tp-link

Installation Guide

5-Port Gigabit Desktop Switch

LED Explanation

Power

Power

On: Power on
Off: Power off

PoE MAX

PoE Max

On: The remaining PoE power is ≤ 7 W
Off: The remaining PoE power is > 7 W
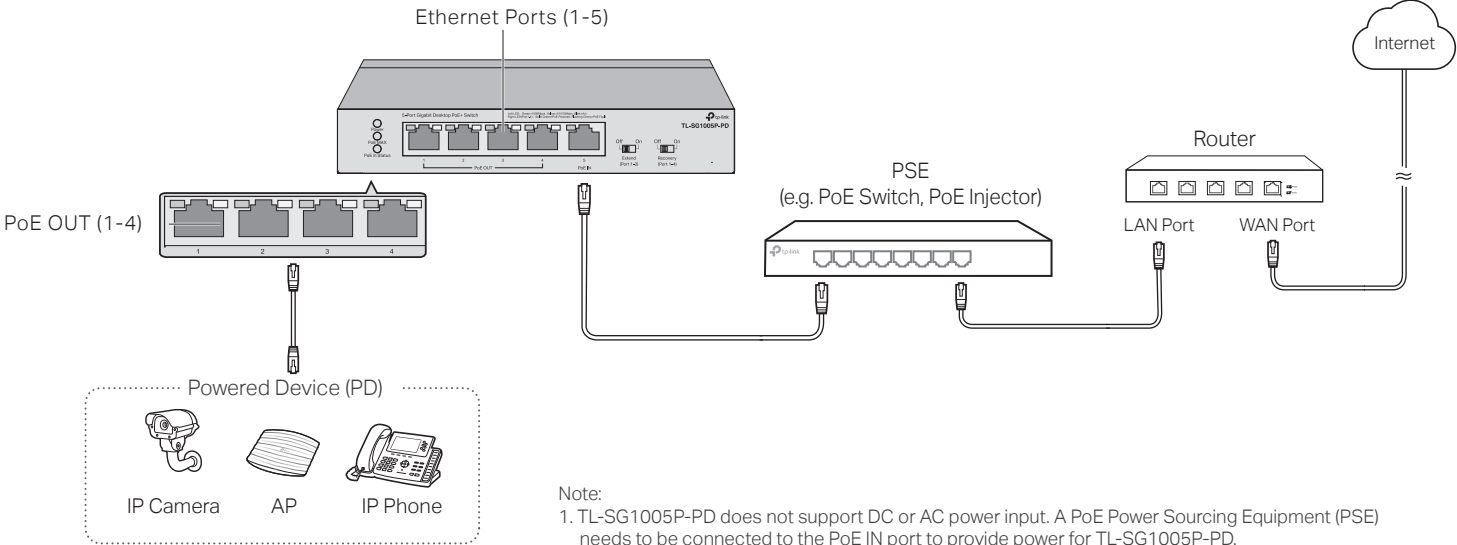
PoE in Status

PoE in Status

On (Green): Powered by 802.3bt (type 4)
On (Yellow): Powered by 802.3bt (type 3)
Off: Powered by 802.3af/at

Link/Act and PoE Status
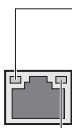
On (Green): Connected to a 1000 Mbps device
On (Yellow): Connected to a 10/100 Mbps device
Flashing: Transmitting/receiving data
Off: No device is connected to the corresponding port.

On: Providing PoE power
Flashing: PoE fault/Short-circuit
Off: Not providing PoE power

Switches Explanation

Note: The numbers in brackets indicate the ports where the feature takes effect. For example, when Extend (Port 1-2) is toggled to On, the Extend mode will be enabled for ports 1-2.

Extend

Off: The corresponding ports run at 10/100/1000 Mbps and support PoE power supply up to 100 m away.
On: The corresponding ports run at 10 Mbps and support PoE power supply up to 250 m away.

Recovery

Off: The PoE Auto Recovery function is disabled.
On: The switch will constantly detect the working status of a PoE powered device (PD). When the switch finds that the PD works abnormally, the switch will reboot it.

Connection

Ethernet Ports (1-5)

PoE OUT (1-4)

Powered Device (PD)

IP Camera   AP   IP Phone

PSE
(e.g. PoE Switch, PoE Injector)

Router

LAN Port   WAN Port

Internet

Note:
1. TL-SG1005P-PD does not support DC or AC power input. A PoE Power Sourcing Equipment (PSE) needs to be connected to the PoE IN port to provide power for TL-SG1005P-PD.
2. The PoE OUT ports can also be connected to non-PoE devices, but only transmit data.

Specifications

General Specifications

Standard	IEEE802.3i, IEEE802.3u, IEEE802.3ab, IEEE802.3x, IEEE802.3af, IEEE802.3at, (For PoE IN Port only) IEEE802.3bt
Protocol	CSMA/CD
Switching Capacity	10 Gbps
Transfer Method	Store-and-Forward
MAC Address Learning	Automatically learning, automatically aging
Interface	5 10/100/1000 Mbps RJ45 Ports Auto-Negotiation MDI/MDIX PoE IN Port: Port 5 PoE OUT Ports: Port 1-4
Network Media (Cable)	UTP/STP of Cat. 5E or above (based on the standards that the connected devices comply with)
PoE INPUT	Compliance with 802.3af/at/bt
PoE OUTPUT	Compliance with 802.3af/at
PoE Budget (for different PoE INPUT types*)	802.3af (type 1): 9W 802.3at (type 2): 21W 802.3bt (type 3): 47W 802.3bt (type 4): 66W
Wall Mountable	Yes
Distance Between Mounting Holes	94 mm

*PoE budget calculations are based on laboratory testing. Actual PoE power budget is not guaranteed and may vary due to PoE input, client limitations and environmental factors.

Environmental and Physical Specifications

Operating Temperature	-30˚C to 70˚C (-22˚F to 158˚F)
Storage Temperature	-40˚C to 70˚C (-40˚F to 158˚F)
Operating Humidity	10% to 90%RH non-condensing
Storage Humidity	5% to 90%RH non-condensing

Frequently Asked Questions (FAQ)

Q1. Why is the Power LED not lit?

The Power LED should be lit when the power system is working normally. If the Power LED is not lit, please try the following:
A1: Make sure the PSE and PD devices are connected to the corresponding ports properly.
A2: Make sure the PSE device is powered on and works normally.

Q2. Why is the Link/Act LED not lit while a device is connected to the corresponding port?

It is recommended that you check the following items:
A1: Make sure that the cable connectors are firmly plugged into the switch and the device.
A2: Make sure the connected device is turned on and works normally.
A3: The cable must be less than 100 meters long (328 feet). If Extend Mode is enabled, it should be less than 250 meters (820 feet).

Q3. Why are PoE ports not supplying power for PoE devices?

When the total power consumption of connected PoE devices exceeds the maximum, the PoE OUT port with a smaller port number has higher priority. The system will cut off power to the ports with larger port numbers to ensure supplying to other ports.
For example. if the switch is powered by 802.3bt (type 4) with port 1, 2 and 4 consuming 15.4 W respectively, and an additional PoE device with 20 W is connected to port 3, the system will cut off the power of port 4 to compensate for the overload.

Q4. What should I notice before using the PoE Auto Recovery feature?

A1: Before upgrading a connected PD device, disable PoE Auto Recovery to avoid damage to the PD device.
A2: When a PD device does not send data packets to the switch for a long period in certain scenarios (e.g. an IPC in sleep mode), disable PoE Auto Recovery to avoid the PD device repeatedly rebooting.

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