Installation Guide

Gigabit Desktop PoE+ Switch

LiteWave LS105GP/LS1210GP

LED Explanation

Power

On: Power on
Off: Power off

Link/Act; Uplink 1, Uplink 2

On:
Running at 10/100/1000 Mbps, but no activity.
Flashing:
Running at 10/100/1000 Mbps and is transmitting or receiving data.
Off:
No device is linked to the corresponding port.

PoE Status

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

PoE Max

For LS105GP:
On: 58 W≤Total power supply < 65 W
Flashing: Total power supply ≥ 65 W
Off: Total power supply < 58 W

For LS1210GP:
On: 54 W≤Total power supply < 61 W
Flashing: Total power supply ≥ 61 W
Off: Total power supply < 54 W

Switches Explanation

Note: The numbers in brackets indicate the ports where the feature takes effect. For example, when Extend (Port 1-4) is toggled to On, the Extend mode will be enabled for ports 1-4.

Extend (For LS105GP/LS1210GP)

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

Recovery (For LS105GP/LS1210GP)

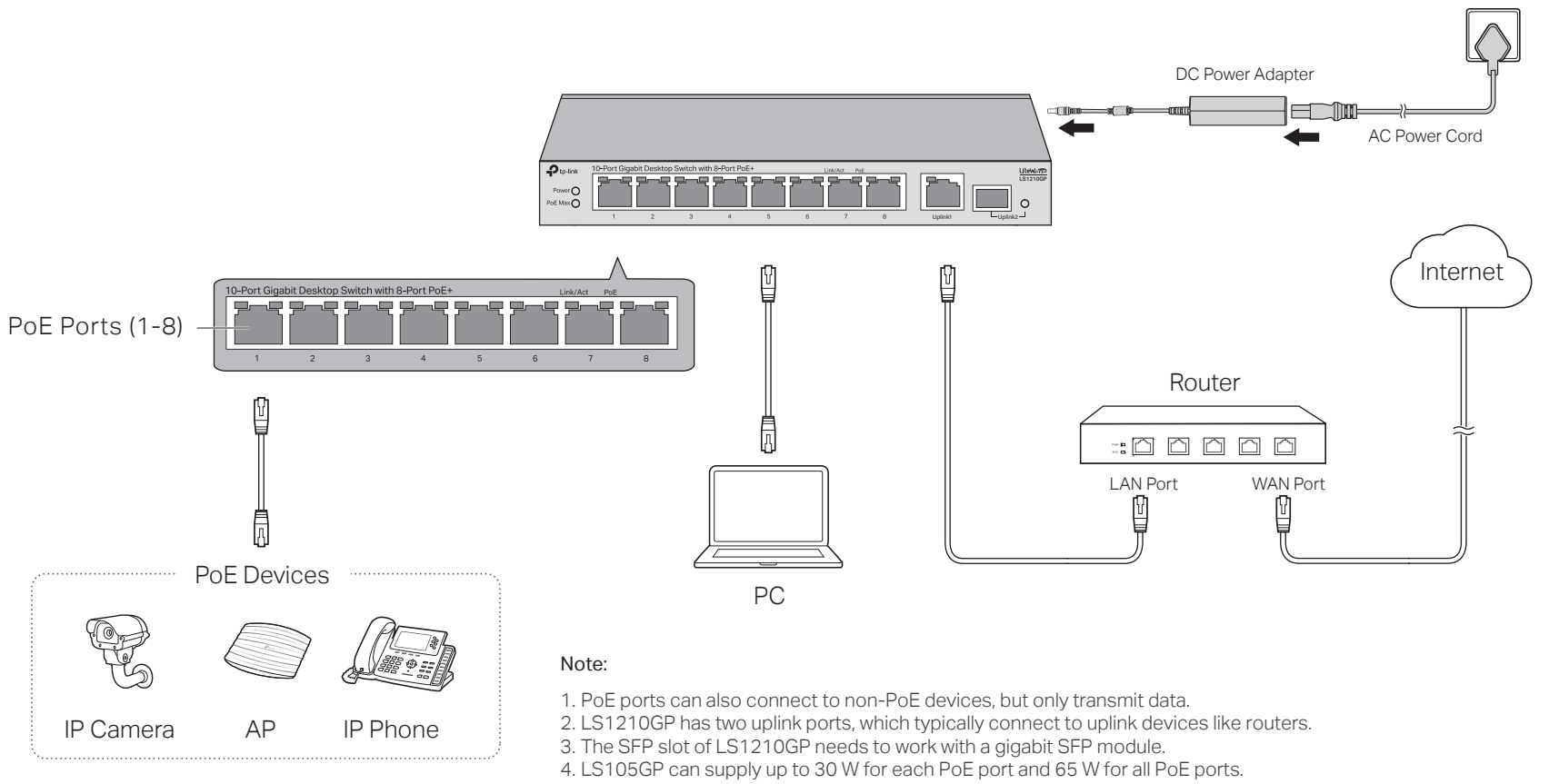
Off: The PoE Auto Recovery function is disabled.
On: The switch will constantly detect the working status of a PoE powered device (PD). When the switch finds that the PD works abnormally, the switch will reboot it.

