TP-Link TL-SG1008D 8 Port Gigabit Ethernet Network Switch User Guide

Contents [hide

TP-LINK®

TP-Link TL-SG1008D 8 Port Gigabit Ethernet Network Switch

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE Mark Warning
This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Safety Notices

Cautions:
Do not use this product near water, for example, in a wet basement or near a swimming pool.
Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

Package Contents

The following items should be found in your package:

- One TL-SG1005D/TL-SG1008D switch
- One Power Adapter
- This User Guide

Note: The wall-mounting screws are not provided with our product. Please contact your distributor if any of the listed items are damaged or missing.

Convention
The switch or TL-SG1005D/TL-SG1008D mentioned in this User Guide stands for TL-SG1005D/TL-SG1008D 5/8-port Gigabit Desktop Switch without any explanation.

Note: The two devices of TL-SG1005D and TL-SG1008D are sharing this User Guide. For simplicity, we will take TL-SG1008D for example throughout this Guide.

The differences between them are:

- TL-SG1005D switch with 5 10/100/1000Mbps Auto-Negotiation RJ45 ports.
- TL-SG1008D switch with 8 10/100/1000Mbps Auto-Negotiation RJ45 ports.

Introduction of the Product

Thank you for choosing the TL-SG1005D/TL-SG1008D 5/8-port Gigabit Desktop Switch.

Overview of the Product

Powered by the Gigabit Ethernet Technology, TL-SG1005D/ TL-SG1008D Gigabit Desktop Switch provides a seamless network connection, which can speed up your old network to 1000Mbps, ensuring the graphics, CGI, CAD, or multimedia files and other applications with bandwidth-intensive files transferred across the network almost instantly. The non-blocking switching architecture adopted in the TL-SG1005D/TL-SG1008D switch greatly improves network response times as well as significantly speeds up the traffic between subnets by forwarding and filtering packets at full wire speed for maximum throughput.

The TL-SG1005D/TL-SG1008D switch is plug-and-play. In addition, the Auto-MDI/MDIX cable detection on all ports eliminates the demand for crossover cable or Uplink ports. Each port can be used as a general port or Uplink port, and any port can be simply plugged into a server, a hub, a router, a switch, or a PC, using the straight cable or crossover cable.

Diagnostic LEDs display link status and activity, allowing you to quickly detect and correct problems on the network. The TL-SG1005D/TL-SG1008D switch adopts Green Ethernet technology and supports power-saving features. The switch automatically powers down the ports that have no link or are connected to the computers which have been shut down, budgets power output for different Ethernet cable lengths.

Features

- Supports Green Ethernet technology to implement power-saving features
- Complies with IEEE802.3, IEEE802.3u, IEEE802.3ab standards
- 5/8 10/100/1000Mbps Auto-Sensing RJ45 ports supporting Auto-MDI/MDIX
- Supports IEEE802.3x flow control for Full-duplex Mode and backpressure for Half-duplex Mode
- Non-blocking switching architecture that forwards and filters packets at full wire speed for maximum throughput
- 4K entry MAC address table of TL-SG1005D/TL-SG1008D with auto-learning and auto-aging
- Supports for Jumbo frames of up to 9KB
- LED indicators for monitoring power, link, speed, and activity
- External power adapter supply

Identifying External Components

This Chapter describes the front panel and rear panel of the switch.

Front Panel

Figure 2-1 TL-SG1008D Switch Front Panel

The switch's LEDs are located on the front panel

- Power LED: This indicator will light up when the switch powers up.
- LEDs (1~8): The LED indicates Link/Active status. The corresponding LED indicator will light solid green when connected to a network device. It flashes green when data is being transmitted or received on the working connection.

Note:
The LEDs' description above explains the device's working status after initialization.

Rear Panel

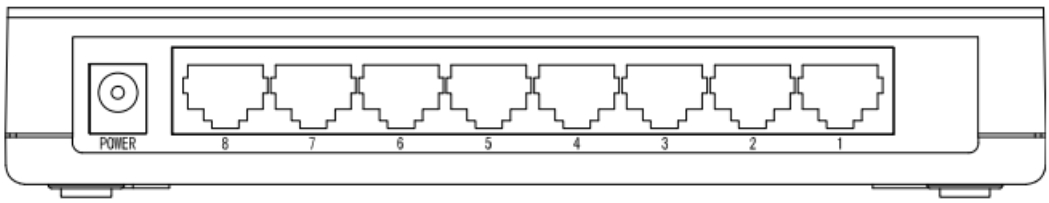


Figure 2-2 TL-SG1008D Switch Rear Panel

The following parts are located on the rear panel.

