TP-LINK®

User Guide

TL-SG1008D

8-port Gigabit Desktop Switch

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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 receiver.
- Connect the equipment into 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

$C\epsilon$

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 box:

➢ One TL-SG1008D 8-port Gigabit Desktop Switch

➢ One AC Power Adapter

➢ This User Guide

☞ **Note:**

Make sure that the box contains the above items. If any of the listed items are damaged or missing, please contact with your distributor.

CONTENTS

Chapter 1. Introduction of the Product

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

1.1 Overview of the Product

Powered by the Gigabit Ethernet Technology, the TL-SG1008D 8-port Gigabit Desktop Switch provides the seamless network connection, which can speed up your old network to 1000Mbps. The increased speed and backbone connections make Gigabit a reality, which ensures 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-SG1008D greatly improves network response times as well as significantly speed up the traffic between subnets by forwarding and filtering packets at full wire-speed for maximum throughput.

The TL-SG1008D switch is compatible with all 10Mbps, 100Mbps, and 1000Mbps Ethernet devices, which can protect your existing network investments while provide you a straightforward migration path to faster Gigabit speed.

The TL-SG1008D switch is very easy to manage since it is plug-and-play and no configuration is needed. In addition, the auto MDI/MDI-X cable detection on all ports eliminates the demand of crossover cable or Uplink port. Each port can be used as general ports or Uplink ports, and any port can be simply plugged into a server, a hub, a router or a switch, using the straight cable or crossover cable. Diagnostic LEDs which display link status and activity, allowing you to quickly detect and correct problems on the network.

1.2 Convention

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

1.3 Features

➢ Complies with IEEE802.3, IEEE802.3u, IEEE802.3ab standards

➢ Eight 10/100/1000Mbps Auto-Negociation 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 the TL-SG1008D with auto-learning and auto-aging

- ➢ Support for Jumbo frames of up to 9728 Bytes

- ➢ LED indicators for monitoring power, link, speed and activity

- ➢ External power adapter supply

Chapter 2.   Installation

2.1 Mounting the Switch on a Desk

To install the Switch, please follow the steps:

1) You can place the Switch on a flat desk.

2) Please 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 thing placed on the switch.

2.2 Power On

TL-SG1008D 8-port Gigabit Desktop Switch can be used with AC power supply. Powering on the Switch, it will automatically initialize and its LED indicators will respond as follows:

1) All the 10/100Mbps and 1000Mbps Link/Act LED indicators will light simultaneously at first, then light in turn and the 10/100Mbps Link/Act LED indicators will light simultaneously again for the last time, which indicates the system initialized well.

2) The Power indicator will light all the time.

☞ **Note:**

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

Chapter 3. Identifying External Components

This Chapter describes the front panel, rear panel and LED indicators of the Switch.

3.1 Front Panel

Figure 3-1 TL-SG1008D Switch Front Panel

The Switch's LEDs are located on the front panel.

| Name	Status	Indication
Power	On (red)	Power on
	Off	Power off
1000Mbps	On (green)	There is a 1000Mbps device connected to the corresponding port.
	Flashing (green)	Data transmitting or receiving on corresponding port.
	Off	No 1000Mbps device connected to the corresponding port.
10/100Mbps	On (green)	There is a 10/100Mbps device connected to the corresponding port.
	Flashing (green)	Data transmitting or receiving on corresponding port.
	Off	No 10/100Mbps device connected to the corresponding port.

3.2 Rear Panel
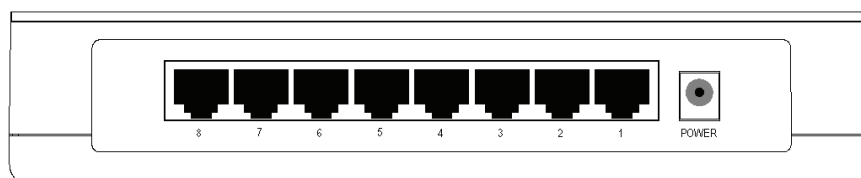
Figure 3-2 TL-SG1008D Switch Rear Panel

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.

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-TX: UTP category 5 cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m)
Number of Ports	8 10/100/1000Mbps Auto-Negotiation RJ45 ports
LED indicators	Power, 1000Mbps Link/Act, 10/100Mbps Link/Act
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	
Dimensions(W×D×H)	7.87×5.6×1.57 in. (200×142×40mm)
Power Supply Output	9V~1.2A 50/60Hz
Operating Temperature	0 ~40°C (32 ~104°F)
Storage Temperature	-40 ~70°C (-40 ~158°F)
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).