10-Gigabit L2+ Managed Switch Datasheet

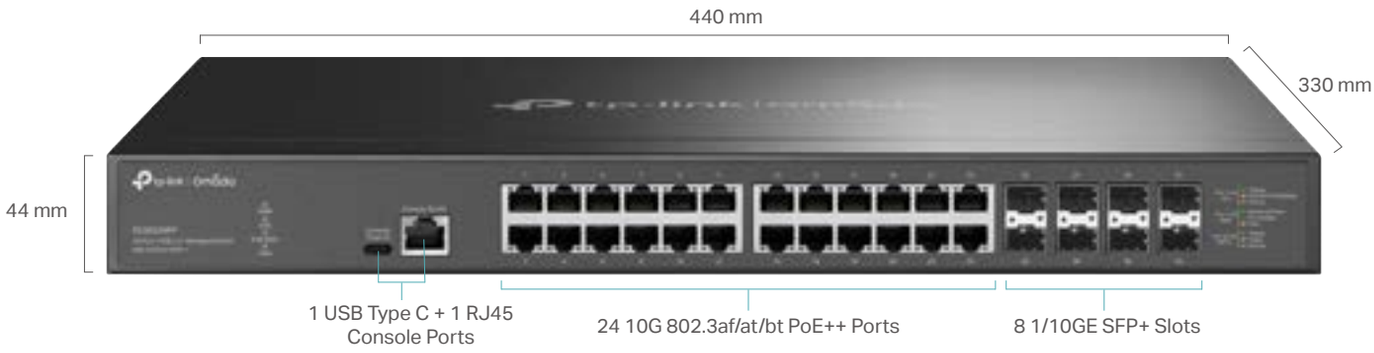
SX3832MPP

Omada 32-Port 10GE L2+ Managed Switch with 24-Port PoE++

Highlights

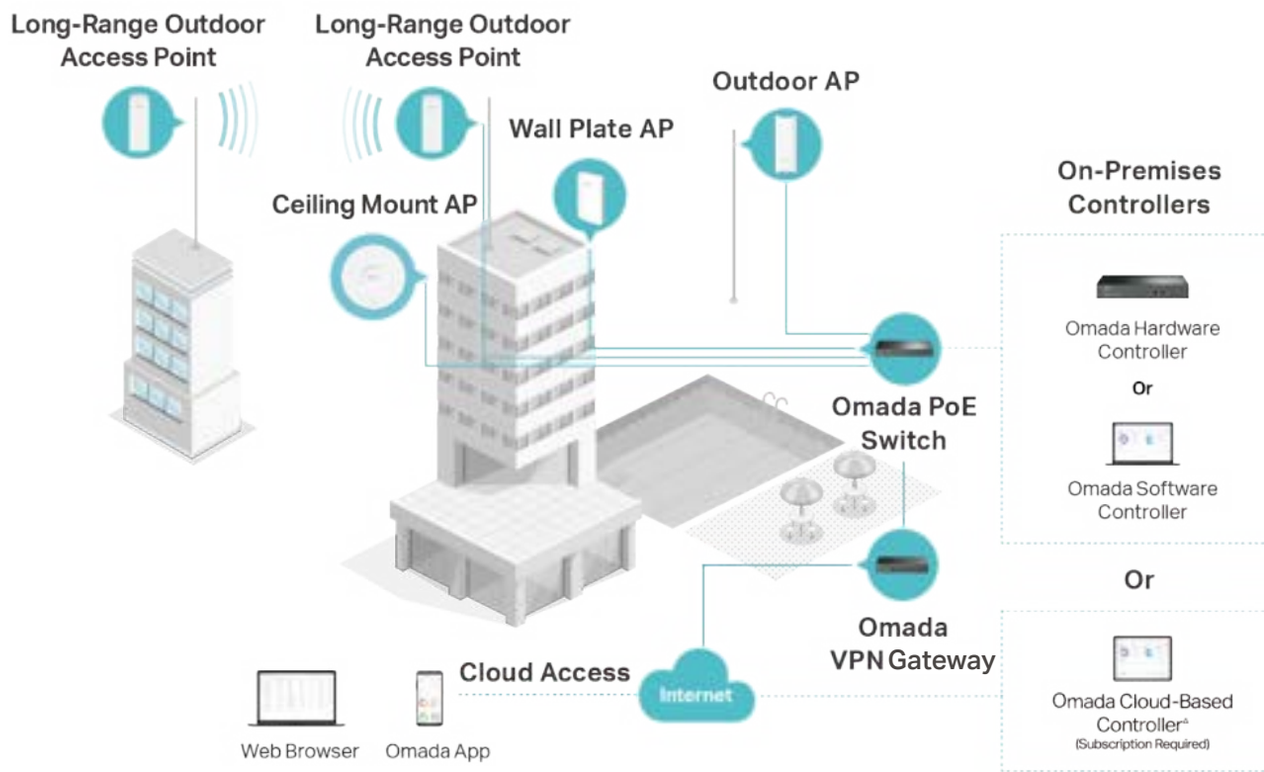
- 8× 1/10GE SFP+ Slots
- 24× 10G 802.3af/at/bt PoE++ Ports
- 770 W total PoE budget with up to 90 W PoE output per port*
- Centralized cloud management via the web or the Omada app†
- Standalone management via web, CLI, SNMP, and RMON
- Static Routing helps route internal traffic for higher efficiency
- VLAN, ACL, QoS, IGMP Snooping, OAM, and DDM
- ERPS supports rapid protection and recovery in a ring topology
- Durable metal casing and rack-mountable design

