# 10-Gigabit L2+ Managed Switch Datasheet

MODELS: S5500-8XF / S5500-16XF / S5500-4XHPP2XF / S5500-8MHP2XF / S5500-24MPP4XF / S5500-24F4XF / S5500-24GP4XF / S5500-48GP4XF


## Overview

TP-Link | Omada Pro L2+ managed switches provide high performance, powerful L2 and L2+ features like static routing, enterprise-level QoS, advanced security strategies and a bundle of ISP features. The 10-gigabit ports ensure high-speed data transfer, and their backward compatility with gigabit products reserves room for network upgrades, therefore guarantees stable and long-term usability. The IP-MAC-Port Binding (IMPB) and Access Control List (ACL) functions protect against broadcast storm, ARP and Denial-of-Service (DoS) attacks, etc. Quality of Service (QoS, L2 to L4) provides enhanced traffic management capabilities to move your data smoother and faster. The OAM function helps facilitate network management. Moreover, the easy-to-use web management interfaces, along with CLI, SNMP and Dual Image mean faster setup and configuration with less downtime. TP-Link | Omada Pro L2+ 10-gigabit managed switches provide a reliable, secure solution for enterprise, campus and ISP networks.

# Switch Product Features

## Networking Security

The L2+ managed switches provide IP-MAC-Port Binding, Port Security, Storm control and DHCP Snooping which protect against broadcast storms, ARP attacks, etc. It integrates some typical DoS attacks to select. You can protect these attacks more easily ever than before. 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 and even VLAN ID. Moreover, the switch supports 802.1X authentication, which is used in conjunction with a RADIUS/TACACS+ server to require some authentication information before access to the network is allowed.

## Advanced QoS features

To integrate voice, data and video service on one traffic based on a variety of means including IP or MAC address, TCP or UDP port number, etc. to ensure that voice and video are always clear, smooth and jitter free. In conjunction with the Voice VLAN the switch supporting, the voice applications will operate with much smoother performance.

## Abundant L2+ features

The L2+ managed switches support a complete lineup of L2 features, including 802.1Q VLAN, Port Mirroring, STP/RSTP/MSTP, Link Aggregation Control Protocol and 802.3x Flow Control function. Any more, the switch provides advanced features for network maintenance. Such as Loopback Detection, Cable Diagnostics and IGMP Snooping. IGMP snooping ensures the switch intelligently forward the multicast stream only to the appropriate subscribers while IGMP throttling & filtering restrict each subscriber on a port level to prevent unauthorized multicast access. Moreover, L2+ managed switches support L2+ feature-static routing, which is a simple way to provide segmentation of the network with internal routing through the switch and helps network traffic for more efficient use.

## ISP Features

The L2+ managed switches support a bundle of ISP features such as 802.3ah OAM, DDM, sFlow, QinQ, L2PT PPPoE ID Insertion, IGMP authentication etc. 802.3ah OAM and Device Link Detection Protocol (DLDP) functions improve monitor and troubleshoot Ethernet networks, help facilitate network management. DDM(Digital Diagnostic Monitoring) function helps view the status of SFP modules inserting to the Switch and to configure alarm settings, warning settings, temperature threshold settings, voltage threshold settings, bias current threshold settings, TX power threshold settings, and Rx power threshold settings.

## Enterprise Level Management Features

TP-Link | Omada Pro L2+ managed switches are easy to use and manage. It supports various user-friendly standard management features, such as intuitive web-based Graphical User Interface (GUI), industry-standard Command Line Interface (CLI), SNMP (v1/v2c/v3), and RMON. This allows the switch to provide valuable status information and send reports on abnormal events. It also supports Dual Image and Dual Configuration to provide improved reliability and network uptime.

## IPv6 Support

The L2+ managed switches support various 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 Discovery, which guarantees your network is ready for the Next Generation Network (NGN) without upgrading your network equipment.

