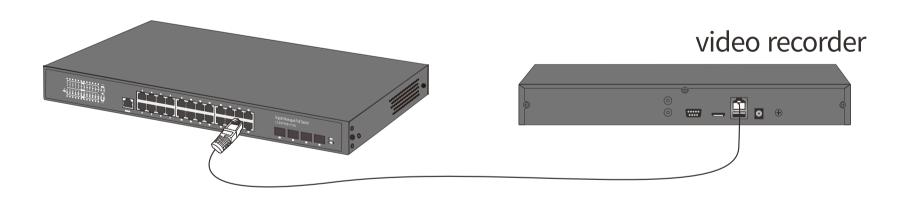


Figure 3.2.1 RJ45 port connection diagram

2. The process of installing the optical fiber module in the switch is as follows:

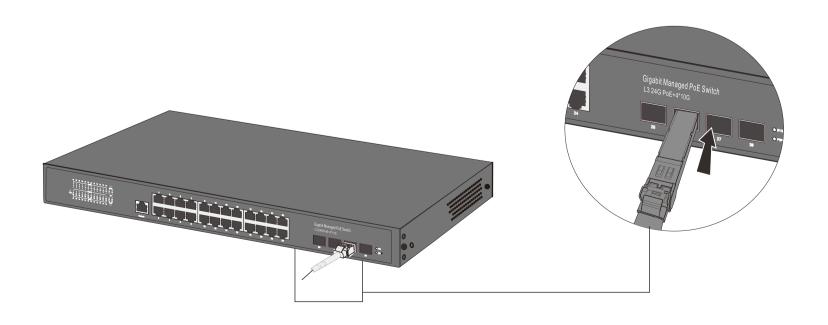


Figure 3.2.2 SFP port connection diagram



Note: in order to avoid equipment damage or personal injury caused by improper operation, please pay attention to the following matters

- Excessive bending of optical fiber is not allowed, and its radius of curvature shall not be less than 10cm;
- Ensure the cleanliness of the end face of the optical fiber;
- Please do not look directly at the optical fiber connector with your eyes, otherwise you may cause injury to your eyes.

Note: it is recommended to adopt the international standard connection method of straight line-568b for network cable connection, as shown in Figure 3.2.3.

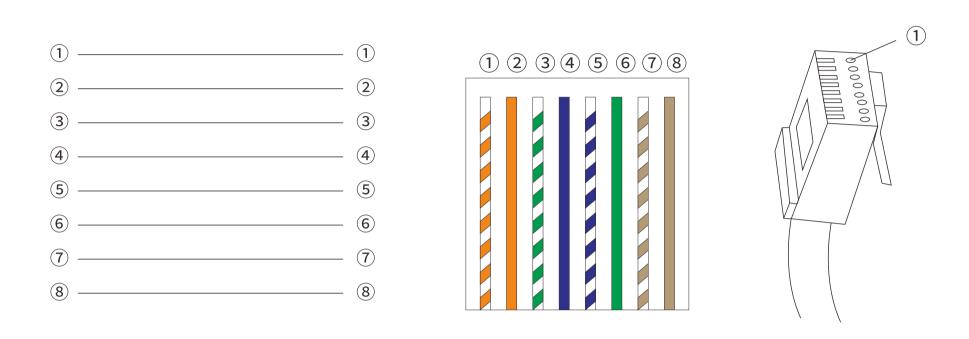


Figure 3.2.3 schematic diagram of network cable practice

#### **Connect The Power Supply And Grounding Wire**

#### **Power Socket Specification**

The switch power line adopts single-phase three wire power socket, the middle pin is grounding wire, the left pin is zero wire, and the right pin is live wire. Please check before operation

