

TP-Link TL-SG105MPE

TP-Link TL-SG105MPE Easy Smart Managed 5-Port Gigabit Switch with 4-Port PoE+ User Manual

Model: TL-SG105MPE

1. PRODUCT OVERVIEW

The TP-Link TL-SG105MPE is a 5-Port Gigabit Easy Smart Switch featuring 4 Power over Ethernet Plus (PoE+) ports. This device is designed to simplify network expansion by providing both data and power over a single Ethernet cable to compatible devices.

Key Features:

- **Flexible Full Gigabit PoE Configuration:** Equipped with 4 PoE+ (802.3at/af) 10/100/1000 Mbps RJ45 ports, each delivering up to 30W, and a total PoE power budget of 120W. Includes 1 Gigabit non-PoE port for high-speed connections.
- **Easy Smart Management:** Offers a user-friendly web-based management interface and a smart configuration utility for straightforward network setup and monitoring.
- **Network Segmentation:** Supports VLAN features to enhance network security through traffic segmentation.
- **PoE Auto Recovery:** Automatically detects and reboots unresponsive PoE-powered devices, reducing the need for manual intervention.
- **Plug and Play Operation:** Designed for easy setup without requiring complex software installation or configuration for basic functionality.
- **Advanced Software Features:** Includes Port-based 802.1p/DSCP QoS (Quality of Service) and IGMP Snooping for efficient traffic prioritization and optimized video/voice data transmission.
- **Durable Design:** Features a fanless design for silent operation and a metal casing for enhanced durability.

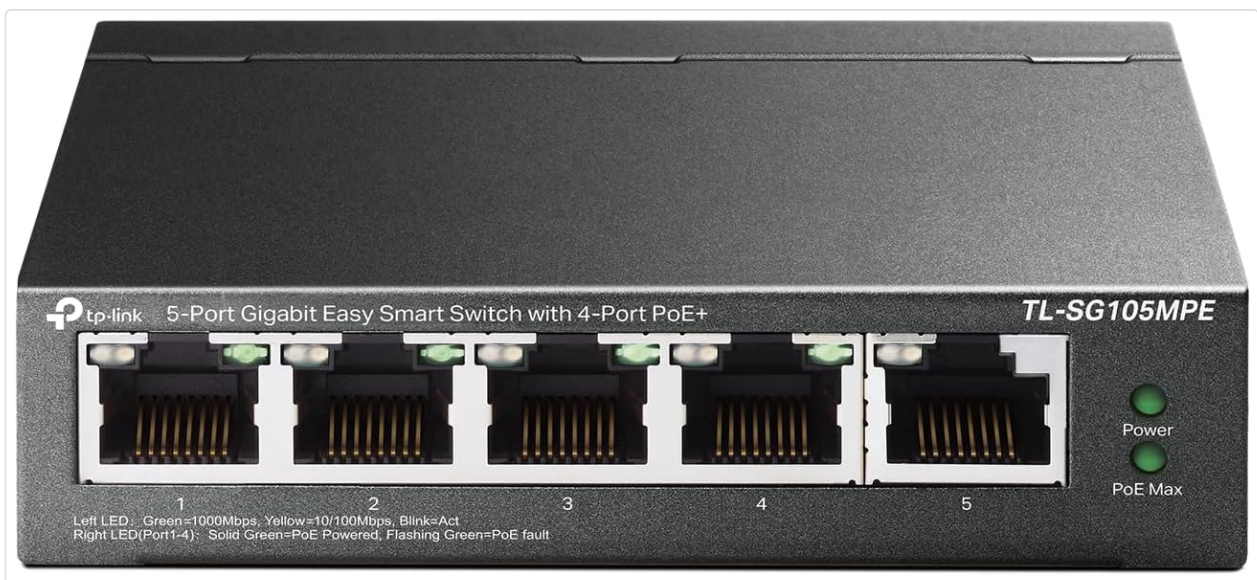


Image 1.1: Front view of the TP-Link TL-SG105MPE switch, showing five Gigabit Ethernet ports and LED indicators.

2. SETUP AND INSTALLATION

The TL-SG105MPE switch is designed for simple plug-and-play installation, requiring no software setup for basic operation. For advanced features, a web-based management interface is available.

