

LiteWave PoE Switches

## LiteWar Series





#### LS105LP/LS105GP

LS106LP/LS108GP

#### Datasheet





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

Product Pictures			Contraction of the second seco		
	Model		LS105LP	LS106LP	LS109P
Standards		IEEE802.3i, IEEE802.3u, IEEE802.3x,IEEE802.3af		IEEE802.3i, IEEE802.3u, IEEE802.3x,IEEE802.3af, IEEE802.3at	
Interface		5 10/100 Mbps RJ45 Ports	6 10/100 Mbps RJ45 Ports	9 10/100 Mbps RJ45 Ports	
Network Media (Cable)			10BASE-T: UTP category 3, 4, 5 cable (maximum 100 m); EIA/TIA-568 100Ω STP (maximum 100 m) 100BASE-TX: UTP category 5, 5e cable (maximum 100 m); EIA/TIA-568 100Ω STP (maximum 100 m)		
PoE		PoE Standard	PoE Standard: IEEE 802.3af		
	-	PoE Port	Port 1–4, up to 15.4 W per port		Port 1–8, up to 30 W per port
		PoE Power Budget	41 W***		63 W***
Auto Negotiation				'	
Auto MDI/MDIX					
Max Power Consumption		2.40 W (220 V/50 Hz no PD connected) 46.45 W (220 V/50 Hz with 41 W PD connected)	2.53 W (220 V/50 Hz no PD connected) 47.76 W (220 V/50 Hz with 41 W PD connected)	3.67 W (220 V/50 Hz no PD connected) 73.24 W (220 V/50 Hz with 63 V PD connected)	
Max Heat Dissipation			8.15 BTU/h (220 V/50 Hz no PD connected) 157.93 BTU/h (220 V/50 Hz with 41 W PD connected)	8.61 BTU/h (220 V/50 Hz no PD connected) 162.38 BTU/h (220 V/50 Hz with 41 W PD connected)	12.48 BTU/h (220 V/50 Hz no PI connected) 249 BTU/h (220 V/50 Hz with 63 PD connected)
Forwarding Mode				Sto	
Switch Capacity		1 Gbps	1.2 Gbps	1.8 Gbps	
MAC Address Table			2k, Auto-learning, Auto-aging		
Extend Mode			YES (Ports 1-4)		YES (Ports 1-4/Ports 1-8)
Isolation Mode			No		YES (Ports 1-8)
PoE Auto Recovery			YES (Ports 1-4)	YES (Ports 1-4)	YES (Ports 1-8)
Flow Conrol					
Fan Quantity					
LED			Power, Link/A		
Dimensions		3.9*3.9*1.0 in. (99.8 x 98 x 25 mm)	6.2*4.0*1.0 in. (158 x 101 x 25 mm)	6.7X3.9X1.1 in. (171 x 98 x 27 mm)	
Certifications					C

#### 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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LS105GP	LS108GP	LS1210GP					
IEEE 802.3i, IEEE 802.3u, IEEE 80 IEEE 802.3at	2.3ab, IEEE 802.3x, IEEE 802.3af, , 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					
5 10/100/1000 Mbps RJ45 Ports	8 10/100/1000 Mbps RJ45 Ports	9 10/100/1000 Mbps RJ45 Ports 1 1000 Mbps SFP port					
10BASE-T: UTP category 3, 4, 5 cable (maximum 100 m); EIA/TIA-568 100 $\Omega$ STP (maximum 100 m) 100BASE-TX: UTP category 5, 5e cable (maximum 100 m); EIA/TIA-568 100 $\Omega$ STP (maximum 100 m) 1000BASE-T: UTP category 5e cable or above (maximum 100 m); EIA/TIA-568 100 $\Omega$ STP (maximum 100 m)							
IEEE 802.3af, IEEE 802.3at							
Port 1–4, up to 30 W per port	Port 1–8, up to 30 W per port						
65 W***	62 W***	61W***					
Yes							
Yes							
4 W (220 V/50 Hz no PD connected) 74.46 W (220 V/50 Hz with 65 W PD connected)	5.53 W (220 V/50 Hz no PD connected) 71.61 W (220 V/50 Hz with 62W PD connected)	7.3 W (220 V/50 Hz no PD connected) 76.96 W (220 V/50 Hz with 61 W PD connected)					
13.6 BTU/h (220 V/50 Hz no PD connected) 253.16 BTU/h (220 V/50 Hz with 65 W PD connected)	18.81 BTU/h (220 V/50 Hz no PD connected) 243.47 BTU/h (220 V/50 Hz with 62W PD connected)	24.82 BTU/h (220 V/50 Hz no PD connected) 261.66 BTU/h (220 V/50 Hz with 61 W PD connected)					
pre and Forward							
10 Gbps	16 Gbps	20 Gbps					
	4k, Auto-lea	4k, Auto-learning, Auto-aging					
YES (Pc	rts 1-2)	YES (Ports 1-4)					
N	0	YES (Ports 1-8)					
YES (Ports 1-4)	YES (Ports 1-8)						
Yes							
0							
Act, PoE Status, PoE MAX							
3.9*3.9*1.0 in. (99.8 x 98 x 25 mm)	6.2*3.9*1.0 in. (158 x 99 x 25 mm)	8.2*4.9*1.0 in. (209 x 126 x 26 mm)					
CE, FCC, RoHS							
	IEEE 802.3i, IEEE 802.3i, IEEE 802.3i, IEEE 802.3i, IEEE 802.3i, IEEE 802.3i, 10BASE-T: UTP category 3, 4, 5 cal 100BASE-T: UTP category 5, 5 e c 1000BASE-T: UTP category 5 e cab   IEEE 802.3i   Port 1-4, up to 30 W per port   65 W***   Yes   4 W (220 V/50 Hz no PD connected)   74.46 W (220 V/50 Hz with 65 W PD connected)   13.6 BTU/h (220 V/50 Hz no PD connected)   13.6 BTU/h (220 V/50 Hz no PD connected)   13.6 BTU/h (220 V/50 Hz no PD connected)   10 Gbps   YES (Ports 1-6 SW PD connected)   A W (220 V/50 Hz no PD connected)   13.6 BTU/h (220 V/50 Hz with 65 W PD connected)   and Forward   YES (Ports 1-6)   YES (Ports 1-4)   YES (Ports 1-4)   YES (Ports 1-4)	IEEE 802.3i, IEEE 802.3u, IEEE 802.3a, IEEE 802.3x, IEEE 802.3af, IEEE 802.3a, IEEE 802.3af, IEEE 802.3af					