



TP-LINK

Gigabit Smart Switch

TL-SG2452

■ Overview

TP-LINK Gigabit Smart Switch TL-SG2452 is equipped with 48 gigabit RJ45 ports and 4 SFP slots. The switch provides high performance, enterprise-level QoS, useful security strategies and rich layer 2 management features.

TP-LINK Gigabit Smart Switch TL-SG2452 is a cost-effective product solution for the small and medium business. TL-SG2452 has useful security features. The Storm Control feature protects against Broadcast, Multicast and Unknown unicast Storm. Quality of Service (QoS, L2 to L4) provides enhanced traffic management capabilities to move your data smoother and faster. Anymore, the easy-to-use web management interfaces, along with SNMP and RMON, mean faster setup and configuration with less downtime. For workgroup and departments requiring cost-sensitive layer 2 switch and gigabit capability, TP-LINK Gigabit Smart Switch TL-SG2452 provides you the ideal access-edge solution.

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
- Storm Control

Management

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



- 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-SG2452 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-SG2452 is easy to use and manage. It supports various user-friendly standard management features, such as intuitive web-based Graphical User Interface(GUI) or 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-SG2452 |
| Physical Features | | |
| Connector | 10/100/1000Mbps RJ45 Ports | 48 |
| | Gigabit SFP Ports | 4 |
| Power Supply | | 100-240VAC, 50/60Hz |
| FAN Quantity | | 2 |
| Certifications | | CE, FCC |
| Dimensions (W × D × H) | | 17.3 × 10.2 × 1.7 in. (440 × 260 × 44 mm), 19-inch Rack mount Steel Case, 1U Height |
| 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% non-condensing, Storage Humidity: 5%~90% non-condensing |
| Performance | | |
| Switch Capacity | | 104Gbps |
| Forwarding Rate | | 77.4Mpps |
| MAC Address Table | | 8k |
| Jumbo Frame | | 10240 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 up to 512 VLANs simultaneously (out of 4K VLAN IDs)

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

Management

- Support Web-based GUI 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 (RFC1643)
- 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-SG2452 | 48-Port Gigabit Smart Switch with 4 SFP Slots |
| Router | |
| Product Model | Description |
| TL-ER6120 | SafeStream Gigabit Dual-WAN VPN Router |
| TL-ER5120 | Gigabit Load Balance Broadband Router |
| SFP Modules | |
| Product Model | Description |
| TL-SM311LS | Gigabit SFP module, Single-mode, LC interface, Up to 10km distance |
| TL-SM311LM | Gigabit SFP module, Multi-mode, LC interface, Up to 550m distance |
| TL-SM321A | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX:1550nm/RX:1310nm, 10km |
| TL-SM321B | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX:1310nm/RX:1550nm, 10km |
| 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 |

*This software version doesn't support these functions, which will be added in next version.