Product Picture



Omada Solution

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.



Hassle-Free Cloud or On-Premises Controllers

Zero-Touch Provisioning (ZTP)*

Multi-Site Cloud Management

Intelligent Monitoring

Specifications

Hardware Features & Performance

Model		SX3832MPP
General	Interface	24 100 M/1 G/2.5 G/5 G/10 Gbps RJ45 Ports 8 1/10GE SFP+ Slots▲
	Console	1 RJ45 Console Port, 1 USB Type C Console Port
	Flash	32 MB
	DRAM	512 MB
	Port Standard	IEEE 802.3: Ethernet Media Access Control (MAC) Protocol IEEE 802.3u: 100BASE-X Fast Ethernet (UTP/STP) IEEE 802.3ab: 1000BASE-T Gigabit Ethernet IEEE 802.3an: 10GBASE-T 10G Ethernet IEEE 802.3z: 1000BASE-X Gigabit Ethernet (Optical fiber) IEEE 802.3bz: 2.5GBASE-T 2.5G Ethernet IEEE 802.3bz: 5GBASE-T 5G Ethernet IEEE 802.3ae: 10GBASE-SR/LR 10G Ethernet (Optical fiber) IEEE 802.3af: Power over Ethernet IEEE 802.3at: Power over Ethernet enhancements IEEE 802.3bt: Power over Ethernet over 4 pairs IEEE 802.3x: Flow Control
PoE	PoE Standard	802.3af/at/bt
	PoE Ports	24, up to 90 W per port
	PoE Power Budget	770 W*
	Fast PoE	Yes
	Perpetual PoE	Yes
Performance	Switching Capacity	640 Gbps
	Packet Forwarding Rate	240 Mpps
	Packet Buffer	24 Mbit
	MAC Address Table	32 K
	Transmission Method	Store and Forward
	Jumbo Frame	9 KB
Physical & Environmet	Power Supply	100-240 V AC~50/60 Hz
	Max Power Consumption	1,010.2 W (110V/60Hz with 770 W PD connected) 953.7 W (220V/50Hz with 770 W PD connected)
	Max Heat Dissipation	3,444.7 BTU/hr (110V/60Hz with 770 W PD connected) 3,252.2 BTU/hr (220V/50Hz with 770 W PD connected)
	Standby Power Consumption	57.7 W max (110 V/60 Hz 25 °C) 56.5 W max (220 V/50 Hz 25 °C)
	Noise	Min: 43.0 dBA @1 m & 25 °C Max: 58.9 dBA @1 m & 25 °C
	Dimensions (W x D x H)	17.3 × 13.0 × 1.7 in (440 × 330 × 44 mm)
	Fan Quantity	4
	Surge Protection	Service port: ±6 kV in common mode Power port: ±6 kV in differential mode; ±6 kV in common mode
	MTBF	315,002 h @ 25 °C
	Installation	Rack Mountable
	Operating Temperature	-5 °C to 45 °C (23 °F to 113 °F)
	Storage Temperature	-40 °C to 70 °C (-40 °F to 158 °F)
	Operation Humidity	10% to 90% RH, non-condensing
	Storage Humidity	5% to 90% RH, non-condensing
	Certification	CE, FCC, RoHS