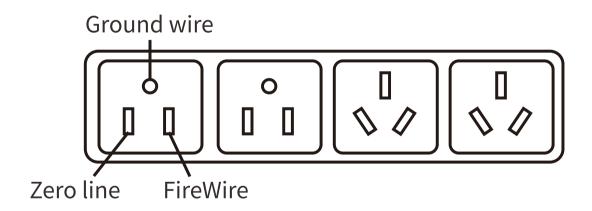
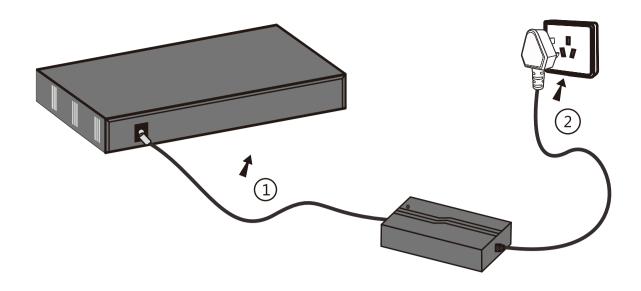


Figure 3.3.1 single phase three wire power socket

#### **Connect The Power Cord**

- 1. Check that the selected power supply is consistent with the power supply requirements marked on the switch;
- 2.For desktop type, first insert the DC output end of the power adapter into the DC port of the switch, and then connect the power line to AC100 ~ 240V, 50 ~ 60Hz mains power; As shown in Figure 3.3.2;
- 3.Rack type, without power adapter, can be directly connected to AC100 ~ 240V, 50 ~ 60Hz mains power; As shown in Figure 3.3.3





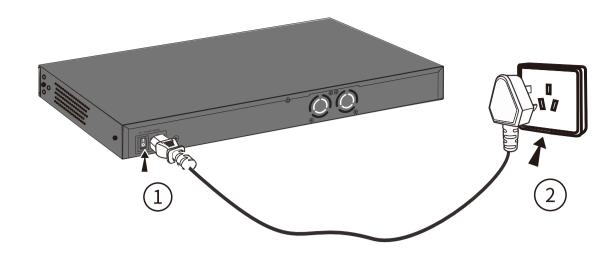


Figure 3.3.3 schematic diagram of power connection

Figure 3.3.2 schematic diagram of power connection

# **Connect The Grounding Column**

In order to avoid equipment damage caused by various external factors, it is recommended to connect the equipment to the grounding column; As shown in figure 3.3.4

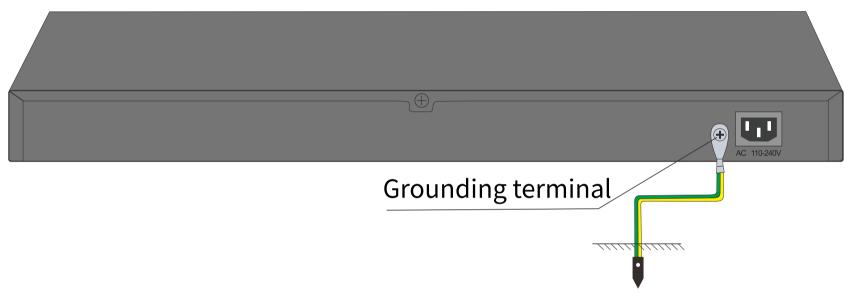


Figure 3.3.4 product grounding diagram

Note: This product does not provide grounding column and grounding cable. If necessary, please buy it yourself.

## **Post Installation Inspection**

After installation, check the following:

- 1.Check whether there is enough heat dissipation space around the switch and whether the air circulation is smooth;
- 2.Check whether the power supply of the power socket meets the specification of the switch;
- 3. Check that the power supply, switch, rack and other equipment are properly grounded;



# 10 Gigabit layer 3 network management PoE switch · hardware parameters

|                           | T  |  |
|---------------------------|--|--|
| Specifications            | 24GE+4*10G SFP   | 48GE+4*10G SFP   |
| Fixed port                | 24 10/100/1000Base-TX  | 48 10/100/1000Base-TX  |
|                           | 4 10000M SFP   | 4 10000M SFP   |
| PoE port                  | 1-2port:Support PoE   IEEE 802.3af/at/PoE++/BT 3-24port: Support PoE   IEEE 802.3af/at | 1-4port:Support PoE IEEE 802.3af/at/PoE++/BT 5-48port: Support PoE IEEE 802.3af/at |
| Management<br>port        | 1 console key  |  |
| Reset key                 | 1 port   |  |
| Exchange content          | 256Gbps  | 512Gbps  |
| Packet forwarding rate    | 92.32Mpps  | 184.64Mpps   |
| MAC                       | 16K  |  |
| Transmission mode         | Store and forward (full line speed)  |  |
| working<br>temperature    | -20°C~55°C   |  |
| Storage<br>temperature    | -40°C~75°C   |  |
| Working<br>humidity       | 5%~90% no condensation   |  |
| Storage<br>humidity       | 5%~95% no condensation   |  |
| Product size              | 440*290*45mm   | 440*290*45mm   |
| Package size              | 515*375*95mm   | 515*375*95mm   |
| input voltage             | AC 100~240V 50/60HZ  | AC 100~240V 50/60HZ  |
| Overall power consumption | ≥48W   | ≥50W   |
|                           |  |  |