Isolation (For LS1210GP)

Off: Ports can transmit data with each other.
On: Specific ports cannot transmit data with other downlink ports. They can transmit data only with the uplink ports.

Note: For simplicity, we will take LS1210GP for example throughout the Guide.

Connection



Note:

1. PoE ports can also connect to non-PoE devices, but only transmit data.
2. LS1210GP has two uplink ports, which typically connect to uplink devices like routers.
3. The SFP slot of LS1210GP needs to work with a gigabit SFP module.
4. LS105GP can supply up to 30 W for each PoE port and 65 W for all PoE ports.
5. LS1210GP can supply up to 30 W for each PoE port and 61 W for all PoE ports.

Specifications

General Specifications

Standard	IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.3af, IEEE 802.3at, IEEE 802.1p
Interface	LS105GP: 5 10/100/1000 Mbps RJ45 Ports, Auto-Negotiation MDI/MDIX; PoE Ports: Port 1-4 LS1210GP: 9 10/100/1000 Mbps RJ45 Ports, Auto-Negotiation MDI/MDIX; 1 1000 Mbps SFP port; PoE Ports: Port 1-8
Network Media (Cable)	10BASE-T: UTP category 3, 4, 5 cable (maximum 100 m); EIA/TIA-568 100 Ω STP (maximum 100 m) 100BASE-TX: UTP category 5, 5e cable (maximum 100 m); EIA/TIA-568 100 Ω STP (maximum 100 m) 1000BASE-T: UTP category 5e cable or above (maximum 100 m); EIA/TIA-568 100 Ω STP (maximum 100 m)
Switching Capacity	LS105GP: 10 Gbps LS1210GP: 20 Gbps
Transfer Method	Store-and-Forward
MAC Address Learning	Automatically learning, automatically aging
Power Supply	Input: 100-240 VAC, 50/60 Hz Output: 53.5 V DC/1.31 A
PoE Budget	LS105GP: 65 W (up to 30 W for each PoE port) LS1210GP: 61 W (up to 30 W for each PoE port)
Wall Mountable	Yes
Distance Between Mounting Holes	LS105GP: 76 mm LS1210GP: 150 mm

Environmental and Physical Specifications

Operating Temperature	0˚C to 40˚C (32˚F to 104˚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. The Power LED is not lit.

The Power LED should be lit when the power system is working normally. If the Power LED is not lit, please check as follows:

A1: Make sure the AC power cord is connected the switch with power source properly.

A2: Make sure the voltage of the power supply meets the requirements of the input voltage of the switch.

A3: Make sure the power source is on.

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 working well.

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 is the PoE Port not supplying power for PoE devices?

When the total power consumption of connected PoE devices exceeds the maximum, the PoE port with a smaller port number has a higher priority. The system will cut off power to the ports with larger port numbers to ensure supplying to other ports.

Take LS1210GP as an example. If port 1, 2 and 4 are 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 PoE powered device (PD), disable PoE Auto Recovery to avoid the PD's damage.

A2: When a PD 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 repeatedly rebooting.

To ask questions, find answers, and communicate with TP-Link users or engineers, please visit **https://community.tp-link.com** to join TP-Link Community.

For technical support and other information, please visit **https://www.tp-link.com/support**, or simply scan the QR code.

EU declaration of conformity

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of directives 2014/30/EU, 2014/35/EU, 2011/65/EU and (EU)2015/863.

The original EU declaration of conformity may be found at https://www.tp-link.com/en/support/ce/

UK declaration of conformity

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of the Electromagnetic Compatibility Regulations 2016 and Electrical Equipment (Safety) Regulations 2016.

The original UK declaration of conformity may be found at https://www.tp-link.com/support/ukca

Safety Information

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device. If you need service, please contact us.
- Place the device with its bottom surface downward.
- Do not use damaged charger or USB cable to charge the device.
- Do not use any other chargers than those recommended.
- Adapter shall be installed near the equipment and shall be easily accessible.
- The plug on the power supply cord is used as the disconnect device, the socket-outlet shall be easily accessible.