

TP-LINK Omada SG5452XMPP, Managed, L3, Gigabit Ethernet (10/100/1000), Power over Ethernet (PoE), Rack mounting

Omada 48-Port Gigabit Stackable Lite L3 Managed PoE++ Switch with 4x 10G Slots

Group	Network Equipment
Manufacturer	TP-LINK
Manufacturer item no.	SG5452XMPP
EAN/UPC	8885020626483



Description

What This Product Does

Omada SG5452XMPP is a dependable entry-level L3 managed PoE++ switch tailored for the access layer, featuring L3 routing, fast 10 Gbps wired speeds, and stacking options. It boasts a 770W PoE budget,* 48x gigabit RJ45 ports (8x PoE++, 40x PoE+), 4x 10 Gbps SFP+ slots, physical stacking ability, and centralized management. Integrated with strong security and extensive management features, the SG5452XMPP offers a reliable networking solution for SMEs, and ISPs.

IEEE 802.3af/at/bt-compliant Power over Ethernet

8x IEEE 802.3af/at/bt-compliant and 40x IEEE 802.3af/at-compliant PoE ports supply up to 770W total power to 802.3af, 802.3at, and 802.3bt devices.* Set up wireless access points, surveillance cameras, IP phones, and other PoE devices quickly and easily, without the hassle and cost of installing power cabling. Perpetual PoE ensures an uninterrupted power supply to connected devices even during switch reboots. Additionally, the switch retains PoE power settings across reboots, thanks to fast PoE functionality.

High-speed Connectivity and Powerful Stacking

48x gigabit RJ45 ports and 4x 10 Gbps SFP+ slots provide up to 176 Gbps switching capacity per unit. Up to 4 units of physical stacking empower the networking structure with built-in redundancy and performance.

Abundant Layer 3 Capabilities

Comes with abundant Layer 3 routing protocols that support a scalable network. Static Routing, RIP, OSPF, DHCP Server, and DHCP Relay are supported.

Highly Available

ERPS (Ethernet Ring Protection Switching) ensures rapid protection and recovery in ring topologies, which is essential for maintaining network uptime in medium business environments.

Enhanced Security Functions

Defend against a range of network threats with ACL support (IPv4 & IPv6), Dynamic ARP Inspection, IEEE 802.1X, MAB, Port Security, and Secure Shell.

Omada SDN

Integration into the Omada system brings centralized cloud management and a series of management features such as Zero-

Touch Provisioning (ZTP).† The Omada Software Defined Networking (SDN) platform integrates network devices, including access points, switches, and routers, providing 100% centralized cloud management—all controlled from a single interface.

Apart from the ability to be centrally managed via the web or the Omada app, SG5452XMPP is also easy to manage via an intuitive web-based Graphical User Interface (GUI) or an industry-standard Command Line Interface (CLI). For both management methods, traffic is protected through SSL or SSH encryption. SNMP (v1/v2c/v3) and RMON support enable the switch to be polled for valuable status information and to send traps for abnormal events.

Main features

	General
Switch type	Managed
Switch layer	L3
Basic switching RJ-45 Ethernet ports type	Gigabit Ethernet (10/100/1000)
Basic switching RJ-45 Ethernet ports quantity	48
USB 2.0 ports quantity	1
Console port	RJ-45
MAC address table	16000 entries
Switching capacity	176 Gbit/s
Networking standards	IEEE 802.3ad, IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt, IEEE 802.3x
Power over Ethernet (PoE)	Yes
Rack mounting	Yes

Extended details

	Design
Rack mounting	Yes
Stackable	Yes
Product colour	Black
LED indicators	Yes
Number of fans	3 fan(s)
	Management features
Switch type	Managed
Switch layer	L3
Quality of Service (QoS) support	Yes
Web-based management	Yes
Cloud-managed	Yes
ARP inspection	Yes
	Ports & interfaces
Basic switching RJ-45 Ethernet ports quantity	48

Basic switching RJ-45 Ethernet ports type	Gigabit Ethernet (10/100/1000)
Gigabit Ethernet (copper) ports quantity	48
Installed SFP modules quantity	0
Installed SFP+ modules quantity	0
SFP+ module slots quantity	4
USB Type-C ports quantity	1
Console port	RJ-45
USB 2.0 ports quantity	1
Power over Ethernet (PoE)	
Power over Ethernet (PoE)	Yes
Power over Ethernet (PoE) type supported	PoE+, PoE++ (4PPoE)
Power over Ethernet plus (PoE+) ports quantity	40
Power over Ethernet 4PPoE (PoE++) ports quantity	8
Total Power over Ethernet (PoE) budget	770 W
Data transmission	
MAC address table	16000 entries
Switching capacity	176 Gbit/s
Forwarding rate	130.94 Mpps
Store-and-forward	Yes
Jumbo frames support	Yes
Jumbo frames	9000
Packet buffer memory	12 MB
Other features	
Management level	4
Bandwidth	88 Gbit/s
Network	
Networking standards	IEEE 802.3ad, IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt, IEEE 802.3x
10G support	Yes
Port mirroring	Yes
Link aggregation	Yes
Broadcast storm control	Yes
VLAN support	Yes
Virtual LAN features	MAC address-based VLAN, Private VLAN, Protocol-based VLAN, Voice VLAN
Number of VLANs	4000

	Power
Power source	AC
Power supply included	Yes
AC input voltage	100 - 240 V
AC input frequency	50/60 Hz
Power consumption (max)	893.6 W
Surge protection	Yes
Surge protection voltage	6 kV
	Performance
Physical stacking (units)	4
Built-in processor	Yes
Processor manufacturer	ARM
Processor frequency	1200 MHz
Memory type	DRAM
Internal memory	2000 MB
Flash memory	512 MB
Noise level	58.5 dB
Firmware upgradeable	Yes
Telnet	Yes
Fanless	Yes
Mean time between failures (MTBF)	275.277 h
	Multicast features
Multicast support	Yes
	Certificates
Compliance certificates	CE, Federal Communications Commission (FCC), RoHS
	Security
DHCP features	DHCP relay, DHCP server
Access Control List (ACL)	Yes
IGMP snooping	Yes
Security algorithms	SNMP, SNMPv2, SNMPv3
MAC address filtering	Yes
Static port security	Yes
SSH/SSL support	Yes
IP-MAC-Port binding	Yes
Password protection	Yes
	Packaging content
Cables included	AC

Quick start guide	Yes
Rack mount kit	Yes
Operational conditions	
Operating temperature (T-T)	-5 - 45 °C
Storage temperature (T-T)	-40 - 70 °C
Operating relative humidity (H-H)	10 - 90 %
Storage relative humidity (H-H)	5 - 90 %
Heat dissipation	3047.18 BTU/h
Weight & dimensions	
Width	440 mm
Depth	330 mm
Height	44 mm