

TP-Link Omada SG5452X V1 (SG5452X)

TP-Link Omada SG5452X V1 - Switch - L3 Lite - Managed - 48 x 10/100/1000 + 4 x 10Gb Ethernet SFP+ - rack-mountable



The TP-Link Omada SG5452X V1 meets advanced networking demands with its features and capabilities. This switch offers a switching capacity of 40 Gbps and a stacking bandwidth of 176 Gbps, suitable for high-traffic environments. With 48 ports that support 10/100/1000 base connections, it provides connectivity options for numerous devices, while its four additional 10Gb Ethernet SFP+ ports enable flexibility in network design and performance enhancement. Robust security features include support for Secure Shell (SSH) and various authentication methods such as RADIUS and EAP styles. With capabilities such as port mirroring, DHCP snooping, and Dynamic ARP Inspection (DAI), the SG5452X V1 ensures reliable security against potential threats. It operates quietly with its fanless design and supports energy-saving features, making it an intelligent choice for business networking solutions.

Key Selling Points

- Switching capacity of 40 Gbps for high-performance networking
- 48 10/100/1000 ports along with four 10Gb Ethernet SFP+ ports
- Security features including SSH and access control list support
- Fanless design for silent operation
- Supports energy-efficient features for sustainable operation

Product Features

- Efficient Design**
The TP-Link Omada SG5452X V1 features a fanless design that minimizes noise, making it ideal for office environments while maintaining performance.
- Robust Security**
With advanced security protocols such as Secure Shell (SSH) and authentication methods like RADIUS and various EAP types, this switch detects and prevents unauthorized access effectively.
- Extensive Connectivity**
Equipped with 48 ports supporting 10/100/1000 base connections and additional 10Gb Ethernet SFP+ ports, the switch allows versatile device connectivity to support modern network architectures.
- High Performance**
With a switching capacity of 40 Gbps and stacking bandwidth of 176 Gbps, the SG5452X V1 handles heavy data traffic efficiently, ensuring optimal network performance.
- Advanced Networking Capabilities**
With features such as port mirroring, DHCP snooping, and Dynamic ARP Inspection (DAI), the switch enhances network diagnostics and security management.

Main specifications

Product Description	TP-Link Omada SG5452X V1 - switch - 48 ports - Managed - rack-mountable
Device Type	Switch - 48 ports - L3 Lite - Managed - stackable
Enclosure Type	Rack-mountable
Subtype	Gigabit Ethernet
Ports	48 x 10/100/1000 + 4 x 10Gb Ethernet SFP+
Performance	Switching capacity: 176 Gbps Packet forwarding rate: 130.94 Mpps Stacking bandwidth: 40 Gbps Forwarding bandwidth: 88 Gbps
Capacity	Buffer capacity (MB): 12 Priority queues: 8 IPv4 interfaces: 128 IPv6 interfaces: 128 Maximum host route table: 1024 IPv4 routes (static): 512 IPv6 routes (static): 128 RIP routes: 1796 OSPFv2 routes: 1796 OSPFv3 routes: 450 Static ARP entries: 512 Dynamic ARP: 3600 DHCP pool: 64 Binding entries: 1000 Maximum L2 multicast table: 2000 VLAN groups: 4000 MAC VLAN address entries: 60 VLAN VPN (QinQ) entries: 256 IP MAC port binding entries: 1024 IPv6 MAC port binding entries: 1024 MAC addresses per port: 64
MAC Address Table Size	16K entries
Jumbo Frame Support	9KB
Routing Protocol	Static IP routing, RIP-1, RIP-2, OSPFv2, OSPFv3, L2PT, MLD, IGMP, MLDv2, MSTP, PPPoE, RIPvng, RSTP, STP
Remote Management Protocol	DHCP, HTTP, HTTPS, CLI, SNMP 1, SNMP 2c, SNMP 3, BOOTP, RMON 1, MIB, Telnet, TFTP