▲No more than 2× 10G RJ45 SFP+ modules (SM5310-T) are supported. It is recommended to have one column interval between every two 10G RJ45 SFP+ modules.

Software Features

SDN Support	• Support Omada Hardware Controller • Automatic Device Discovery • Batch Configuration • Batch Firmware Upgrading	• Intelligent Network Monitoring • Unified Configuration • Reboot Schedule
L3 Features	• 128 IPv4/IPv6 Interfaces • Static Routing - 48 static routes • Static ARP - 128 static entries • 510 ARP Entries	• Proxy ARP • Gratuitous ARP • DHCP Server • DHCP Relay - DHCP interface relay - DHCP VLAN relay • DHCP L2 Relay
L2 Features	• Link Aggregation - Static link aggregation - 802.3ad LACP - Up to 8 aggregation groups and up to 8 ports per group • Spanning Tree Protocol - 802.1d STP - 802.1w RSTP - 802.1s MSTP - STP Security: TC Protect, BPDU Filter, BPDU Protect, Root Protect, Loop Protect	• Loopback Detection - Port based - VLAN based • Flow Control - 802.3x Flow Control - HOL Blocking Prevention • Mirroring - Port Mirroring - CPU Mirroring - One-to-One - Many-to-One - Tx/Rx/Both
L2 Multicast	• Supports 4000 (IPv4, IPv6) IGMP groups • IGMP Snooping - IGMP v1/v2/v3 Snooping - Fast Leave - IGMP Snooping Querier - IGMP Authentication • MVR	• MLD Snooping - MLD v1/v2 Snooping - Fast Leave - MLD Snooping Querier - Static Group Config - Limited IP Multicast • Multicast Filtering: 256 profiles and 16 entries per profile
VLAN	• VLAN Group (802.1q VLAN) - Max 4K VLAN Groups • 802.1Q Tagged VLAN • MAC VLAN entries: 30 • Protocol VLAN: Protocol Template 16, Protocol VLAN 12	• GVRP • VLAN VPN - VLAN Mapping - VLAN Replace • Voice VLAN
QoS	• 8 priority queues • 802.1p CoS/DSCP priority • Queue scheduling - SP (Strict Priority) - WRR (Weighted Round Robin) - SP+WRR	• Bandwidth Control - Port/Flow based Rating Limiting • Smoother Performance • Action for Flows - QoS remark (802.1P Remark, DSCP Remark)
ACL	• MAC ACL - Source MAC - Destination MAC - VLAN ID - User Priority - Ether Type • IP ACL -Source IP - Destination IP - Fragment - IP Protocol - TCP Flag	- TCP/UDP Port - DSCP/IP TOS • Combined ACL • IPv6 ACL • Policy - Mirroring - Redirect - Rate Limit - QoS Remark • ACL apply to Port/VLAN • Time-based ACL

