

TP-Link JetStream TL-SG3452X V1 (TL-SG3452X)

TP-Link JetStream TL-SG3452X V1 - Switch - Managed - 48 x 10/100/1000 + 4 x 10 Gigabit SFP+ - rack-mountable



Key Selling Points

10G lightning-fast uplink - 4x 10 Gbps SFP+ slots enable high-bandwidth connectivity and non-blocking switching capacity

Gigabit speeds - 48x gigabit RJ45 ports offer high-speed and reliable connections to other switches and devices

Integrated into Omada SDN - Zero-Touch Provisioning (ZTP), centralized cloud management, and intelligent monitoring

Centralized management - cloud access and omada app for ultra-convenience and easy management

Static routing - helps route internal traffic for more efficient use of network resources

Robust security strategies - IP-MAC-port binding, ACL, port security, dos defend, storm control, DHCP snooping, 802.1X, radius authentication, and more

Optimize voice and video applications - L2/L3/L4 QoS and IGMP snooping

Standalone management - Web, CLI (Console Port, Telnet, SSH), SNMP, RMON, and Dual Image bring powerful management capabilities

Product Features

Enterprise Switch with 10G Uplink

4x 10 Gbps SFP+ slots provide non-blocking switching performance and ultra-low latency, so reliable and lightning-fast connections to server and other switches are easily built.

Software Defined Networking (SDN) with cloud access

Omada's Software Defined Networking (SDN) platform integrates network devices, including access points, switches and gateways, providing 100% centralized cloud management. Omada creates a highly scalable network - all controlled from a single interface. Seamless wireless and wired connections are provided, ideal for use in hospitality, education, retail, offices, and more.

Advanced L3 features

An abundance of L2+ and L3 features are supported to help build a highly scalable and robust network, providing a reliable and efficient solution for enterprises, campuses and ISPs.

Secure networking

Security features include IP-MAC-Port-VID Binding, Port Security, Storm Control, and DHCP Snooping to defend against a range of network threats. An integrated list of common Dos attacks is available, making it easier than ever to prevent them. 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, or VLAN ID. Users' network access can be controlled via 802.1X authentication, which works with a RADIUS/Tacacs+ server to grant access only when valid user credentials are provided.

Enterprise level features

A complete lineup of L2+ features is supported, including 802.1Q VLAN, Port Mirroring, STP/RSTP/MSTP, Link Aggregation Control Protocol, and 802.3x Flow Control. Advanced IGMP Snooping ensures the switch intelligently forwards multicast streams to the appropriate subscribers, cutting unnecessary traffic. IGMP throttling & filtering restrict each subscriber on a port level to prevent unauthorized multicast access. Static Routing is a simple way of segmenting the network and internally routes traffic through the switch for improved efficiency.

Advanced QoS

Voice and video traffic can be prioritized based on IP address, MAC address, TCP port number, UDP port number, and more. With QoS (Quality of Service), voice and video services remain smooth, even when bandwidth is in short supply.

ISP features

sFlow, QinQ, L2PT PPPoE ID Insertion, and IGMP authentication features are provided, developed with service providers in mind. 802.3ah OAM and Device Link Detection Protocol (DLDP) offer easy monitoring and troubleshooting of Ethernet links.

IPv6 support

IPv6 functions such as Dual IPv4/IPv6 Stack, MLD Snooping, IPv6 ACL, DHCPv6 Snooping, IPv6 Interface, Path Maximum Transmission Unit (PMTU) Discovery, and IPv6 Neighbor Discover guarantee your network is ready for the Next Generation Network (NGN) without upgrading your hardware.