# Specifications

## Hardware Features & Performance

| | | | |
|---|---|---|---|
| Product Picture | |  |  |
| Model | | S5500-8XF | S5500-16XF |
| General | Interface | 8 10GE SFP+ Slots | 16 10GE SFP+ Slots |
| | Console | 1 RJ45 Console Port, 1 Micro-USB Console Port | |
| | Flash | 32 MB | |
| | DRAM | 256 MB | |
| | Port Standard | IEEE 802.3z: 1000BASE-X Gigabit Ethernet (Optical fiber)<br>IEEE 802.3ae: 10 Gigabit Ethernet over fiber | |
| Performance | Switching Capacity | 160 Gbps | 320 Gbps |
| | Packet Forwarding Rate | 119.04 Mpps | 238.08 Mpps |
| | MAC Address Table | 32K | |
| | Packet Buffer | 16 Mbit | 24 Mbit |
| | Transmission Method | Store and Forward | |
| | Number of Static Routers | 48 (IPv4, IPv6) | |
| | Jumbo Frame | 9 KB | |
| Physical & Environment | Dual Redundant Power Supply | - | 2 Fixed AC Power Supply |
| | Power Supply | 100-240 V AC~50/60 Hz | |
| | Max Power Consumption | 15.46 W (220 V/50 Hz) | 32.74 W (220 V/50 Hz) |
| | Max Heat Dissipation | 52.75 BTU/hr (220 V/50 Hz) | 111.71 BTU/hr (220 V/50 Hz) |
| | Standby Power Consumption | 5.91 W (110 V/60 Hz) | 13.33 W (110 V/60 Hz) |
| | Dimensions (W x D x H) | 17.3 × 7.1 × 1.7 in (440 × 180 × 44 mm) | 17.3 × 8.7 × 1.7 in (440 × 220 × 44 mm) |
| | Fan Quantity | Fanless | 1 |
| | Installation | Rack Mountable | |
| | Operating Temperature | 0 °C to 45 °C (32 °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 | |

## Hardware Features & Performance

| | | | |
|---|---|---|---|
| Product Picture | |  |  |
| Model | | S5500-4XHPP2XF | S5500-8MHP2XF |
| General | Interface | 4 100M/1000M/2.5G/5G/10Gbps RJ45 Ports<br>2 10GE SFP+ Slots | 8 100/1000Mbps/2.5Gbps RJ45 Ports<br>2 10GE SFP+ Slots |
| | Console | 1 RJ45 Console Port, 1 Micro-USB Console Port | |
| | Flash | 32 MB | |
| | DRAM | 256 MB | |
| | Port Standard | IEEE 802.3u:100BASE-X Fast Ethernet<br>IEEE 802.3ab:1000BASE-T Gigabit Ethernet<br>IEEE 802.3bz: 2.5GBASE-T Ethernet<br>IEEE 802.3an:10GBASE-T Ethernet<br>IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber)<br>IEEE 802.3ae: 10 Gigabit Ethernet over fiber | IEEE 802.3u:100BASE-X Fast Ethernet<br>IEEE 802.3ab:1000BASE-T Gigabit Ethernet<br>IEEE 802.3bz:2.5GBASE-T Ethernet<br>IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber)<br>IEEE 802.3ae: 10 Gigabit Ethernet over fiber |
| PoE | PoE Standard | 802.3af/at/bt | 802.3af/at |
| | PoE Ports | 4, up to 60 W | 8, up to 30 W |
| | PoE Power Budget | 200 W | 240 W |
| Performance | Switching Capacity | 120Gbps | 80 Gbps |
| | Packet Forwarding Rate | 89.28 Mpps | 59.52 Mpps |
| | Packet buffer | 16 Mbit | 12 Mbit |
| | MAC Address Table | 32 K | 16 K |
| | Transmission Method | Store and Forward | |
| | Number of Static Routers | 48 (IPv4, IPv6) | 48 (IPv4, IPv6) |
| | Jumbo Frame | 9 KB | |
| Physical & Environmet | Power Supply | 100-240 V AC~50/60 Hz | |
| | Max Power Consumption | 244.90 W (110V/60Hz) (with 200 W PD connected) | 285.9 W (110V/60Hz) (with 240 W PD connected) |
| | Max Heat Dissipation | 835.67 BTU/hr (110 V/60 Hz) (with 200 W PD connected) | 975.54 BTU/hr (110V/60Hz) (with 240 W PD connected) |
| | Standby Power Consumption | 13.52 W (110 V/60 Hz) | 15.6 W (110V/60 Hz) |
| | Dimensions (W x D x H) | 11.6×7.1×1.7 in (294×180×44 mm) | 17.3 × 7.1 × 1.7 in (440 × 180 × 44 mm) |
| | Fan Quantity | 2 | |
| | Installation | Rack Mountable / Desktop | Rack Mountable |
| | Operating Temperature | 0 °C to 50 °C (32 °F to 122 °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 | |

