

# **User Manual**

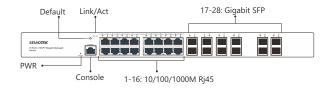
28-Port Gigabit Managed Layer 2 Ethernet Switch with 12 SFP Slots

ST-M1612TS

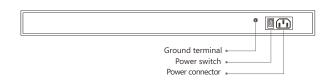
## Packing List

- Ethernet Switch
- User Manual
- Power Cable
- Bracket kits

#### **■** Product description



Indicator light	Status	Description
PWR	ON	Switch power supply is normal
	OFF	The switch is not powered on or the power supply is abnormal
Link/Act	ON	Port is connected
	Flashing	Port is transmitting data
	OFF	The port is not connected, or the connection is abnormal



Interface/button	Description	
Ethernet ports	1-16: 10/100/1000M Rj45 ports, Support Auto-MDI/MDIX function.	
SFP Slots	17-28: Gigabit SFP Slots.	
Console	Console port: Connect the Serial Cable to the Serial port of the computer to manage and configure the switch.	
Default	Restart or reset buttons: Press and hold this button around 10 seconds, the switch will recovery to factory settings.	
Ground terminal	Connect the protective ground wire to prevent lightning strikes.	
Power connector	Connect the power cable with the switch.	

#### **■** Device Installation

#### **Installation Precautions**

To avoid damage to the switch or personal injury caused by improper use, please follow up the below precautions:

- During the installation procedure, wear an anti-static wristband, keep the switch powered off.
   Ensure that the input voltage under the input voltage range.
- 2. Ensure that the heat dissipation holes of the switch are well ventilated.
- 3. Do not disassemble the switch.
- 4. Do not supply power to the switch before cleaning it. Do not use any liquid to scrub the switch.
- 5. Keep the switch far away from power lines, lights, and power grids.



A tamper-evident seal is sealed on a mounting screw of the switch chassis. When the agent maintains the switch, the maintenance switch is required The seal remains intact. If the user needs to open the switch case, please obtain the permission of the local agent. Otherwise, due to all consequences caused by opening the cabinet will be borne by the user himself.

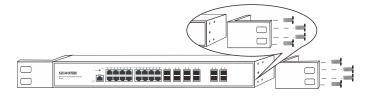
#### Prepare the installation tools

- 1. Static bracelet
- 2. Screw driver
- 3. Optional: flat-blade screw driver, needle-nose pliers, diagonal pliers

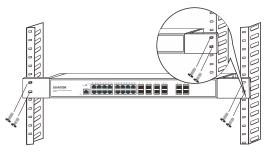
## Install the switch into a 19-inch standard cabinet

**Step 1:** Check the grounding and stability of the rack-mountable.

Step 2: Use the screws to fix the two L-shaped brackets on both sides of the switch.

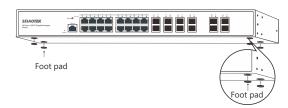


**Step 3:** Place the switch in a proper position in the rack, and fix the L-shaped brackets on the guide grooves at both ends of the rack with screws (if users required) to ensure that the switch is installed on the rack smoothly



#### Install the switch to the desktop

After sticking the foot pads on the four corners of the bottom surface of the switch, please place and keep the switch face up on the stable desktop.

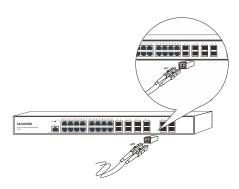


#### Hardware connection

#### Connect SFP Slots

Step 1: Grab the handle end of the optic fiber module, confirm that the handle of the optic fiber module facing upwards, and then insert the optical module into the 17~28 SFP Slots of the switch.

Step 2: After confirming the Rx and Tx ports on the optic fiber module, insert the two fiber connectors at one end of the fiber into the Rx and Tx ports of the optical module respectively, and then plug the two fiber connectors at the other end of the fiber into the opposite device. Tx and Rx ports.

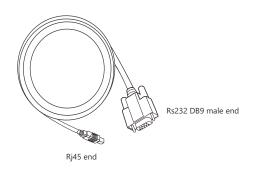


#### Connect Rj45 port

Connect one end of the network cable to the Rj45 port of the switch, and the other end to the RJ45 Ethernet port of the opposite network device.