Main Specifications

Product Description

TP-Link JetStream TL-SG3452X V1 - switch - 52 ports - Managed - rack-mountable

Device Type	Switch - 52 ports - Managed
Enclosure Type	Rack-mountable
Subtype	Gigabit Ethernet
Ports	48 x 10/100/1000 + 4 x 10 Gigabit SFP+
Performance	Switching capacity: 176 Gbps Packet forwarding rate: 130.94 Mpps
Capacity	Number of interfaces: 16 VLAN groups: 4000 Priority queues: 8
MAC Address Table Size	16K entries
Jumbo Frame Support	9KB
Routing Protocol	IGMPv2, IGMP, IGMPv3, static IPv4 routing, static IPv6 routing, MLDv2, MLD, MSTP, RSTP, STP
Remote Management Protocol	SNMP 1, RMON 1, RMON 2, RMON 3, RMON 9, Telnet, SNMP 3, SNMP 2c, HTTP, HTTPS, TFTP, SSH, CLI, ICMP, DHCP, RSTP
Features	Flow control, VPN support, BOOTP support, ARP support, IGMP snooping, Syslog support, DoS attack prevention, port mirroring, store and forward, Broadcast Storm Control, IPv6 support, Multicast Storm Control, Unicast Storm Control, firmware upgradable, SNTF support, sFlow, DHCP snooping, Access Control List (ACL) support, Quality of Service (QoS), DHCP server, MLD snooping, Cable Diagnostics Function, bandwidth control, Device Link Detection Protocol (DLDP) support, fanless, LLDP support, DHCP relay, Link Aggregation Control Protocol (LACP), Port Security, Multicast VLAN Registration (MVR), Neighbor Discovery Protocol (NDP), port isolation, 12MB packet buffer, Class of Service (CoS), Strict Priority (SP), Generic VLAN Registration Protocol (GVRP), 802.1x authentication, cloud managed, DiffServ Code Point (DSCP) support, IP source guard, ARP inspection, Bridge protocol data unit (BPDU), dual image support, Software Defined Networking (SDN), Authentication, Authorization and Accounting (AAA), LLDP-MED, VLAN group, guest access, Zero-touch provisioning (ZTP), Energy-Efficient Ethernet (EEE), BPDU Filter, Weighted Round Robin (WRR), Head-of-line (HOL) Blocking Prevention, loopback detection, Advanced QoS, MAC Access Bypass (MAB), security slot (Kensington security lock compatible)
Compliant Standards	IEEE 802.3u, IEEE 802.3i, IEEE 802.3z, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3ab, IEEE 802.1p, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.1x, IEEE 802.3ae, IEEE 802.1s, IEEE 802.3ah, IEEE 802.1ab (LLDP)
Power	AC 100-240 V (50/60 Hz)
Dimensions (WxDxH)	44 cm x 22 cm x 4.4 cm

Extended Specification

General

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Remote Management Protocol	SNMP 1, RMON 1, RMON 2, RMON 3, RMON 9, Telnet, SNMP 3, SNMP 2c, HTTP, HTTPS, TFTP, SSH, CLI, ICMP, DHCP, RSTP
Encryption Algorithm	SSL 3.0, TLS 1.2

Authentication Method	Secure Shell (SSH),RADIUS,TACACS+,Secure Shell v.2 (SSH2)
Features	Flow control,VPN support,BOOTP support,ARP support,IGMP snooping,Syslog support,DoS attack prevention,port mirroring,store and forward,Broadcast Storm Control,IPv6 support,Multicast Storm Control,Unicast Storm Control,firmware upgradable,SNTP support,sFlow,DHCP snooping,Access Control List (ACL) support,Quality of Service (QoS),DHCP server,MLD snooping,Cable Diagnostics Function,bandwidth control,Device Link Detection Protocol (DLDP) support,fanless,LLDP support,DHCP relay,Link Aggregation Control Protocol (LACP),Port Security,Multicast VLAN Registration (MVR),Neighbor Discovery Protocol (NDP),port isolation,12MB packet buffer,Class of Service (CoS),Strict Priority (SP),Generic VLAN Registration Protocol (GVRP),802.1x authentication,cloud managed,DiffServ Code Point (DSCP) support,IP source guard,ARP inspection,Bridge protocol data unit (BPDU),dual image support,Software Defined Networking (SDN),Authentication,Authorization and Accounting (AAA),LLDP-MED,VLAN group,guest access,Zero-touch provisioning (ZTP),Energy-Efficient Ethernet (EEE),BPDU Filter,Weighted Round Robin (WRR),Head-of-line (HOL) Blocking Prevention,loopback detection,Advanced QoS,MAC Access Bypass (MAB),security slot (Kensington security lock compatible)
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RAM	512 MB
Flash Memory	32 MB
Status Indicators	Status

Expansion / Connectivity

Interfaces	48 x 1000Base-T RJ-45 4 x 10GBase-X SFP 1 x console RJ-45 1 x micro-USB console
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Power

Power Device	Internal power supply
Voltage Required	AC 100-240 V (50/60 Hz)

Miscellaneous

Included Accessories	Rubber feet
Rack Mounting Kit	Included
Compliant Standards	FCC,RoHS

Dimensions & Weight

Width	44 cm
Depth	22 cm
Height	4.4 cm

Environmental Parameters

Min Operating Temperature	0 °C
Max Operating Temperature	45 °C
Humidity Range Operating	10 - 90% (non-condensing)
Min Storage Temperature	-40 °C
Max Storage Temperature	70 °C

Humidity Range Storage

5 - 90% (non-condensing)

Product data is provided by CNET, we do not warrant the accuracy and completeness of the material contained in this data sheet