## Hardware Features & Performance

| | | | |
|---|---|---|---|
| Product Picture | |  |  |
| Model | | S5500-24MPP4XF | S5500-24F4XF |
| General | Interface | 24 10/100/1000Mbps/2.5Gbps RJ45 Ports<br>4 10GE SFP+ Slots | 20 Gigabit SFP Slots<br>4 Gigabit RJ45/SFP Combo Ports<br>4 10GE SFP+ Slots |
| | Console | 1 RJ45 Console Port, 1 Micro-USB Console Port | |
| | Flash | 32 MB | |
| | DRAM | 256 MB | |
| | Port Standard | IEEE 802.3i:10BASE-T Ethernet;<br>IEEE 802.3u:100BASE-X Fast Ethernet<br>IEEE 802.3ab:1000BASE-T Gigabit Ethernet<br>IEEE 802.3bz:2.5GBASE-T Ethernet<br>IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber)<br>IEEE 802.3ae: 10 Gigabit Ethernet over fiber | IEEE 802.3i:10BASE-T Ethernet;<br>IEEE 802.3u:100BASE-X Fast Ethernet;<br>IEEE 802.3ab:1000BASE-T Gigabit Ethernet;<br>IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber)<br>IEEE 802.3ae: 10 Gigabit Ethernet over fiber |
| PoE | PoE Standard | 802.3af/at/bt | - |
| | PoE Ports | 8 802.3bt ports, up to 60 W<br>16 802.3at ports, up to 30 W | - |
| | PoE Power Budget | 500 W | - |
| Performance | Switching Capacity | 200 Gbps | 128 Gbps |
| | Packet Forwarding Rate | 148.80 Mpps | 95.23 Mpps |
| | MAC Address Table | 32K | 16K |
| | Transmission Method | Store and Forward | |
| | Packet Buffer | 16 Mbit | 12 Mbit |
| | Number of Static Routers | 48 (IPv4, IPv6) | |
| | Jumbo Frame | 9 KB | |
| Physical & Environmet | Power Supply | 100-240 V AC~50/60 Hz | |
| | Dual Redundant Power Supply | - | 2 Fixed AC Power Supply |
| | Max Power Consumption | 629.1 W (110V/60Hz) | 35.7 W (110V/60Hz) |
| | Max Heat Dissipation | 2153.45 BTU/hr (110 V/60 Hz) | 121.81 BTU/hr (110 V/60 Hz) |
| | Standby Power Consumption | 24.2 W (110V/60Hz) | 17.6 W (110V/60 Hz) |
| | Dimensions (W x D x H) | 17.3 × 13.0 × 1.7 in (440 × 330 × 44 mm) | 17.3 × 8.7 × 1.7 in (440 × 220 × 44 mm) |
| | Fan Quantity | 3 | 1 |
| | Installation | Rack Mountable | |
| | Operating Temperature | 0 °C to 40 °C (32 °F to 104 °F) | 0 °C to 45 °C (32 °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 | |