Features	DHCP relay, DHCP server, ACL support, DoS attack prevention, Port Security, ERPS, SDN, DAI, MAB, ZTP, metal housing, fanless, bandwidth control, port priority, QoS, rate limit, Storm Control, Voice VLAN, flow control, IGMP snooping, IP multicast, Link Aggregation, loopback detection, MLD snooping, port mirroring, RSPAN, STP support, fast leave, MVR, Multicast filtering function, DLDP support, DDM, sFlow, GVRP, port isolation, DHCP snooping, DHCPv6 snooping, AAA, Broadcast Storm Control, Guest VLAN, Multicast Storm Control, Unknown Storm Control, LLDP-MED, EEE, store and forward, 15KV ESD Protector (air-gap discharge), 8KV ESD Protector (contact discharge)
Compliant Standards	IEEE 802.1x, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1ab (LLDP), IEEE 802.3az, IEEE 802.1D, IEEE 802.1s, IEEE 802.1w, IEEE 802.3ad (LACP), IEEE 802.3x
Power	AC 100-240 V (50/60 Hz)
Dimensions (WxDxH)	44 cm x 22 cm x 4.4 cm

Extended specification

General

Device Type	Switch - 48 ports - L3 Lite - Managed - stackable
Enclosure Type	Rack-mountable
Subtype	Gigabit Ethernet
Ports	48 x 10/100/1000 + 4 x 10Gb Ethernet SFP+
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MAC Address Table Size	16K entries
Jumbo Frame Support	9KB
Max Units In A Stack	4
Routing Protocol	Static IP routing, RIP-1, RIP-2, OSPFv2, OSPFv3, L2PT, MLD, IGMP, MLDv2, MSTP, PPPoE, RIPng, RSTP, STP
Remote Management Protocol	DHCP, HTTP, HTTPS, CLI, SNMP 1, SNMP 2c, SNMP 3, BOOTP, RMON 1, MIB, Telnet, TFTP
Encryption Algorithm	SSL 3.0, TLS 1.0
Authentication Method	Secure Shell (SSH), RADIUS, RADSEC, PAP, EAP-MD5, EAP-PEAP, EAP-TLS, EAP-TTLS
Features	DHCP relay, DHCP server, ACL support, DoS attack prevention, Port Security, ERPS, SDN, DAI, MAB, ZTP, metal housing, fanless, bandwidth control, port priority, QoS, rate limit, Storm Control, Voice VLAN, flow control, IGMP snooping, IP multicast, Link Aggregation, loopback detection, MLD snooping, port mirroring, RSPAN, STP support, fast leave, MVR, Multicast filtering function, DLDP support, DDM, sFlow, GVRP, port isolation, DHCP snooping, DHCPv6 snooping, AAA, Broadcast Storm Control, Guest VLAN, Multicast Storm Control, Unknown Storm Control, LLDP-MED, EEE, store and forward, 15KV ESD Protector (air-gap discharge), 8KV ESD Protector (contact discharge)
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Processor	X ARM: 1.2 GHz
RAM	2 GB DDR4 SDRAM
Status Indicators	Port status, power, speed, stack, system

Expansion / Connectivity

Interfaces	48 x 10/100/1000 Base-T RJ-45 4 x 1000Base-X/10GBase-X SFP+ 1 x console RJ-45 console 1 x USB-C console USB 2.0
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Miscellaneous

Included Accessories	Rubber feet, 8 screws, mounting brackets
Cables Included	1 x console cable
MTBF	211,644 hours
Compliant Standards	FCC, RoHS

Power

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

Environmental Parameters

Min Operating Temperature	-5 °C
Max Operating Temperature	45 °C
Humidity Range Operating	10 - 90% RH (non-condensing)
Min Storage Temperature	-40 °C
Max Storage Temperature	70 °C
Humidity Range Storage	5 - 90% RH (non-condensing)

Dimensions & Weight

Width	44 cm
Depth	22 cm
Height	4.4 cm

What's in the box

- TP-Link Omada SG5452X V1
- Rubber feet, mounting brackets, 8 screws
- Console cable

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