2.1 Package Contents

Verify that your package contains the following items:

- TP-Link TL-SG105MPE Switch
- Power Adapter
- Installation Guide
- Rubber Feet

2.2 Physical Installation

1. Place the switch on a stable, flat surface or mount it using appropriate hardware (not included unless specified). Ensure adequate ventilation around the device.
2. Attach the included rubber feet to the bottom of the switch if placing it on a desktop to prevent slipping and protect surfaces.
3. Connect the power adapter to the switch's power input and then plug it into a power outlet. The Power LED on the switch should illuminate.
4. Connect your network devices (e.g., router, computers, IP cameras, IP phones, access points) to the RJ45 ports on the switch using Ethernet cables.

PoE+ for Versatility

Support PoE Power up to
120 W for 4 PoE ports

Work with IEEE
802.3af/at compliant PDs

Connect More
Devices

Data  Power 

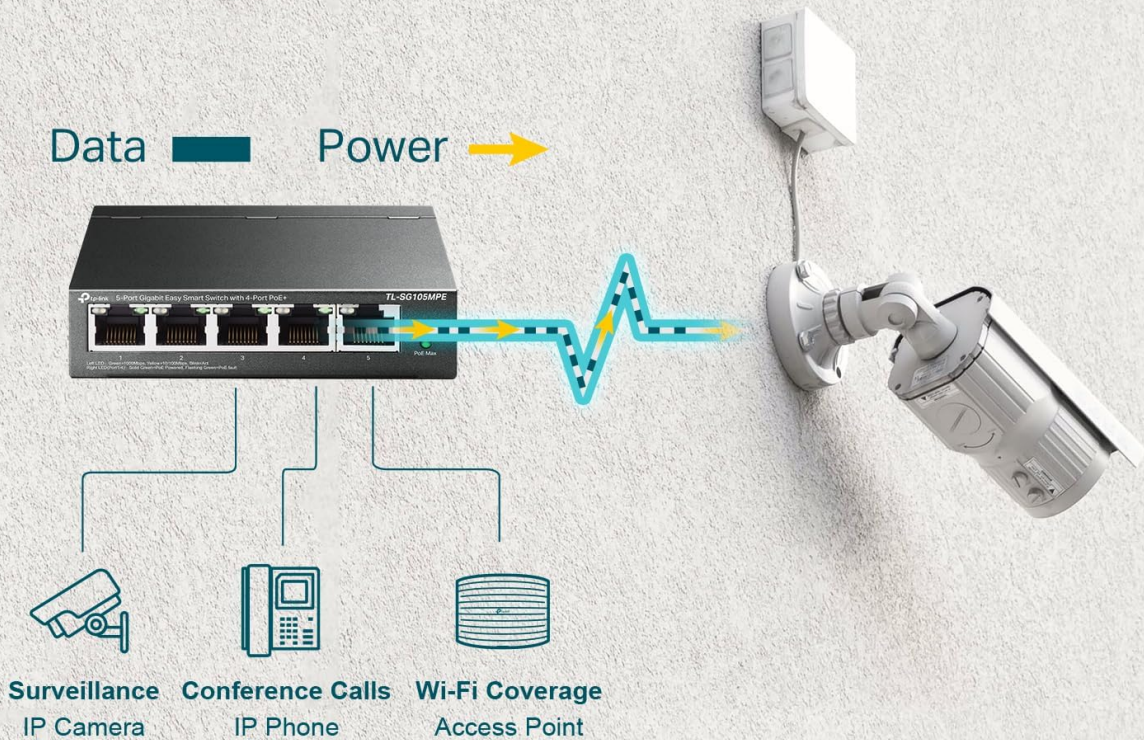


Image 2.1: Illustration of PoE+ functionality, demonstrating how the switch provides both data and power to connected devices like IP cameras, IP phones, and Wi-Fi access points.

Provide Power for Access Point with PoE+ Capabilities.

Stable, Fast, Plug & Play



Image 2.2: The TL-SG105MPE switch supplying power to a ceiling-mounted access point via PoE+.