## S5500-48GP4XF

| | | | |
|---|---|---|---|
| Product Picture | |  |  |
| Model | | S5500-24GP4XF | S5500-48GP4XF |
| General | Interface | 24 10/100/1000Mbps RJ45 Ports<br>4 10GE SFP+ Slots | 48 10/100/1000Mbps RJ45 Ports<br>4 10GE SFP+ Slots |
| | Console | 1 RJ45 Console Port, 1 Micro-USB Console Port | |
| | Flash | 32 MB | |
| | DRAM | 256 MB | 512 MB |
| | Port Standard | IEEE 802.3i:10BASE-T Ethernet;<br>IEEE 802.3u:100BASE-X Fast Ethernet;<br>IEEE 802.3ab:1000BASE-T Gigabit Ethernet;<br>IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber)<br>IEEE 802.3ae: 10 Gigabit Ethernet over fiber | |
| PoE | PoE Standard | 802.3af/at | |
| | PoE Ports | 24, up to 30 W | 48, up to 30 W |
| | PoE Power Budget | 384 W | 500 W |
| Performance | Switching Capacity | 128 Gbps | 176 Gbps |
| | Packet Forwarding Rate | 95.23 Mpps | 130.94 Mpps |
| | MAC Address Table | 16 K | |
| | Transmission Method | Store and Forward | |
| | Packet Buffer | 12 Mbit | |
| | Number of Static Routers | 48 (IPv4, IPv6) | |
| | Jumbo Frame | 9 KB | |
| Physical & Environmet | Power Supply | 100-240 V AC~50/60 Hz | |
| | Max Power Consumption | 30.43 W (110V/60Hz) (no PD connected)<br>486.2 W (110V/60Hz) ( with 384 W PD connected) | 49.19 W (110V/60Hz) (no PD connected)<br>635.70 W (110V/60Hz) (with 500 W PD connected) |
| | Max Heat Dissipation | 103.77 BTU/hr (110 V/60 Hz) (no PD connected)<br>1658.78 BTU/hr (110 V/60 Hz) (with 384 W PD connected) | 167.85 BTU/hr (110 V/60 Hz) (no PD connected)<br>2169.2 BTU/hr (110 V/60 Hz) (with 500 W PD connected) |
| | Standby Power Consumption | 17.6 W (110V/60 Hz) | 28.61 W (110 V/60 Hz) |
| | Dimensions (W x D x H) | 17.3 × 13.0 × 1.7 in (440 × 330 × 44 mm) | |
| | Fan Quantity | 2 | 3 |
| | Installation | Rack Mountable | |
| | Operating Temperature | 0 °C to 45 °C (32 °F to 113 °F) | 0 °C to 40 °C (32 °F to 104 °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 | |