Software Features

Security	• IP-MAC-Port Binding -512 Entries - DHCP Snooping - ARP Inspection - IPv4 Source Guard • IPv6-MAC-Port Binding -512 Entries - DHCPv6 Snooping - ND Detection - ND Snooping - IPv6 Source Guard • DoS Defend • DHCP Filter • Static/Dynamic Port Security - Up to 64 MAC addresses per port • Broadcast/Multicast/Unknown-unicast Storm Control - kbps/ratio control mode	• 802.1X - Port base authentication - Mac base authentication - VLAN Assignment - MAB - Guest VLAN - Support RADIUS authentication and accountability • AAA (including TACACS+) • Port Isolation • Secure web management through HTTPS with SSLv3/TLS 1.2 • Secure Command Line Interface (CLI) management with SSHv1/SSHv2 • IP/Port/MAC based access control
ISP Features	• 802.3ah Ethernet Link OAM • L2PT (Layer 2 Protocol Tunneling) • PPPoE ID Insertion • ERPS	• Device Link Detect Protocol (DLDP) • sFlow • DDM
Management	• Web-based GUI • Command Line Interface (CLI) through consoleport, telnet • SNMPv1/v2c/v3 - Trap/Inform - RMON (1, 2, 3, 9 groups) • SDM Template • DHCP/BOOTP Client • 802.1ab LLDP/LLDP-MED	• DHCP Auto Install • Dual Image, Dual Configuration • CPU Monitoring • Cable Diagnostics • Password Recovery • SNTP • System Log • IEEE802.3az Energy Efficient Ethernet (EEE)
IPv6 Support	• IPv6 Dual IPv4/IPv6 • Multicast Listener Discovery (MLD) Snooping • IPv6 ACL • IPv6 Interface • Static IPv6 Routing • IPv6 neighbor discovery (ND) • Path maximum transmission unit (MTU) discovery • Internet Control Message Protocol (ICMP) version 6 • TCPv6/UDPv6	• IPv6 applications - HTTP by IPv6 - SSL by IPv6 - Telnet by IPv6 - SSH by IPv6 - TFTP by IPv6 - NTP by IPv6 - Syslog by IPv6 - Ping by IPv6 - Tracert by IPv6
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 MIB

Ordering Information

Host Switch

Model	Description
SX3832MPP	Omada 32-Port 10GE L2+ Managed Switch with 24-Port PoE++

SFP/SFP+ Modules

Model	Description
SM311LS	Gigabit SFP module, Single-mode, LC interface, Up to 20km distance
SM311LM	Gigabit SFP module, Multi-mode, LC interface, Up to 550m distance
SM321A	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 20 km
SM321A-2	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 2 km
SM321B	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 20 km
SM321B-2	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 2 km
SM5110-LR	10GBase-LR SFP+ LC Transceiver, single-mode, LC connector, 1310nm, 10 km
SM5110-SR	10GBase-SR SFP+ LC Transceiver, multi-mode, LC connector, 850nm, 300 m

RJ45 SFP/SFP+ Modules

Model	Description
SM331T	1000BASE-T RJ45 SFP Module
SM5310-T	10GBASE-T RJ45 SFP+ Module

MC Series Media Converter

Model	Description
MC210CS	Gigabit Single-Mode Media Converter, up to 20 km, chassis mountable
MC200CM	Gigabit multi-mode SC SFP Transceiver, up to 550 m, chassis mountable
MC200L	Gigabit SFP slot supporting mini-GBIC modules, chassis mountable

FC Series Media Converter

Model	Description
FC111A-20	100Mbps Single-Mode WDM Media Converter, up to 20 km, TX:1550nm, RX:1310nm, chassis mountable
FC111B-20	100Mbps Single-Mode WDM Media Converter, up to 20 km, TX:1310nm, RX:1550nm, chassis mountable
FC311A-2	Gigabit Single-Mode WDM Media Converter, up to 2 km, TX:1550nm, RX:1310nm, chassis mountable
FC311B-2	Gigabit Single-Mode WDM Media Converter, up to 2 km, TX:1310nm, RX:1550nm, chassis mountable
FC311A-20	Gigabit Single-Mode WDM Media Converter, up to 20 km, TX:1550nm, RX:1310nm, chassis mountable
FC311B-20	Gigabit Single-Mode WDM Media Converter, up to 20 km, TX:1310nm, RX:1550nm, chassis mountable

*PoE budget calculations are based on laboratory testing. The actual PoE power budget is not guaranteed and will vary due to client limitations and environmental factors.

†These functions require the use of the Omada SDN Controller. Zero-Touch Provisioning requires the use of the Omada Cloud-Based Controller.

Some models featured in this guide may be unavailable in your country or region. Visit TP-Link website for local sales information: www.tp-link.com.