

5-Port Gigabit Easy Smart Switch with 4-Port PoE+

MODEL: TL-SG105PE Datasheet



Overview

The TL-SG105PE is an 5-port Gigabit Easy Smart Switch with 4 PoE+ ports, represents a powerful upgrade from an unmanaged switch. It is designed specially for small businesses that require simple network management and PoE function. The TL-SG105PE can connect and power up to four PoE devices, such as wireless access points (APs), IP cameras, and IP phones. Through its web-based user interface and management utility, the TL-SG105PE offers a variety of useful features, including network monitoring, traffic prioritization, PoE Auto Recovery and enhanced QoS. Additionally, with port-based, tag-based and MTU VLAN, TL-SG105PE can improve security and meet more network segmentation requirements.

Power Over Ethernet

4 of the 5 Auto-Negotiation RJ45 ports (port 1 to port 4) of the switch support Power over Ethernet (PoE) function. These PoE ports can automatically detect and supply power with those IEEE 802.3af/at compliant Powered Devices (PDs).

Overload Arrangement

TL-SG105PE has the priority function which will help protect the system when the system power is overloaded. If all PoE PDs power consumption is ≥ 65 W, a priority will be arranged among the PoE ports, then the system will cut off the power of the lowest-priority port.

Intelligent Power Management

Priority (port 1>port 2>port 3>port 4): This function will help protect the system if the system power becomes overloaded. For example, Port 1, 2 and 4 are consuming 15.4 W respectively. If an additional PoE device with 20 W is inserted to port 3, the system will cut off the power of port 4 to compensate for the overload.

Effective Management

TL-SG105PE offers network monitoring for users to observe traffic behavior. Through its web-based user interface and management utility, the TL-SG105PE offers a variety of useful features, including network monitoring, traffic prioritization, PoE Auto Recovery and enhanced QoS.

With Port Mirroring, Loop Prevention and Cable Diagnostics features, TL-SG105PE can identify and even locate connection problems on your business network. Also, administrators can designate the priority of the traffic based on Port Priority, 802.1P Priority and DSCP Priority, to ensure that voice and video are always clear, smooth and lag-free.

Additionally, to improve security and network performance, TL-SG105PE supports MTU VLAN, port-based VLAN and 802.1Q-based VLAN functions. PoE Auto Recovery automatically reboots your dropped or unresponsive PoE-powered devices.


TL-SG105PE is an upgrade from the plug-and-play Unmanaged Switch, delivering great value while empowering your network and similarly delivering great value to the end user.

Easy to Use

TL-SG105PE is easy to use and manage. Auto MDI/MDI-X crossover on all ports eliminate the need for crossover cables or uplink ports. Auto-negotiation on each port senses the link speed of a network device (either 10, 100, or 1000 Mbps) and intelligently adjusts for compatibility and optimal performance. Its compact size makes it ideal for desktops with limited space. Dynamic LED lights provide real-time work status display and basic fault diagnosis.

Specifications

Hardware Features & Performance

Product Picture		
Model		TL-SG105PE
Physical Features	Interface	5 10/100/1000Mbps RJ45 Ports
	PoE Standard	802.3af/at
	PoE Ports	Port 1~ Port 4, up to 30 W per port
	PoE Power Budget	65 W
	External Power Supply	External Power Adapter(output: 53.5 VDC/1.31 A)
	Max Power Consumption	4.52 W (220 V/50 Hz. no PD connected) 73.86 W (220 V/50 Hz. with 65 W PD connected)
	Max Heat Dissipation	15.41 BTU/h (no PD connected) 251.86 BTU/h (with 65 W PD connected)
	Fan Quantity	Fanless
	LED	Power, PoE Max, Speed/Link/Act, PoE Status (Port 1~Port 4)
	Certification	CE, FCC
	Dimensions	3.9 x 3.9 x 1.0 in (99.8 x 98 x 25 mm)
	Environment	Operating Temperature: 0 °C~40 °C (32 °F~104 °F) Storage Temperature: -40 °C~70 °C (-40 °F~158 °F) Operating Humidity: 10% ~ 90%RH, non-condensing Storage Humidity: 5%~95%RH, non-condensing
Performance	Switching Capacity	10 Gbps
	Forwarding Rate	7.44 Mpps
	MAC Address Table	2K
	Packet Buffer Memory	1 Mb
	Jumbo Frame	16 KB

Note: 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.

Specifications

Software Features

L2 Switching Features	<ul style="list-style-type: none">• IGMP Snooping<ul style="list-style-type: none">- IGMP Snooping- Supports 128 Groups• Link Aggregation<ul style="list-style-type: none">- Supports static link aggregation- Supports up to 4 aggregation groups, containing 4 ports per group• Port Mirroring<ul style="list-style-type: none">- One to One- Many to One• Cable Test• Loop Prevention• PoE Auto Recovery
VLAN	<ul style="list-style-type: none">• Supports up to 32 VLANs (out of 4K VLAN IDs)• MTU/Port/802.1Q VLAN
Quality of Service (QoS)	<ul style="list-style-type: none">• Support Port-based/802.1p/DSCP priority• Support 4 priority queues• Rate Limit• Storm Control
Management	<ul style="list-style-type: none">• Web-based Graphic User Interface (GUI)• Easy Smart Configuration Utility<ul style="list-style-type: none">- Central Management- Friendly user interface
Ethernet Protocols	<ul style="list-style-type: none">• IEEE 802.3i 10BASE-T• IEEE 802.3u 100BASE-TX/FX• IEEE 802.3ab 1000BASE-T• IEEE 802.3x Flow Control• IEEE 802.1q VLANs/VLAN tagging• IEEE 802.1p QoS