Omada Managed Switch Datasheet

SX3032F

Omada 32-Port 10GE SFP+ L2+ Managed Switch

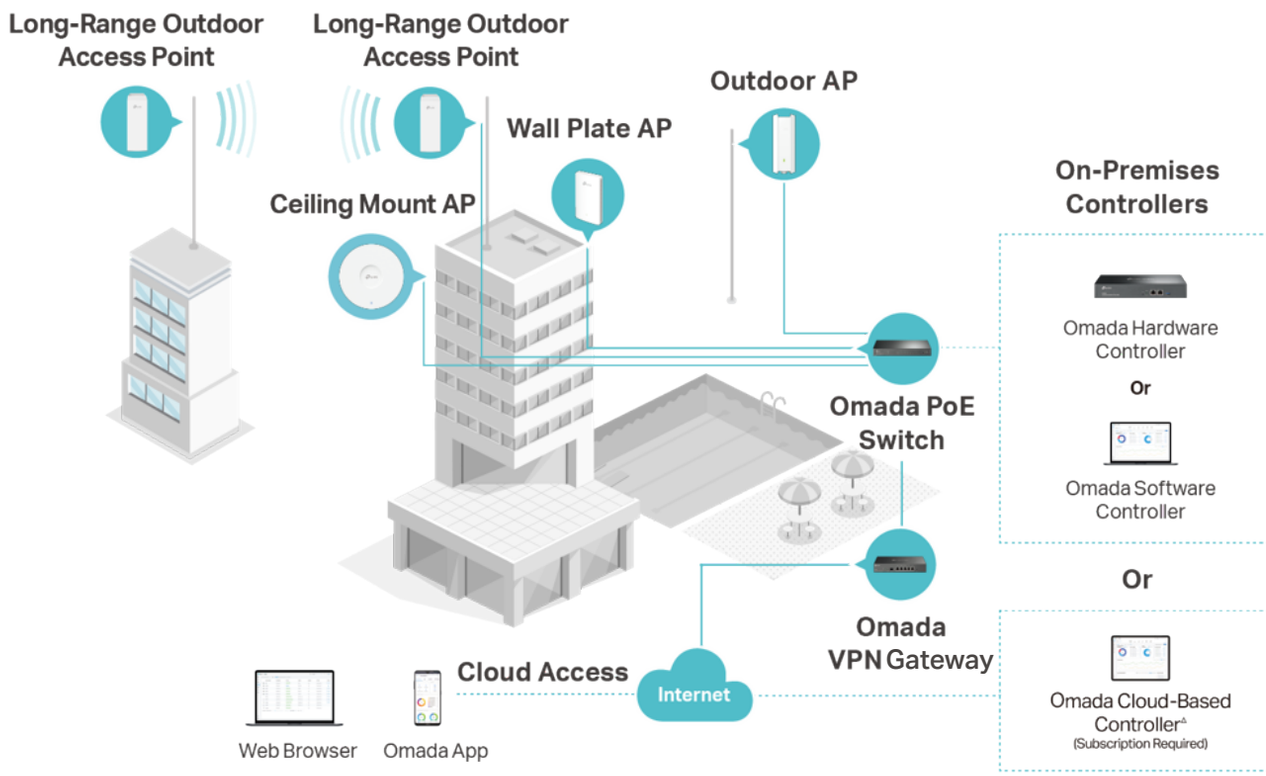
Highlights

- 32× 10 Gbps SFP+ slots
- 640 Gbps switching capacity
- Two internal fixed power supply modules back each other up
- 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 Pictures

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		SX3032F
General	Interface	32 1/10 Gbps SFP+ Slots*
	Console	1 RJ45 Console Port, 1 Micro-USB Console Port
	Flash	32 MB
	DRAM	512 MB
	Port Standard	IEEE 802.3z: 1000BASE-X Gigabit Ethernet (Optical fiber) IEEE 802.3ae: 10 Gigabit Ethernet over fiber
Performance	Switching Capacity	640 Gbps
	Packet Forwarding Rate	476.16 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
	Redundant Power Supply	Yes (Internal and fixed)
	Noise	Min: 33.7 dBA @ 1m 25 °C Max: 47.4 dBA @ 1m 25 °C
	Fan Quantity	2 internal fixed fans
	Airflow	Left-to-right
	Surge Protection	Power port: ±4kV in differential mode; ±4kV in common mode
	ESD Protection	Air: ±15kV, Contact: ±8kV
	MTBF	309,014 h @ 25 °C
	Dimensions (W x D x H)	17.3×13.0×1.7 in (440×330×44 mm)
	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

*It is recommended to use a maximum of 8 SM5310-T (TL-SM5310-T) modules with the SX3032F, with one module used for every two sets of SFP+ ports.

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 • 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	• 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 • Password Recovery • SNTP • System Log
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 - DHCPv6 Client - Ping6 - Tracert6 - Telnet (v6) - IPv6 SNMP - IPv6 SSH - IPv6 SSL - Http/Https - IPv6 TFTP
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
SX3032F	Omada 32-Port 10GE SFP+ L2+ Managed Switch

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

†Centralized cloud management functions require the use of the Omada SDN Controller. Zero-Touch Provisioning requires the use of the Omada Cloud-Based Controller. Go to the Omada Cloud-Based Controller Product List to find all the models supported by 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.