LiteWave PoE Switches

Datasheet

LiteWave Series

Ideal for Basic Networks




LS105LP/LS105GP




LS106LP/LS108GP




LS109P/LS1210GP

## Overview

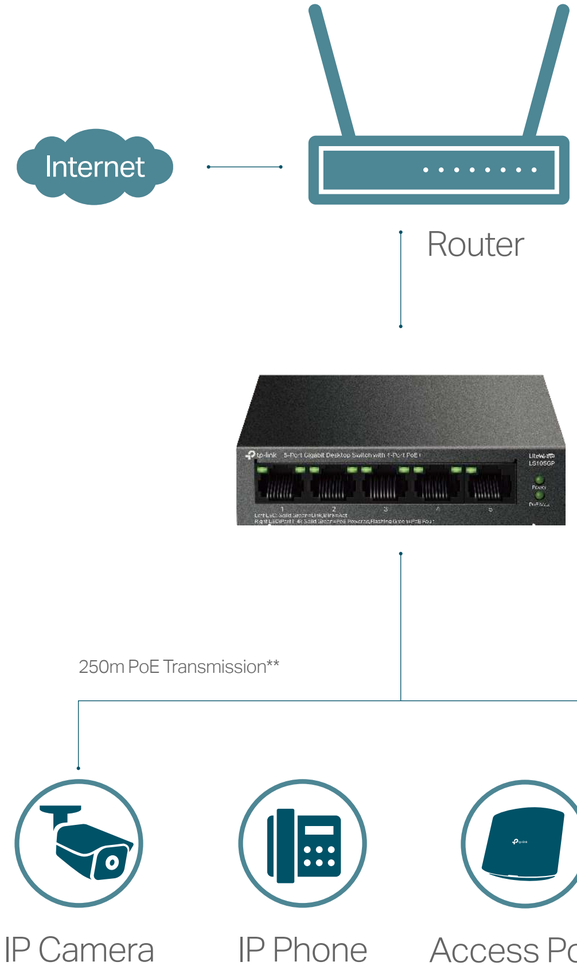
The TP-Link LiteWave Series PoE Switches require no configuration and provide PoE (Power over Ethernet) ports. They can automatically detect and supply power with all IEEE 802.3af/at compliant Powered Devices (PDs). In this situation, the electrical power is transmitted along with data in one single cable allowing you to expand your network to where there are no power lines or outlets, where you wish to fix devices such as APs, IP Cameras or IP Phones, etc.

## Highlights

- With multiple PoE ports, transfer data and power on one single cable
- Working with IEEE 802.3af /at compliant PDs, expand your network*
- 802.1p/DSCP QoS enable smooth latency-sensitive traffic
- Up to 250 m data and power transmission under Extend Mode** specially designed for surveillance system
- Isolation Mode (for LS109P&LS1210GP only) allows one-click client traffic separation for higher security and performance
- PoE Auto Recovery guarantees stable operation of PoE devices by automatically rebooting the dropped or unresponsive PD devices
- Plug and play, no configuration and installation required