#### Connect to the console port

Connect the RS232 DB9 male end of the serial cable to the computer, and connect the Rj45end to the Conport port of the switch.



#### Connect the ground wire

Step 1: Connect one end of the ground wire to the ground terminal of the switch.

Step 2: Connect the other end of the ground wire to other equipment that has been grounded, or directly connect it to the ground bar of the equipment room engineering terminal.

3. Open the computer's local browser (take IE as an example), enter http://192.168.1.1 into the address, and press Enter to log in Switch Web Management page.



4. Enter the user name and password (the default is admin), and then click the login button.



5. Log in to the switch web management page and start to configure the switch.

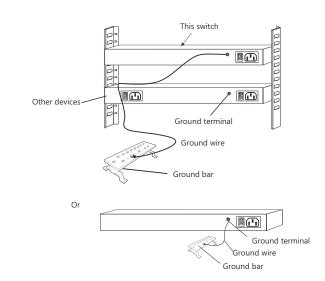
### **■** Common Tips

What should I do if I can't log in to the switch's web management page? Please try the following solutions:

Confirm that the switch is powered on.

- 1. Confirm that the computer and the switch network cable are connected properly.
- 2. Confirm that the computer's Ethernet (or local connection) IP address has been set to 192.168.1.X (X is  $2 \sim 254$ , and it is not occupied by other devices).
- Clear the cache of the browser, or change the browser, and confirm that the connection method of the browser is never dial connection.
- 4. Turn off the computer's firewall or replace a computer.
- $5. \, Confirmed \, that \, there \, is \, no \, other \, devices \, whose \, IP \, address \, is \, also \, 192.168.1.1.$
- 6. If you still cannot log in after the above operations, please restore the factory settings.

  The specific operations as follows:
- 7. When the Power indicator is on, press and hold the Default button on the front panel of the switch around 10 seconds.
- 8. Release when all the indicators are on. When the Power indicator keeps on or the SYS indicator flashing again, the factory settings recovery successfully.

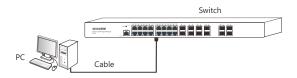




The ground wire of the switch should be connected to the engineering ground of the equipment room. The grounding fire water pipe and the lightning rod of building are not properly grounded.

#### ■ Log in to the WEB Management Page

1. Connect the computer to the switch through a network cable.



 Set the computer's local IP address to 192.168.1.X (X is 2~254, and is not occupied by other devices), and the subnet mask is 255.255.255.0.

#### **■** Specifications

Name	28-Port Gigabit Managed Layer 2 Ethernet Switch with 12 SFP Slots			
Model	ST-M1612TS			
Interface	Ethernet Ports	1~16: 10/100/1000M Rj45 Ports		
	SFP Slots	17~28: Gigabit SFP Slots		
LED	PWR , Link / Act			
Processing Types	Store-and-forward			
	Half-duplex back pressure and IEEE802.3x full-drplex flow control			
Performance Specification	Bandwidth	56Gbps		
	Packet Forwarding Rate	41.66Mpps		
	MAC Address	16K		
Network Standards	IEEE802.3i 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3ab 1000BASE-T IEEE802.3z 1000BASE-LX, IEEE802.3x Flow Control, IEEE802.1p, IEEE802.1x, IEEE802 IEEE802.3az EEE	.1d, IEEE802.1s		
Power Input	AC 100~240V 50~60Hz			
Dimension	440mm (L) x 220mm (W) x 44mm (H)			
Cables	UTP Cat 5 or above			
Environment Specification	Working Temperature: 0°C ~ 45°C, Humidity: 10% ~ 90% RH non-condensing			
	Storage Temperature: 20°C ~ 70°C, Humidity: 5% ~ 95% RH non-condensing			

## ■ Warranty Card

Model NO.	
Serial NO.	
Purchase Date	
RMA Number	
Return Reason	
Customer Name	
Customer Address	
Customer Email	

Note: Please refer to the User Manual for Detail Warranty policy