- **POWER:** The POWER socket is where you will connect the power adapter. Please use the power adapter provided with this TL-SG1008D switch.
- **Port (1-8):** The TL-SG1008D switch is equipped with 8 10/100/1000Mbps Auto-Sensing RJ45 ports where you will connect your network devices. The working status can be indicated by the corresponding LEDs on the front panel.

Installation

The switch can be either located on a desktop or mounted on a wall.

Mounting the Switch on a Desk

To locate the switch on a desktop, please follow these steps:

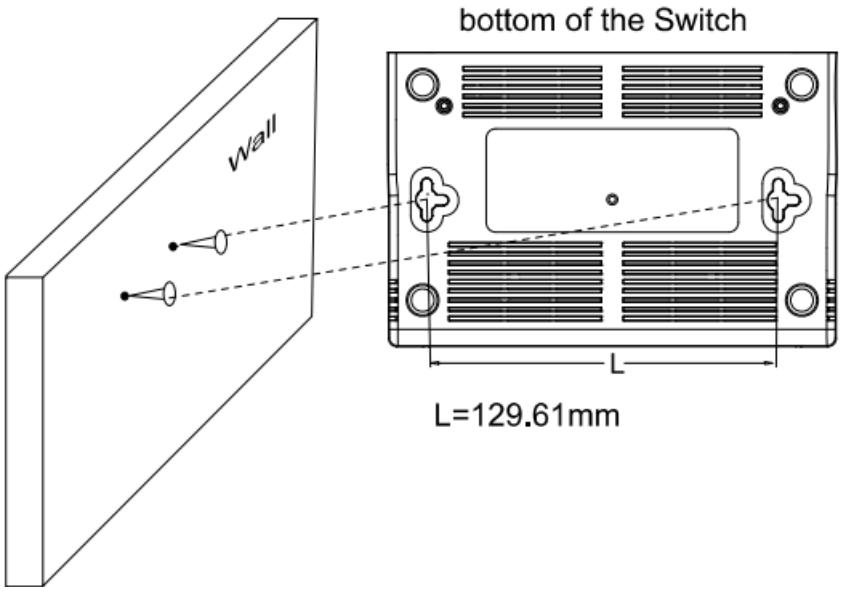
1. Place the switch on a flat desk.
2. Inspect the Power Adapter carefully and make sure that it is properly connected to a power source.
3. Ensure adequate ventilation space around the switch for dissipating heat and air.

Note:
Please avoid any heavy things placed on the switch.

To ensure a stable cable connection, please keep the switch horizontal on the desktop, with a white cover facing up.

Mounting the Switch on a Wall
There are two wall-mounting slots on the bottom panel of the switch. To mount the switch on a wall, please follow the steps below.

1. Drill two holes into the wall. Insert a screw into each hole and leave a part of its head exposed.
2. Place the two wall-mounting slots over the screws and slide the switch down to fasten it.



Power On
Power on the switch and it will automatically initialize and its LED indicators will respond as follows:

Name	Time	Status	Indication
Power	All the time	On	Power on
LEDs (port 1-8)	1st second	On	N/A
	2nd second	Off	N/A
	3rd second~	Off	No device is connected to the corresponding port.
		On	There is a 10/100/1000Mbps device connected to the corresponding port.

Note:
If the LED indicators don't respond as described above, please check the power supply and its connection.

Appendix A: Specifications

General	
Standards	IEEE802.3, IEEE802.3u, IEEE802.3ab
Topology	Star
Protocol	CSMA/CD
Data Transfer Rate	Ethernet: 10Mbps (Half Duplex), 20Mbps (Full Duplex)
	Fast Ethernet: 100Mbps (Half Duplex), 200Mbps (Full Duplex)
	Gigabit Ethernet: 2000Mbps (Full Duplex)
Network Media(Cable)	10Base-T: UTP category 3, 4, 5 cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m)
	100Base-TX: UTP category 5, 5e cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m)
	1000Base-T: UTP category 5 cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m)
Number of Ports	5/8 10/100/1000Mbps Auto-Negotiation RJ45 ports
LED indicators	Power, LEDs (1-8)
Transfer Method	Store-and-Forward
MAC Address Learning	Automatically learning, automatically aging
Frame Filter Rate	10Base-T: 14880pps/Port
	100Base-Tx: 148800pps/Port
	1000Base-T: 1488000pps/Port

