

TP-LINK Omada 8-Port 2.5GBASE-T and 2-Port 10GE SFP+ L2+ Managed Switch with 8-Port PoE+, Managed, L2+, 2.5G Ethernet (100/1000/2500), Power over Ethernet (PoE), Rack mounting, 1U

8× 100/1000/2500 Mbps RJ45 - 2× 10G SFP+ Slots - RJ45/Micro-USB - 80 Gbps - 16 K MAC - 9 KB Jumbo - 440 x 180 x 44 mm



Group	Network Equipment
Manufacturer	TP-LINK
Manufacturer item no.	SG3210XHP-M2
EAN/UPC	6935364030797

Description

Ultrafast 2.5G PoE+ Managed Switch with 10G Uplink for a Complete Omada Network SG3210XHP-M2

2.5G PoE+ Ports for WiFi 6
8× 2.5 Gbps Ports Uplock the Full Potential of WiFi 6 APs

10G Lightning-Fast Uplink Connection
2× 10 Gbps SFP+ Slots for High-Bandwidth Connectivity

240 W Power Budget
8× PoE+ Ports with Total 240 W Power Budget

Centralized Cloud Management
SDN Solutions Integration for a Highly Efficient Network

Unlock the Full Potential of WiFi 6 with Multi-Gigabit PoE+ Ports

Featuring 8× 2.5 Gbps PoE+ ports, the switch is capable of future network expansion and deployment, providing sufficient bandwidth for incoming WiFi 6 APs. Designed to use a single Ethernet cable for both data and power transmission, it supports up to 240 W total PoE power budget* and flexible installation to fit in various application scenarios.

Enterprise Switch with 10G Uplink

2× 10 Gbps SFP+ slots provide non-blocking switching performance and ultra-low latency, so reliable and lightning-fast connections to servers 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 are 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 only the appropriate subscribers, cutting out unnecessary traffic, while 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

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 features

	General
Switch type	Managed
Switch layer	L2+
Basic switching RJ-45 Ethernet ports type	2.5G Ethernet (100/1000/2500)
Basic switching RJ-45 Ethernet ports quantity	8
Console port	RJ-45/micro-USB
MAC address table	16000 entries
Switching capacity	80 Gbit/s
Networking standards	IEEE 802.1D, IEEE 802.1s, IEEE 802.1w
Power connector	AC-in jack
Power over Ethernet (PoE)	Yes
Rack mounting	Yes
Form factor	1U

Extended details

Design

Rack mounting	Yes
Form factor	1U
Product colour	Black
LED indicators	Yes
Number of fans	2 fan(s)
Management features	
Switch type	Managed
Switch layer	L2+
Quality of Service (QoS) support	Yes
Web-based management	Yes
Cloud-managed	Yes
Traffic classification	Yes
ARP inspection	Yes
Configuring Location Settings (CLI)	Yes
System event log	Yes
MIB support	RFC2925, RFC2618, RFC2620, RFC2021, RFC2819, RFC2674, RFC1493, RFC1643, RFC2233, RFC1213
Ports & interfaces	
Basic switching RJ-45 Ethernet ports quantity	8
Basic switching RJ-45 Ethernet ports type	2.5G Ethernet (100/1000/2500)
2.5G Ethernet (copper) ports quantity	8
Installed SFP modules quantity	0
Installed SFP+ modules quantity	0
SFP+ module slots quantity	2
Console port	RJ-45/micro-USB
Power connector	AC-in jack
Power over Ethernet (PoE)	
Power over Ethernet (PoE)	Yes
Power over Ethernet plus (PoE+) ports quantity	8
Power over Ethernet (PoE) power per port	30 W
Total Power over Ethernet (PoE) budget	240 W
Data transmission	
MAC address table	16000 entries
Switching capacity	80 Gbit/s

Forwarding rate	59.52 Mpps
Static route	Yes
Number of static routes	48
Number of IP interfaces	16
Jumbo frames support	Yes
Jumbo frames	9000
Packet buffer memory	12 MB
Protocols	
Management protocols	SNMPv1/v2c/v3, SNMP
GARP VLAN Registration Protocol (GVRP)	Yes
Network	
Networking standards	IEEE 802.1D, IEEE 802.1s, IEEE 802.1w
10G support	Yes
Port mirroring	Yes
IP routing	Yes
Flow control support	Yes
Link aggregation	Yes
Broadcast storm control	Yes
Rate limiting	Yes
Spanning tree protocol	Yes
Head-of-line (HOL) blocking	Yes
Ethernet LAN data rates	100,1000,2500 Mbit/s
VLAN support	Yes
Virtual LAN features	MAC address-based VLAN, Port-based VLAN, Private VLAN, Protocol-based VLAN, Tagged 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)	285.9 W
Multicast features	
Multicast support	Yes
Multicast Listener Discovery (MLD) snooping	Yes
Security	

DHCP features	DHCP client, DHCP relay, DHCP server, DHCP snooping, DHCPv6 client, DHCPv6 snooping
Access Control List (ACL)	Yes
IGMP snooping	Yes
Security algorithms	HTTPS, SSH, SSH-2, SSL/TLS
MAC address filtering	Yes
Static port security	Yes
SSH/SSL support	Yes
Loop protection	Yes
BPDU filtering/protection	Yes
IP-MAC-Port binding	Yes
Authentication	MAC-based authentication, Port-based authentication
Password protection	Yes
Authentication type	AAA, TACACS+
Queue scheduling algorithms	SP, WRR+SP, Weighted Round Robin (WRR)
Packaging content	
Cables included	AC
Quick start guide	Yes
Operational conditions	
Operating temperature (T-T)	0 - 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	975.54 BTU/h
Weight & dimensions	
Width	440 mm
Depth	180 mm
Height	44 mm
Packaging data	
Package type	Box
Certificates	
Certification	CE, FCC, RoHS