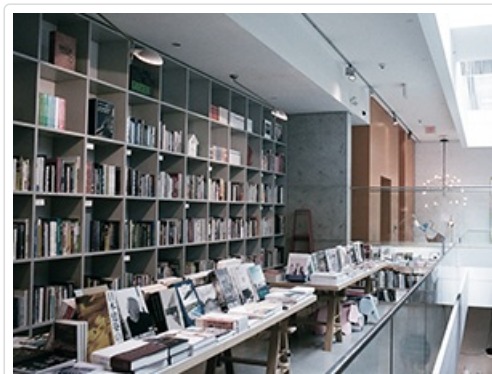


Image 2.3: Simplified setup process: plug in the power, connect devices, and begin using the network.

3. OPERATING THE SWITCH

Once physically connected, the TL-SG105MPE switch operates automatically for basic network connectivity. For advanced features and management, access the web-based interface.

3.1 LED Indicators

The switch features LED indicators to provide status information:

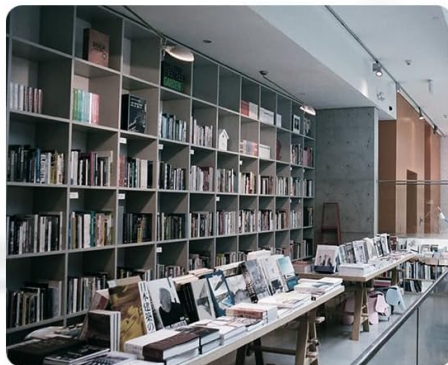
- **Power LED:** Indicates the power status of the switch.
- **PoE Max LED:** Illuminates when the total PoE power consumption approaches or exceeds the maximum budget.
- **Link/Act LEDs (per port):** Green indicates a 1000Mbps connection. Yellow indicates a 10/100Mbps connection. Blinking indicates activity.
- **PoE LEDs (per PoE port):** Solid green indicates PoE power is being supplied. Flashing green indicates a PoE fault.

3.2 Easy Smart Management

The switch can be managed via a web-based graphical user interface (GUI) or a smart configuration utility. This allows for configuration of features such as VLANs, QoS, and PoE settings.

- To access the web GUI, connect a computer to the switch and open a web browser. Refer to the included Installation Guide for default IP address and login credentials.
- The smart configuration utility can be downloaded from the TP-Link support website for easier management.

Multiple Application Scenarios



Surveillance

Works with IP Cameras.



Conference Call

Works with IP Phones.



Wi-Fi Coverage

Works with Omada EAPs, perfect solution for hotels, restaurants, etc.



Wired Connections

Works with PCs and Printers.

Image 3.1: Icons representing Quality of Service (QoS) for fluent online experience and IGMP Snooping for traffic optimization.

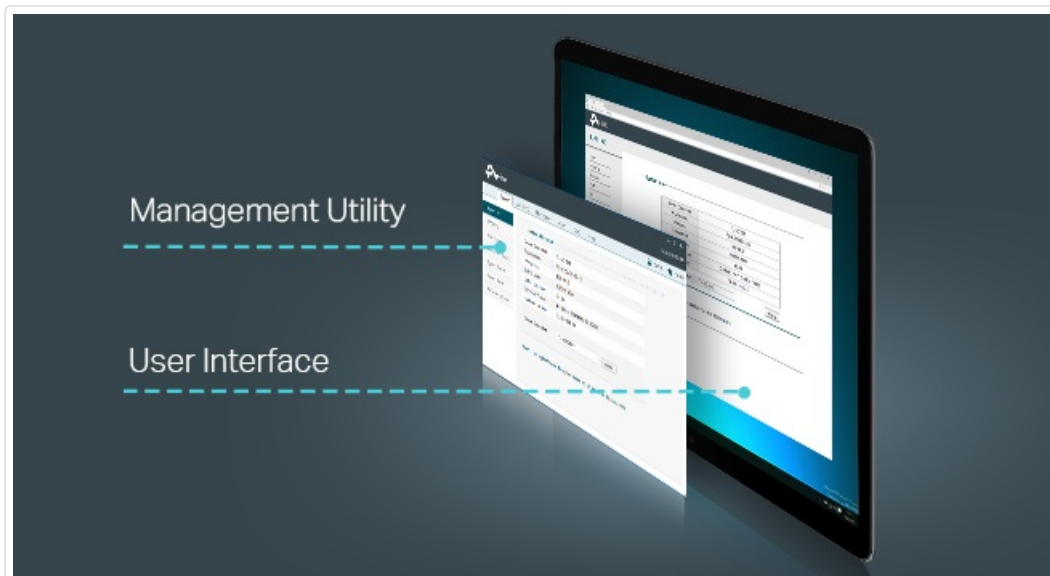


Image 3.2: QoS feature ensures smooth data flow for applications like online gaming.