# 10 Gigabit Layer 3 Management PoE Switch · Software Function

| Support link aggregation Support yort isolation  ACC Support NAC table management Support MAC table management Support MAC address filtering  VLAN  VLAN VLAN supporting MAC address Support Paddress based VLAN VLAN Support port based VLAN Support voice VLAN  Support Port fing detection Support Port fring detection Support Port fring detection Support Port fring detection Support EAPs protocol (FRPs protocol g.8032/y.1344; LLDP-& LLDP-MEDSupport villp (VRRP layer 2 ring protection protocol) and cooperate with VRRP to make Support port bandwidth control, port isolation and storm suppression  Three layer outing protocol  Support Port bandwidth control, port isolation and storm suppression  Support port bandwidth control, port isolation and storm suppression  Support port bandwidth control, port isolation and storm suppression  Support data flow to modify tos or DSCP values Support mapping different data streams to different queues Support data flow to modify tos or DSCP values Support data flow statistics Support data flow statistics Support data flow statistics Support limit of data flow Support data flow statistics Support limit of data streams  Support climit and streams  Support limit management, serial port management and switch It supports telinet management switch, SSH management switch, HTTP and HTTPS, SNMP protocol V1, V2C and SNMP trap characteristics  Cluster management Support disable Tellnet, WEB and SNMP services Support disable Tellnet, WEB and SNMP services Support supp |                               |   |  |
|--|-------------------------------|---|--|
| Support port flow control Support port raise control Support port mirroring Support port mirroring Support port mirroring Support INL forwarding mode Support MAC table management Support MAC address binding Support MAC address Support sport pased VLAN VLAN Supporting MAC address Support sport pased VLAN Support Paddress based VLAN Support voice VLAN Support port bandwidth control, port isolation and storm suppression  Three layer Support port bandwidth control, port isolation and storm suppression  Three layer Support MARR, RR, wdrr and SP scheduling modes Support voice voice VLAN Support data flow to modify cos or DSCP values Support data flow to modify cos or DSCP values Support speed limit of data flow | PoE                           | Support setting total power   |  |
| Support IVL forwarding mode Support MAC address Support MAC address filtering  VLAN  Support port based VLAN VLAN supporting 802.1Q VLAN supporting MAC address Support IP address based VLAN Support voice VLAN Support port ring detection Support port port port bandwidth control, port isolation and storm suppression  Three layer Support port ipv1 / V2, OSPF, ospfv2, policy routing and VRRP  Support port classification, 802.1p classification, DSCP (DiffServ) classification and ACL classification Support data flow to modify cos or DSCP values Support data flow to modify cos or DSCP values Support data flow tatistics Support data flow statistics Suppo | Port<br>configuration         | Support port flow control Support port rate control Support port name customization Support port mirroring Support link aggregation   |  |
| VLAN   VLAN   Supporting 802.1Q   VLAN supporting MAC address   Support   Paddress based VLAN   Support voice VLAN   | MAC                           | Support IVL forwarding mode Support static MAC address Support MAC address binding  |  |
| Reliability protocol  Reliability protocol  Support EAPs protocol / ERPs protocol g.8032/y.1344; LLDP & LLDP-MEDSupport vllp (VRRP layer 2 ring protection protocol) and cooperate with VRRP to make Support port bandwidth control, port isolation and storm suppression  Three layer outing protocol  Support WRR, RR, wdrr and SP scheduling modes Support port classification, 802.1p classification, DSCP (DiffServ) classification and ACL classification Support mapping different data streams to different queues Support data flow to modify cos or DSCP values Support adat flow to modify cos or DSCP values Support adat flow statistics Support speed limit of data flow Support data flow statistics Support simroring of data streams  Support cli management, serial port management and switch It supports telnet management switch, SSH management switch, HTTP and HTTPS, SNMP protocol V1, V2C and SNMP trap Rich standard and private MIB, multi-user management, local log management, syslog, RMON 1, 2, 3 and 9 groups, cluster management Support configuration file loading, downloading, software upgrading and clock management  Enable and disable TELNET, WEB and SNMP services Supports static configuration of IP, MAC and port binding   | VLAN                          | VLAN supporting 802.1Q VLAN supporting MAC address Support IP address based VLAN  |  |