## Network Diagram

Note: LS105GP is used for demonstration



# LiteWave PoE Switches

Datasheet

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Product Pictures | |  |  |  |  |  |  |
| Model | | LS105LP | LS106LP | LS109P | LS105GP | LS108GP | LS1210GP |
| Standards | | IEEE802.3i, IEEE802.3u, IEEE802.3x,IEEE802.3af | | IEEE802.3i, IEEE802.3u, IEEE802.3x,IEEE802.3af, IEEE802.3at | IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.3af, IEEE 802.3at, IEEE 802.1p | | IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.3af, IEEE 802.3at, IEEE 802.1p, EEE 802.3z |
| Interface | | 5 10/100 Mbps RJ45 Ports | 6 10/100 Mbps RJ45 Ports | 9 10/100 Mbps RJ45 Ports | 5 10/100/1000 Mbps RJ45 Ports | 8 10/100/1000 Mbps RJ45 Ports | 9 10/100/1000 Mbps RJ45 Ports<br>1 1000 Mbps SFP port |
| Network Media (Cable) | | 10BASE-T: UTP category 3, 4, 5 cable (maximum 100 m); EIA/TIA-568 100Ω STP (maximum 100 m)<br>100BASE-TX: UTP category 5, 5e cable (maximum 100 m); EIA/TIA-568 100Ω STP (maximum 100 m) | | | 10BASE-T: UTP category 3, 4, 5 cable (maximum 100 m); EIA/TIA-568 100 Ω STP (maximum 100 m)<br>100BASE-TX: UTP category 5, 5e cable (maximum 100 m); EIA/TIA-568 100 Ω STP (maximum 100 m)<br>1000BASE-T: UTP category 5e cable or above (maximum 100 m); EIA/TIA-568 100 Ω STP (maximum 100 m) | | |
| PoE | PoE Standard | PoE Standard: IEEE 802.3af | | IEEE 802.3af, IEEE 802.3at | | | |
| | PoE Port | Port 1–4, up to 15.4 W per port | | Port 1–8, up to 30 W per port | Port 1–4, up to 30 W per port | Port 1–8, up to 30 W per port | |
| | PoE Power Budget | 41 W*** | | 63 W*** | 65 W*** | 62 W*** | 61W*** |
| Auto Negotiation | | Yes | | | | | |
| Auto MDI/MDIX | | Yes | | | | | |
| Max Power Consumption | | 2.40 W (220 V/50 Hz no PD connected)<br>46.45 W (220 V/50 Hz with 41 W PD connected) | 2.53 W (220 V/50 Hz no PD connected)<br>47.76 W (220 V/50 Hz with 41 W PD connected) | 3.67 W (220 V/50 Hz no PD connected)<br>73.24 W (220 V/50 Hz with 63 W PD connected) | 4 W (220 V/50 Hz no PD connected)<br>74.46 W (220 V/50 Hz with 65 W PD connected) | 5.53 W (220 V/50 Hz no PD connected)<br>71.61 W (220 V/50 Hz with 62W PD connected) | 7.3 W (220 V/50 Hz no PD connected)<br>76.96 W (220 V/50 Hz with 61 W PD connected) |
| Max Heat Dissipation | | 8.15 BTU/h (220 V/50 Hz no PD connected)<br>157.93 BTU/h (220 V/50 Hz with 41 W PD connected) | 8.61 BTU/h (220 V/50 Hz no PD connected)<br>162.38 BTU/h (220 V/50 Hz with 41 W PD connected) | 12.48 BTU/h (220 V/50 Hz no PD connected)<br>249 BTU/h (220 V/50 Hz with 63 W PD connected) | 13.6 BTU/h (220 V/50 Hz no PD connected)<br>253.16 BTU/h (220 V/50 Hz with 65 W PD connected) | 18.81 BTU/h (220 V/50 Hz no PD connected)<br>243.47 BTU/h (220 V/50 Hz with 62W PD connected) | 24.82 BTU/h (220 V/50 Hz no PD connected)<br>261.66 BTU/h (220 V/50 Hz with 61 W PD connected) |
| Forwarding Mode | | Store and Forward | | | | | |
| Switch Capacity | | 1 Gbps | 1.2 Gbps | 1.8 Gbps | 10 Gbps | 16 Gbps | 20 Gbps |
| MAC Address Table | | 2k, Auto-learning, Auto-aging | | | | 4k, Auto-learning, Auto-aging | |
| Extend Mode | | YES (Ports 1-4) | | YES (Ports 1-4/Ports 1-8) | YES (Ports 1-2) | | YES (Ports 1-4) |
| Isolation Mode | | No | | YES (Ports 1-8) | No | | YES (Ports 1-8) |
| PoE Auto Recovery | | YES (Ports 1-4) | YES (Ports 1-4) | YES (Ports 1-8) | YES (Ports 1-4) | YES (Ports 1-8) | |
| Flow Conrol | | Yes | | | | | |
| Fan Quantity | | 0 | | | | | |
| LED | | Power, Link/Act, PoE Status, PoE MAX | | | | | |
| Dimensions | | 3.9*3.9*1.0 in.<br>(99.8 x 98 x 25 mm) | 6.2*4.0*1.0 in.<br>(158 x 101 x 25 mm) | 6.7X3.9X1.1 in.<br>(171 x 98 x 27 mm) | 3.9*3.9*1.0 in.<br>(99.8 x 98 x 25 mm) | 6.2*3.9*1.0 in.<br>(158 x 99 x 25 mm) | 8.2*4.9*1.0 in.<br>(209 x 126 x 26 mm) |
| Certifications | | CE, FCC, RoHS | | | | | |

**Note:**

* LS105LP and LS106LP only support IEEE 802.3af, and provide PoE Power up to 15.4W for each PoE port; other switches support IEEE 802.3af/at, and provide PoE Power up to 30W for each PoE port.
** The speed of the ports which are under extend mode will be downgraded to 10Mbps. Actual transmission distance may vary from the quality of the cables.
*** PoE budget calculations are based on laboratory testing. Actual PoE power budget is not guaranteed and will vary as a result of client limitations and environmental factors.



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