## Software Features

| | | |
|---|---|---|
| Model | S5500-8XF / S5500-16XF / S5500-4XHPP2XF / S5500-8MHP2XF / S5500-24MPP4XF / S5500-24F4XF / S5500-24GP4XF / S5500-48GP4XF | |
| SDN Support | • Support Omada Pro Controller<br>• Automatic Device Discovery<br>• Batch Configuration<br>• Batch Firmware Upgrading | • Intelligent Network Monitoring<br>• Abnormal Event Warnings<br>• Unified Configuration<br>• Reboot Schedule |
| L3 Features | • 16 IPv4/IPv6 Interfaces<br>• Static Routing<br>- 48 static routes<br>• Static ARP<br>- 128 static entries<br>• 512 ARP Entries | • Proxy ARP<br>• Gratuitous ARP<br>• DHCP Server<br>• DHCP Relay<br>- DHCP interface relay<br>- DHCP VLAN relay<br>• DHCP L2 Relay |
| L2 Features | • Link Aggregation<br>- Static link aggregation<br>- 802.3ad LACP<br>- Up to 8 aggregation groups and up to 8 ports per group<br>• Spanning Tree Protocol<br>- 802.1d STP<br>- 802.1w RSTP<br>- 802.1s MSTP<br>- STP Security: TC Protect, BPDU Filter, BPDU Protect, Root Protect, Loop Protect | • Loopback Detection<br>- Port based<br>- VLAN based<br>• Flow Control<br>- 802.3x Flow Control<br>- HOL Blocking Prevention<br>• Mirroring<br>- Port Mirroring<br>- CPU Mirroring<br>- One-to-One<br>- Many-to-One<br>- Tx/Rx/Both |
| L2 Multicast | • Supports 1000 (IPv4, IPv6) IGMP groups (511 groups for S5500-8MHP2XF & S5500-24MPP4XF)<br>• IGMP Snooping<br>- IGMP v1/v2/v3 Snooping<br>- Fast Leave<br>- IGMP Snooping Querier<br>- IGMP Authentication<br>• IGMP Authentication<br>• MVR | • MLD Snooping<br>- MLD v1/v2 Snooping<br>- Fast Leave<br>- MLD Snooping Querier<br>- Static Group Config<br>- Limited IP Multicast<br>• Multicast Filtering: 256 profiles and 16 entries per profile |
| VLAN | • VLAN Group (802.1q VLAN)<br>- Max 4K VLAN Groups<br>• 802.1Q Tagged VLAN<br>• MAC VLAN entries: 30 (256 for S5500-8MHP2XF & S5500-24MPP4XF)<br>• Protocol VLAN: Protocol Template 16, Protocol VLAN 16 (Protocol Template 16 and Protocol VLAN 12 for S5500-8XF and S5500-16XF) | • Private VLAN (except for S5500-8MHP2XF & S5500-24MPP4XF)<br>• GVRP<br>• VLAN VPN<br>- VLAN Mapping<br>- VLAN Replace<br>• Voice VLAN<br>• OUI-based VLAN |
| QoS | • 8 priority queues<br>• 802.1p CoS/DSCP priority<br>• Queue scheduling<br>- SP (Strict Priority)<br>- WRR (Weighted Round Robin)<br>- SP+WRR | • Bandwidth Control<br>- Port/Flow based Rating Limiting<br>• Smoother Performance<br>• Action for Flows<br>- QoS remark (802.1P Remark, DSCP Remark) |

## Software Features

| | | |
|---|---|---|
| Model | S5500-8XF / S5500-16XF / S5500-4XHPP2XF / S5500-8MHP2XF / S5500-24MPP4XF / S5500-24F4XF / S5500-24GP4XF / S5500-48GP4XF | |
| ACL | • MAC ACL<br>- Source MAC<br>- Destination MAC<br>- VLAN ID<br>- User Priority<br>- Ether Type<br>• IP ACL<br>-Source IP<br>- Destination IP<br>- Fragment<br>- IP Protocol<br>- TCP Flag | - TCP/UDP Port<br>- DSCP/IP TOS<br>• Combined ACL<br>• IPv6 ACL<br>• Policy<br>- Mirroring<br>- Redirect<br>- Rate Limit<br>- QoS Remark<br>• ACL apply to Port/VLAN<br>• Time-based ACL |
| Security | • IP-MAC-Port Binding<br>-512 Entries<br>- DHCP Snooping<br>- ARP Inspection<br>- IPv4 Source Guard<br>• IPv6-MAC<br>-Port Binding<br>-512 Entries<br>- DHCPv6 Snooping<br>- ND Detection<br>- ND Snooping<br>- IPv6 Source Guard<br>• DoS Defend<br>• DHCP Filter<br>• Static/Dynamic Port Security<br>- Up to 64 MAC addresses per port<br>• Broadcast/Multicast/Unknown-unicast Storm Control<br>- kbps/ratio/pps control mode | • 802.1X<br>- Port base authentication<br>- Mac base authentication<br>- VLAN Assignment<br>- MAB<br>- Guest VLAN<br>- Support RADIUS authentication and accountability<br>• AAA (including TACACS+)<br>• Port Isolation<br>• Secure web management through HTTPS with SSLv3/TLS 1.2<br>• Secure Command Line Interface (CLI) management with SSHv1/SSHv2<br>• IP/Port/MAC based access control |
| ISP Features | • 802.3ah Ethernet Link OAM<br>• L2PT (Layer 2 Protocol Tunneling)<br>• PPPoE ID Insertion<br>• ERPS | • Device Link Detect Protocol (DLDP)<br>• sFlow<br>• DDM |
| Management | • Web-based GUI<br>• Command Line Interface (CLI) through consoleport, telnet<br>• SNMPv1/v2c/v3<br>- Trap/Inform<br>- RMON (1, 2, 3, 9 groups)<br>• SDM Template<br>• DHCP/BOOTP Client<br>• 802.1ab LLDP/LLDP-MED | • DHCP Auto Install<br>• Dual Image, Dual Configuration<br>• CPU Monitoring<br>• Cable Diagnostics<br>• EEE* (S5500-8XF and S5500-16XF do not support this feature)<br>• Password Recovery<br>• SNTP<br>• System Log<br>• Remote Packet Capture |

