



TP-LINK JetStream™

24-Port Gigabit L2 Managed PoE Switch with 4 Combo SFP Slots

TL-SG3424P

Overview

The TL-SG3424P provides 24 10/100/1000Mbps ports that supports 802.3at/af-compliant PoE, with a total PoE power supply up to 320W, powerful and flexible enough for users to deploy wireless access points or IP-based network surveillance cameras. The switch also comes equipped with 4 combo SFP slots, expanding your network flexibly. In addition, it provides high performance, enterprise-level QoS, advanced security strategies and rich layer 2 management features. With all these advanced features, the JetStream™ Gigabit L2 Managed PoE Switch is an ideal choice for small and medium business networking.

TL-SG3424P has robust security and management features. The IP-MAC-Port-VID Binding and Access Control List (ACL) functions protect against broadcast storm, ARP and Denial-of-Service (DoS) attacks, etc. Quality of Service (QoS, L2 to L4) provides enhanced traffic management capabilities to move your data smoother and faster. Any more, the easy-to-use web management interfaces, along with CLI, 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 JetStream™ Gigabit L2 Managed PoE Switch TL-SG3424P provides you the ideal access-edge solution.

PoE Features

- Standard: 802.3at/af compliant with
- up to 30W per port
- PoE+ Ports: 24 Ports
- Power Supply: 320W
- PoE Schedule (Time-based Settings)

Layer 2 Features

- Link Aggregation Control Protocol (LACP)
- 4K VLAN
- GVRP (GARP VLAN Registration Protocol)
- STP/RSTP/MSTP
- IGMP Snooping
- LLDP (LLDP-MED)

Security Strategies

- IP-MAC-Port-VID Binding
- Access Control List (L2~L4 ACL)
- 802.1x and RADIUS Authentication
- Support DoS defend
- Port Security
- SSL and SSH encryptions

Quality of Service

- 4 priority queues
- IEEE 802.1P
- DSCP QoS

Management

- Web-based GUI
- Command Line Interface
- 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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TL-SG3424P

IEEE 802.3at/af-compliant Power over Ethernet

The TL-SG3424P provides 24 10/100/1000Mbps ports that support 802.3at/af-compliant PoE, with a total PoE power supply up to 320W, powerful and flexible enough for users to deploy wireless access points, surveillance cameras, IP phones and other PoE supported devices. The switch also comes equipped with 4 combo SFP slots, expanding your network's flexibility. In addition, it provides high performance, enterprise-level QoS, advanced security strategies and rich layer 2 management features. With all these advanced features, the JetStream™ Gigabit L2 Managed PoE+ Switch is an ideal choice for small and medium business networking.

Secure Networking

This JetStream™ Gigabit L2 Managed PoE Switch provides IP-MAC-Port-VID Binding, Port Security, Storm control and DHCP Snooping which protect against broadcast storms, ARP attacks, etc. It integrates some typical DoS attacks to select. You can protect these attacks more easily ever than before. In addition, the Access Control Lists (ACL, L2 to L4) feature restricts access to sensitive network resources by denying packets based on source and destination MAC address, IP address, TCP/UDP ports and even VLAN ID. Moreover, the switch supports 802.1X authentication, which is used in conjunction with a RADIUS server to require some authentication information before access to the network is allowed. Guest VLAN function supports to enable the non-802.1X clients to access the specific network resource.

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 IP or MAC address, TCP or UDP port number, etc, to ensure that voice and video are always clear, smooth and jitter free. In conjunction with the Voice VLAN the switch supporting, the voice applications will operate with much smoother performance.

Abundant Layer 2 features

For more application of layer 2 switches, TL-SG3424P supports a complete lineup of layer 2 features, including 802.1Q tag VLAN, Port Mirroring, STP/RSTP/MSTP, Link Aggregation Control Protocol and 802.3x Flow Control function. Any more, the switch provides 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-SG3424P 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), either administration traffic can be protected through SSL or SSH encryptions. SNMP (v1/2/3) and RMON support enables the switch to be polled for valuable status information and send traps on abnormal events. In addition, integrated NDP/NTDP protocol, the switch supports to be managed by the commander switch through IP clustering function more easily.