| Support WRR, RR, wdrr and SP scheduling modes Support Dott classification, 802.1p classification, DSCP (DiffServ) classification and ACL classification Support mapping different data streams to different queues Support data flow to modify cos or DSCP values Support data flow statistics Support speed limit of data flow Support data flow statistics Supports mirroring of data streams  Support cli management, serial port management and switch It supports telnet management switch, SSH management, hocal log management, syslog, RMON 1, 2, 3 and 9 groups, cluster management Support configuration file loading, downloading, software upgrading and clock management  Enable and disable TELNET, WEB and SNMP services Support static configuration of IP, MAC and port binding   | •                             | Support port ring detection Support EAPs protocol / ERPs protocol g.8032/y.1344; LLDP & LLDP-MEDSupport vllp (VRRP layer 2 ring protection protocol) and cooperate with VRRP to make  |  |
| Support port classification, 802.1p classification, DSCP (DiffServ) classification and ACL classification Support mapping different data streams to different queues Support data flow to modify cos or DSCP values Support speed limit of data flow Support data flow statistics Supports mirroring of data streams  Support cli management, serial port management and switch It supports telnet management switch, SSH management switch, HTTP and HTTPS, SNMP protocol V1, V2C and SNMP trap Rich standard and private MIB, multi-user management, local log management, syslog, RMON 1, 2, 3 and 9 groups, cluster management Support configuration file loading, downloading, software upgrading and clock management  Enable and disable TELNET, WEB and SNMP services Supports 802.1x Protocol Supports static configuration of IP, MAC and port binding   | Three layer routing protocol  | Support ripv1 / V2, OSPF, ospfv2, policy routing and VRRP   |  |
| Management characteristics  It supports telnet management switch, SSH management switch, HTTP and HTTPS, SNMP protocol V1, V2C and SNMP trap Rich standard and private MIB, multi-user management, local log management, syslog, RMON 1, 2, 3 and 9 groups, cluster management  Support configuration file loading, downloading, software upgrading and clock management  Enable and disable TELNET, WEB and SNMP services  Support 802.1x Protocol  Supports static configuration of IP, MAC and port binding   | QoS policy                    | Support WRR, RR, wdrr and SP scheduling modes Support port classification, 802.1p classification, DSCP (DiffServ) classification and ACL classification Support mapping different data streams to different queues Support data flow to modify cos or DSCP values Support speed limit of data flow Support data flow statistics |  |
| Safety Support 802.1x Protocol Supports static configuration of IP, MAC and port binding   | Management<br>characteristics | It supports telnet management switch, SSH management switch, HTTP and HTTPS, SNMP protocol V1, V2C and SNMP trap Rich standard and private MIB, multi-user management, local log management, syslog, RMON 1, 2, 3 and 9 groups, cluster management  |  |
|  | Safety<br>characteristics     | Support 802.1x Protocol Supports static configuration of IP, MAC and port binding   |  |

# **Product Packing List:**

Open the product packing box and take out the object carefully. Please check the packing list carefully to ensure that all items are included and undamaged. If there is any shortage or damage of parts, please contact us in time.

- % 1 switch
- % 1 AC power cord
- ※ 1 user 's manual
- % 2 lugs (optional for desktop models)
- % 4 gaskets (optional lug for desktop model)
- % 6 lug screws (optional lug for desktop model)