Image 3.3: IGMP Snooping optimizes traffic for IPTV and other multicast applications.

Making Management Easy

Management Utility

User Interface



Image 3.4: The web-based management interface provides detailed control and monitoring options for the switch.

4. MAINTENANCE

The TL-SG105MPE switch is designed for reliable operation with minimal maintenance. Key features contribute to its stability and longevity.

4.1 PoE Auto Recovery

This feature automatically detects and reboots unresponsive PoE-powered devices (PDs) connected to the switch. This helps to restore functionality to devices like IP cameras or access points without manual intervention. This feature may require configuration through the web management interface.



Image 4.1: PoE Auto Recovery feature automatically restarts unresponsive PoE devices.

4.2 Intelligent Power Management

The switch incorporates intelligent power management to prevent power overload. If the total power draw from connected PoE devices exceeds the switch's budget (120W), the switch will cut power to lower-priority ports to protect the device and ensure critical devices remain operational. It also automatically detects PoE/non-PoE equipment to provide the correct power.

Intelligent Power Management

- Power Overload Protection prevents power overload by cutting lower priority port's power
- Automatic PD Detection automatically detects PoE/non-PoE Equipment and provides the required power for your PoE devices

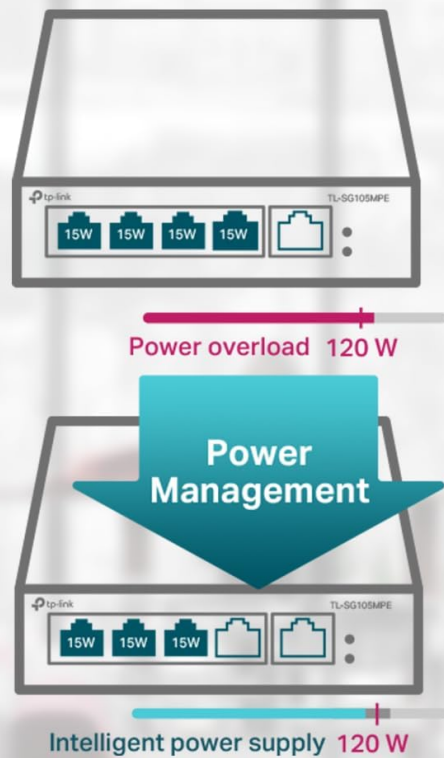


Image 4.2: Intelligent Power Management dynamically adjusts power delivery to prevent overloads.



Image 4.3: The switch manages power distribution to avoid exceeding the 120W PoE budget.

5. TROUBLESHOOTING

If you encounter issues with your TL-SG105MPE switch, consider the following basic troubleshooting steps:

- **No Power:** Ensure the power adapter is securely connected to both the switch and a working power outlet. Check the Power LED status.
- **No Link/Activity:** Verify that Ethernet cables are properly connected to both the switch and the network device. Check the Link/Act LEDs for the respective port. Try a different cable or port.
- **PoE Device Not Powering On:** Confirm the device is PoE compatible (802.3at/af). Check the PoE LED for the port. If the PoE Max LED is on, the total power budget might be exceeded; consider disconnecting non-essential PoE devices or checking power consumption in the management interface.
- **Network Performance Issues:** If experiencing slow speeds, ensure all connected devices and cables support Gigabit Ethernet. Check for network loops (though this switch has some loop prevention features, it's good to verify cabling).
- **Accessing Management Interface:** If you cannot access the web GUI, ensure your computer's IP address is in the same subnet as the switch's default IP. Refer to the Installation Guide for default IP and login details.
- **Unresponsive PoE Device:** The PoE Auto Recovery feature should handle this automatically. If not, manually power cycle the PoE device or the switch.

For more detailed diagnostics and advanced troubleshooting, consult the comprehensive user manual available on the TP-Link support website or utilize the web-based management interface for status and log information.

