TP-LINK

8-Port Gigabit Smart Switch

TL-SG2008

◥ Overview

TP-LINK gigabit Smart Switch TL-SG2008 is equipped with 8 gigabit RJ45 ports. The switch provides high performance, enterprise-level QoS, useful security strategies and rich layer 2 management features.

TP-LINK's 8-Port Gigabit Smart Switch TL-SG2008 is especially designed for the small and medium business networks that require e cient network management. TL-SG2008 comes with a comprehensive set of features, such as Link Aggregation Group, 802.1Q VLAN, Access Control Lists (ACL), Quality of Service(QoS L2 to L4), Storm Control and IGMP Snooping to provide a small or medium-sized business with a network that is geared for growth while ensuring performance and reliability. What's more, its easy-to-use web management inter-face means faster setup and con guration with less downtime, providing the ideal solution for your business network.

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Layer 2 Features

- Link Aggregation Control Protocol (LACP)
- Static Link Aggregation
- 512 VLANs
- Port Isolation
- STP/RSTP/MSTP
- IGMP Snooping

Quality of Service

- 4 priority queues
- Support IEEE 802.1P
- DSCP QoS
- Rate limit feature

Security Strategies

- Port Security
- Access Control List(L2~L4 ACL)
- Storm Control
- SSL and SSH encryptions
- DHCP Filtering

Management

- Web-based GUI
- Command Line Interface
- SNMP v1/v2c/v3
- RMON (1, 2, 3, 9 group)

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Global technical support

- Details:http://www.tp-link.com/support/Localesupport.asp
- German/Austrian/Swiss users are not included

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Advanced QoS features

To integrate voice, data and video service on one network, the switch applies rich QoS policies. Administrator can designate the priority of the traffic based on a variety of means including Port Priority, 802.1P Priority and DSCP Priority, to ensure that voice and video are always clear, smooth and jitter free.

Abundant Layer 2 features

For more application of layer 2 switches, TL-SG2008 supports a complete lineup of layer 2 features, including 802.1Q tag VLAN, Port Isolation, Port Mirroring, STP/RSTP/MSTP, LACP and 802.3x Flow Control function. Any more, the switches provide advanced features for network maintenance. Such as Loop Back Detection, Cable Diagnostics and IGMP Snooping. IGMP snooping ensures the switch intelligently forward the multicast stream only to the appropriate subscribers while IGMP throttling & filtering restrict each subscriber on a port level to prevent unauthorized multicast access.

Enterprise Level Management Features

TL-SG2008 is easy to use and manage. It supports various user-friendly standard management features, such as intuitive web-based Graphical User Interface (GUI) or industry-standard Command Line Interface(CLI) through Telnet Management Mode. SNMP (v1/2/3) and RMON support enables the switch to be polled for valuable status information and send traps on abnormal events.

◩ Specifications

Hardware Features & Performance

Product Picture	
Model	TL-SG2008
Physical Features	
10/100/1000Mbps RJ45 Port	8
Power Supply	100-240VAC, 50/60Hz
Fan Quantity	Fanless
Certification	CE, FCC
Dimensions (W x D x H)	8.2 x 4.9 x 1.0 in. (209 x 126 x 26 mm)
Environment	Operating Temperature: 0℃~40℃(32℉~104℉); Storage Temperature: -40℃~70℃(-40℉~158℉); Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing
Performance	
Switch Capacity	16Gbps
Forwarding Rate	11.9Mpps
Mac Address Table	8k
Package Buffer Memory	4Mb
Jumbo Frame	9216 Bytes

Software Features

L2 Switching Features

- **Link Aggregation**
  - Support 802.3ad LACP
  - Support static link aggregation
  - Up to 6 aggregation groups, containing 4 ports per group
- **Spanning Tree Protocol(STP)**
  - IEEE 802.1D Spanning Tree Protocol
  - IEEE 802.1W Rapid Spanning Tree Protocol
  - IEEE 802.1S Multiple Spanning Tree Protocol
  - STP Security: Loop back detection, TC Protect, BPDU Filter/Protect, Root Protect

- **Multicast**
  - Support IGMP Snooping V1/V2/V3, up to 256 groups
  - Support multicast VLANs, IGMP Immediate Leave, Unknown IGMP Throttling, IGMP Filtering, Static Multicast IP
- **VLAN**
  - Support IEEE802.1Q with 512 VLANs simultaneously (out of 4K VIDs)

IEEE 802.3x flow control for Full Duplex mode and backpressure for Half Duplex mode

Quality of Service (QoS)

- Support 802.1p CoS/DSCP priority
- Support 4 priority queues
- Queue scheduling: SP, WRR, SP+WRR
- Port/Flow- based Rate Limiting
- Voice VLAN assure voice applications much smoother performance

Advanced Security Strategies

- Support Broadcast, Multicast and Unknown unicast Storm Control
- Static/Dynamic Port Security (MAC-based)
- Access Control List (ACL)-L2~L4 package Itering based on source and destination MAC address, IP address, TCP/UDP ports
- SSL and SSH encryptions

Management

- Support Web-based GUI management mode
- Support Command Line Interface(CLI) through telnet
- management mode
- SNMP v1/v2c/v3
- RMON (1, 2, 3, 9 groups)
- DHCP/BOOTP Client
- CPU Monitoring
- Port Mirroring (Many to One)

- Cable Diagnostics feature
- Ping/Tracert feature
- System Log

Ethernet Protocols

- IEEE 802.3i 10BASE-T
- IEEE 802.3u 100BASE-TX/FX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3z 1000BASE-X
- IEEE 802.3x Flow control
- IEEE 802.1p QoS
- IEEE 802.1q VLANs / VLAN tagging
- IEEE 802.1D Spanning Tree Protocol (STP)
- IEEE 802.1W Rapid Spanning Tree (RSTP)
- IEEE 802.1S Multiple Spanning Tree (MSTP)

MIBs

- MIB II (RFC1213)
- Interface MIB (RFC2233)
- Ethernet Interface MIB (RFC843)
- Bridge MIB (RFC1493)
- P/Q-Bridge MIB (RFC2674)
- RMON MIB (RFC2819)
- RMON2 MIB (RFC2021)
- Remote Ping, Traceroute MIB (RFC2925)
- Support TP-LINK private MIBs

Ordering Information

Host Switch	
Product Model	Description
TL-SG2008	8-Port Gigabit Smart Switch
Router	
Product Model	Description
TL-ER604W	SafeStream Wireless N Gigabit Broadband VPN Router
TL-R470T+	Load Balance Broadband Router
Media Converter	
Product Model	Description
MC210CS	Gigabit single-mode SC SFP Transceiver, up to 15Km, chassis mountable
MC200CM	Gigabit multi-mode SC SFP Transceiver, up to 550m, chassis mountable
MC220L	Gigabit SFP slot supporting mini-GBIC modules, chassis mountable
MC1400	14-slot power supply chassis for TP-LINK Media Converter, 19-inch rack-mountable