Specifications

Hardware Features & Performance

Product Picture		
Model		TL-SG3424P
Hardware Features		
Connector	10/100/1000Mbps RJ45 Ports	24
	Combo Gigabit SFP slots*	4
	Console Port	1
Power Supply		100-240VAC, 50/60Hz
FAN Quantity		3
Certifications		CE, FCC
PoE Features		Standard: 802.3at/af compliant
		PoE Ports: 24 Ports
		PoE Power Supply: 320W
Dimensions (W × D × H)		17.3 × 13 × 1.7 in. (440 × 330 × 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		48Gbps
Forwarding Rate		35.7Mpps
MAC Address Table		8k
Jumbo Frame		10KB

Software Features

L2 Switching Features

- **Link Aggregation**
 - Support static link aggregation
 - Support 802.3ad LACP
 - Up to 8 aggregation groups, containing 8 ports per group
- **Spanning Tree Protocol(STP)**
 - IEEE 802.1D Spanning Tree Protocol
 - IEEE 802.1s Multiple Spanning Tree Protocol
 - IEEE 802.1w Rapid 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 4K VLANs simultaneously (out of 4K VIDs)
 - Support Port VLAN, Protocol VLAN and MAC-based VLAN
 - Support GARP/GVRP feature
- **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

- IP-MAC-Port-VID Binding
- Static/Dynamic Port Security (MAC-based)
- DoS defend feature
- Dynamic ARP Inspection
- 802.1x authentication
 - Support 802.1x port/MAC based authentication
 - Support Radius authentication and accountability
 - Guest VLAN
- Access Control List (ACL)
 - L2~L4 package filtering based on source and destination MAC address, IP address, TCP/UDP ports, 802.1p, DSCP, protocol and VLAN ID
 - Time based ACL
- Support Broadcast, Multicast and Unknown unicast Storm Control
- Secure web management through HTTPS and SSLv2/v3/TLSv1
- Secure remote command line interface(CLI) management with SSH v1/V2

Management

- Support Web-based GUI management mode
- Support Command Line Interface(CLI) through console port, telnet management mode
- SNMP v1/v2c/v3
- RMON (1, 2, 3, 9 groups)
- DHCP/BOOTP Client
 - DHCP Snooping

- DHCP Option 82
- CPU Monitoring
- Port Mirroring (Many to One)
- Cable Diagnostics feature
- Ping/Tracert feature
- SNTP
- Integrated NDP/NTDP 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 802.3av GVRP
- IEEE 802.3ad Link Aggregation
- IEEE 802.3x Flow control
- IEEE 802.1p QoS
- IEEE 802.1q VLANs / VLAN tagging
- IEEE 802.1v Protocol VLAN
- IEEE 802.1d Spanning Tree Protocol (STP)
- IEEE 802.1s Multiple Spanning Tree (MSTP)
- IEEE 802.1w Rapid Spanning Tree (RSTP)
- IEEE 802.1x Network Login Security

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)
- Radius Accounting Client MIB (RFC2620)
- Radius Authentication Client MIB (RFC2618)
- Remote Ping, Traceroute MIB (RFC2925)
- Support TP-LINK private MIBs

Ordering Information

Host Switch	
Product Model	Description
TL-SG3424P	JetStream™ 24-Port Gigabit L2 Managed PoE Switch with 4 Combo SFP Slots
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

* The switch supports 100/1000Mbps SFP module at full-duplex mode. When using the SFP port with a 100M module or a gigabit module, you need to configure its corresponding Speed and Duplex mode through firmware.

By factory default, the Speed and Duplex mode of SFP port is 1000Mbps Full-duplex.