6. SPECIFICATIONS

Feature	Detail
Model Number	TL-SG105MPE
Brand	TP-Link
Number of Ports	5 (4 PoE+, 1 Non-PoE)
Interface Type	Gigabit Ethernet, PoE+ (802.3at/af)
Data Transfer Rate	1 Gigabits Per Second
PoE+ Ports	4 ports, up to 30W per port
Total PoE Power Budget	120W
Maximum Power Consumption	65 Watts (This refers to the switch's own power consumption, not the PoE budget)
Voltage	53.5 Volts (DC)
Product Dimensions (L x W x H)	4.1" x 1.1" x 6.3"
Item Weight	0.22 Kilograms (7.7 ounces)
Case Material	Metal

Feature	Detail
Color	Black
Fanless Design	Yes

7. WARRANTY AND TECHNICAL SUPPORT

7.1 Product Warranty

The TP-Link TL-SG105MPE switch is backed by an industry-leading **3-year warranty**, providing assurance for your investment.




7.2 Technical Support

For any technical assistance, questions, or support needs, TP-Link offers free technical support. You can reach out through the following channels:

- **Phone Support:** (866) 225-8139 (Available Monday to Friday, 6 AM to 6 PM PST)
- **Website:** myproducts.tp-link.com/us
- **Email Support:** support.USA@tp-link.com



Image 7.1: TP-Link customer support details for assistance.

 <p>Configuration Guide</p> <p>TP-LINK T1500 SERIES JETSTREAM MANAGED NETWORK SWITCHES Version 1.0 (2023) Page 1/1</p>	<p>TP-Link T1500 Series Configuration Guide</p> <p>Comprehensive guide for configuring TP-Link T1500 series JetStream managed network switches, covering web interface and CLI setup, system management, physical interface configurations, and security features.</p>
 <p>LED Explanation</p> <p>Installation Guide</p> <p>TP-LINK TL-SG1005P-PD 5-Port Gigabit Desktop PoE Switch</p> 	<p>TP-Link TL-SG1005P-PD 5-Port Gigabit Desktop PoE Switch Installation Guide</p> <p>Official installation guide for the TP-Link TL-SG1005P-PD, a 5-port Gigabit desktop switch featuring PoE IN and PoE OUT capabilities. Learn about LED indicators, switch functions, connection setup, specifications, and FAQs.</p>
 <p>LED Explanation</p> <p>Installation Guide</p> <p>TP-LINK TL-SG105, TL-SG108, TL-SG116 5/8/16-Port Gigabit Desktop Switches</p> 	<p>TP-Link Gigabit Desktop Switch Installation Guide: TL-SG105, TL-SG108, TL-SG116</p> <p>Installation guide for TP-Link's 5/8/16-Port Gigabit Desktop Switches (TL-SG105, TL-SG108, TL-SG116). Covers LED explanations, connection setup, technical specifications, FAQs, safety information, and compliance.</p>
 <p>LED Explanation</p> <p>Installation Guide</p> <p>TP-LINK TL-SG1005P, TL-SG1005LP 5-Port Gigabit Desktop PoE Switches</p> 	<p>TP-Link TL-SG1005P/LP: 5-Port Gigabit Desktop PoE Switch Installation Guide</p> <p>Comprehensive installation guide for the TP-Link TL-SG1005P and TL-SG1005LP 5-Port Gigabit Desktop PoE Switches, covering LED explanations, connection setup, specifications, and safety information.</p>
 <p>LED Explanation</p> <p>Installation Guide</p> <p>TP-LINK TL-SG608, TL-SG605 5/8-Port Gigabit Desktop Switches</p> 	<p>TP-Link TL-SG608/TL-SG605 Gigabit Desktop Switch Installation Guide</p> <p>Installation guide for TP-Link TL-SG608 and TL-SG605 5/8-Port Gigabit Desktop Switches, covering LED explanations, specifications, connection setup, and troubleshooting tips.</p>
 <p>LED Explanation</p> <p>Installation Guide</p> <p>TP-LINK TL-SG1005P 5-Port Gigabit Desktop PoE Switch</p> 	<p>TP-Link TL-SG1005P Installation Guide: 5-Port Gigabit PoE Switch Setup</p> <p>Comprehensive installation guide for the TP-Link TL-SG1005P 5-Port Gigabit Desktop PoE Switch. Learn about LED indicators, connection setup, specifications, and troubleshooting.</p>