TL-SF1016<br>TL-SF1024<br>TL-SF1048<br>16/24/48-port 10/100M Fast Ethernet Switch

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## FCC STATEMENT

The 16/24/48-port 10/100M Fast Ethernet Switch has been tested and found to comply with the limits for a class A 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.

## EC DECLARATION OF CONFORMITY (EUROPE)

In compliance with the EMC Directive 89/336/EEC, Low Voltage Directive 73/23/EEC, this product meets the requirements of the following standards: EN55022

EN55024
EN60950

## SAFETY NOTICES

## Caution:

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.

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## Package Contents

The following contents should be found in your box: One TL-SF1016/TL-SF1024/TL-SF1048 Switch One power cord This User's Guide Mounting screws and two "L" planks

1Note: If any of the above contents are damaged or missing, please contact the retailer from whom you purchased the TL-SF1016/TL-SF1024/TLSF1048 16/24/48-port 10/100M Switch for assistance.

## Chapter 1: Introduction of the Product

This chapter describes the features of the model of TL-SF1016/TL-SF1024/TL-SF1048 16/24/48-port10/100M Switch. TL-SF1016, TL-SF1024, and TL-SF1048 just differ in the number of LED indicators and ports, all figures in this guide are of TL-SF1024.

### 1.1 Overview of the product

TL-SF1016/TL-SF1024/TL-SF1048 16/24/48-port 10/100M Switch provides 16/24/48 10/100Mbps Auto-Negotiation RJ45 ports. Each port of the TL-SF1016/TL-SF1024/TL-SF1048 supports auto MDI/MDI-X function, eliminating the need for crossover cables or Uplink ports. The Switch is Plug-and-Play and any port can be simply plugged into a server, a hub or a switch, using straight cable or crossover cable.
The TP-LINK TL-SF1016/TL-SF1024/TL-SF1048 16/24/48-port 10/100M
switch provides you with a low-cost, easy-to-use, high-performance, seamless and standard upgrade to improve your old network to a 100 Mbps network. It will boost your network performance up to full duplex data transfer.

### 1.2 Features

Complies with IEEE802.3, IEEE 802.3u standards
16/24/48 10/100Mbps Auto-Negotiation RJ45 ports supporting AutoMDI/MDIX
Supports IEEE802.3X flow control for full-duplex mode and backpressure for half-duplex mode
LED indicators for monitoring power, link, activity, speed (TL-SF1024)
Standard 19" rack-mountable steel case
Internal power supply

## Chapter 2: Installation

### 2.1 Mounting the Switch on a Desk

Before placing the Switch on a desk, attach four rubber feet to the flutes on the Switch bottom, then lay the Switch on the desktop, where it is able to withstand 5 kg of weight.
!
Note: Make sure there is a grounded AC outlet within 1.5 meters, and working well;
Make sure there is free space for radiating heat and airflow.
Be sure not to lay anything heavy on top.

### 2.2 Mounting the Switch in a Rack

The dimension of TL-SF1016/TL-SF1024/TL-SF1048 is designed according to the standard 19 " rack-mountable steel case of Electronic Industries Association.

Power off all the equipment connected to the Switch before mounting it in the rack, then rivet the two "L" brackets onto each side of the Switch, and fasten it with screws in the rack.


Figure 2-1 Rivet the "L" brackets onto the Switch


Figure 2-2 Fasten the Switch in the Rack

### 2.3 Power on

The TL-SF1016/TL-SF1024/TL-SF1048 16/24/48-port 10/100M Switch is powered by an AC Power Supply. Connect the Switch and power outlet by power cord. Powering on the Switch, it will be automatically initialized and the LED indicators should respond as follows:

1) All of the LED indicators will flash momentarily for one second, which represent a resetting of the system.
2) The Power LED indicator will light up.

## Chapter 3: Identifying External Components

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

### 3.1 Front Panel

The front panel of TL-SF1024 consists of switch model, switch LED indicators, and 24 10/100Mbps RJ-45 ports.


Figure 3-1 TL-SF1024 Switch Front Panel sketch

### 3.2 Rear Panel

The rear panel of TL-SF1024 only features an electrical outlet, which is an AC electrical outlet. Connect the female of the power cord head here, and the male head to the AC power.


Figure 3-2 TL-SF1024 Switch Rear Panel sketch

### 3.3 LED indicators

The LED indicators include Power, Link/Act LED indicators, which are used for monitoring and pre-troubleshooting of the Switch. The following section shows the LED indicators of the Switch along with an explanation of each indicator.


Figure 3-3 TL-SF1024 Switch LEDs sketch
Power LED: This indicator will light solid red when the Switch powers up. If the LED is not lit, please check the power supply and connection.
LINK/ACT LED: 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.
100Mbps: The corresponding gigabit port LED indicator will light solid green when it's working on 100Mbps speed, not lit when working on 10Mbps speed.
Note: Because of the difference of among the mode of switch,Some switch don't include the 100 Mbps indicator, such as TL-SF1048 and a few of TL-SF1016 switch.

## Appendix A: Specifications

| General |  |
| :--- | :--- |
| Standards | IEEE802.3 10Base-T <br> IEEE802.3u 100Base-TX |
| Topology | Star |
| Protocol | CSMA/CD |
| Data Transfer Rate | Ethernet: 10Mbps (Half Duplex) <br> 20Mbps (Full Duplex) <br> Fast Ethernet: 100Mbps (Half Duplex) <br> 200Mbps (Full Duplex) |
| Number of Ports | 16/24/48 10/100Mbps Auto-Negotiation RJ-45 ports |
| LED indicators | Power, Link/Act, 100M(TL-SF1024) |


| Environmental and Physical |  |
| :--- | :--- |
| Dimensions $(\mathrm{W} \times \mathrm{D} \times \mathrm{H})$ | TL-SF1016:11.57 $\times 7.1 \times 1.73 \mathrm{in} .(294 \times 180 \times 44 \mathrm{~mm})$ |
|  | TL-SF1024:17.3 $\times 7.1 \times 1.73 \mathrm{in} .(440 \times 180 \times 44 \mathrm{~mm})$ |
|  | TL-SF1048:17.3 $\times 10.2 \times 1.73$ in. $(440 \times 260 \times 44 \mathrm{~mm})$ |
| Power Supply Output | $100-240 \mathrm{~V} \sim 50-60 \mathrm{~Hz}$ (Internal universal power supply) |
| Operating Temperature | $0^{\circ} \mathrm{C} \sim 40^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F} \sim 104^{\circ} \mathrm{F}\right)$ |
| Storage Temperature | $-40 \sim 70^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F} \sim 158^{\circ} \mathrm{F}\right)$ |
| Operating Humidity | $10 \% \sim 90 \%$ non-condensing |
| Storage humidity | $5 \% \sim 95 \%$ non-condensing |