Frame Forward Rate	10Base-T: 14880pps/Port
	100Base-Tx: 148800pps/Port
	1000Base-T: 1488000pps/Port
Environmental and Physical	
Operating Temperature	0 ~40℃ (32 ~104℉)
Storage Temperature	-40 ~70℃ (-40 ~158℉)
Operating Humidity	10%~90% non-condensing
Storage Humidity	5%~90% non-condensing

Appendix B: Troubleshooting

1. **The Power LED is not lit**
   Check to see if the AC power cord is connected to the switch properly, and make sure the power source is ON.
2. **The Link/Act LED is not lit when a device is connected to the corresponding port**
   Check to see if the cable connectors are firmly plugged into the switch and the device, and verify the connected device is turned on and working well. Make sure the cable is not longer than 100 meters (328 feet).

Frequently Ask Questions

Why does the TP-Link switch have 8 ports?

The 8-Port Gigabit Desktop conversion from TP-Link, model number TL-SG1008D, makes the conversion to Gigabit Ethernet simple for you. Make Gigabit to the desktop a reality or speed up your network's server and backbone connections.

How does the TP-Link switch with 8 Gigabit Ethernet ports operate?

Ethernet switches function by "bridging" Ethernet frames between various local area network segments. By copying the frames from one switch port to another in accordance with the Media Access Control, or MAC, addresses in the frames, the switch carries out its intended function.

What is the TP-Link Ethernet switch's speed?

The WiFi 6 APs are able to handle traffic-intensive apps and services thanks to their 10 Gbps and 2.5 Gbps connections. More IoT devices can be connected to create a smart living and working ecosystem. TP-Link multi-gigabit switches enable PoE (Power over Ethernet), PoE+, and PoE+

What about TP-Link network switches?

Anyone seeking a Gigabit Ethernet switch that is both inexpensive and simple to use should without a doubt consider this switch. The TP-Link 16 Port Gigabit Switch's pros and cons are as follows: Easy Smart Managed | Plug & Play | Limited Lifetime Protection | D: Excellent value!

How many devices is TP-Link capable of?

Tri-band is fully utilized by RE815XE, providing up to 96 devices with blazing-fast 5400 Mbps speed. All of your linked devices have fantastic connectivity thanks to the 6 GHz band, which serves as its backhaul.

How many ports are required for a TP-Link switch network?

Additional Network Switching Considerations. Switches can be configured with anything from 5 to 52 ports. The number of users your network can accommodate should be taken into account when determining the number of ports you'll require. The more ports you require will depend on how big your organization is.

What advantages do a Gigabit TP-Link switch offer?

They aid in boosting the network's dependability and boosting data rates up to about 1000 Mbps. An essential component of a network, gigabit switches enable the connection of several other devices, including computers, printers, cameras, and others, to a local area network (LAN).

Do TP-Link Ethernet switches require power?

Ethernet switches can be used for networks with a variety of devices and require power input in order to divide an Ethernet signal into many signals that can all run simultaneously. However, power input is not required for Ethernet splitters.

Is TP-Link Ethernet compatible with TP-Link?

TP-Link Powerline adapters provide Ethernet ports so that several high-speed, dependable wired connections can be used simultaneously by, for instance, gaming consoles, PCs, and televisions.

What is the TP Link's Ethernet cap?

The maximum speed for a fast Ethernet port is 100Mbps, whereas the maximum speed for a gigabit Ethernet port is 1000Mbps.

What is the TP-Link TL-SG108's speed?

The TL-SG108 is a great option for growing your high-performance wired network because it has full duplex mode and data processing speeds of up to 2000Mbps.

Is TP-Link's data unlimited?

Sure, we do! We have MiFi (Mobile WiFi) devices that run on batteries and can be charged by connecting a micro USB cable to a laptop, portable charger, or converter for unrestricted 4G sharing.

What are the 4 TP-Link switch kinds for networks?

Managed, modular, unmanaged, and stackable network switches are a few of the several varieties available.

Download This PDF Link: TP-Link TL-SG1008D 8 Port Gigabit Ethernet Network Switch User Guide