| Software Features | | |
|---|---|---|
| Model | S5500-8XF / S5500-16XF / S5500-4XHPP2XF / S5500-8MHP2XF / S5500-24MPP4XF / S5500-24F4XF / S5500-24GP4XF / S5500-48GP4XF | |
| IPv6 Support | • IPv6 Dual IPv4/IPv6<br>• Multicast Listener Discovery (MLD) Snooping<br>• IPv6 ACL<br>• IPv6 Interface<br>• Static IPv6 Routing<br>• IPv6 neighbor discovery (ND)<br>• Path maximum transmission unit (MTU) discovery<br>• Internet Control Message Protocol (ICMP) version 6<br>• TCPv6/UDPv6 | • IPv6 applications<br>- DHCPv6 Client<br>- Ping6<br>- Tracert6<br>- Telnet (v6)<br>- IPv6 SNMP<br>- IPv6 SSH<br>- IPv6 SSL<br>- Http/Https<br>- IPv6 TFTP |
| MIBs | • MIB II (RFC1213)<br>• Interface MIB (RFC2233)<br>• Ethernet Interface MIB (RFC1643)<br>• Bridge MIB (RFC1493)<br>• P/Q-Bridge MIB (RFC2674)<br>• RMON MIB (RFC2819) | • RMON2 MIB (RFC2021)<br>• RADIUS Accounting Client MIB (RFC2620)<br>• RADIUS Authentication Client MIB (RFC2618)<br>• Remote Ping, Traceroute MIB (RFC2925)<br>• Support TP-Link Private MIB |

# Ordering Information

## Host Switch

| Model | Description |
|---|---|
| S5500-8XF | Omada Pro 8-Port SFP+ L2+ Managed Switch |
| S5500-16XF | Omada Pro 16-Port SFP+ L2+ Managed Switch |
| S5500-4XHPP2XF | Omada Pro 4-Port PoE++ 10GE L2+ Managed Switch with 2 SFP+ Slots |
| S5500-8MHP2XF | Omada Pro 8-Port PoE+ 2.5G L2+ Managed Switch with 2 SFP+ Slots |
| S5500-24MPP4XF | Omada Pro 24-Port PoE+/PoE++ 2.5G L2+ Managed Switch with 4 SFP+ Slots |
| S5500-24F4XF | Omada Pro 24-Port SFP L2+ Managed Switch with 4 SFP+ Slots |
| S5500-24GP4XF | Omada Pro 24-Port PoE+ Gigabit L2+ Managed Switch with 4 SFP+ Slots |
| S5500-48GP4XF | Omada Pro 48-Port PoE+ Gigabit L2+ Managed Switch with 4 SFP+ Slots |

## 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 |
| MC1400 | 14-slot power supply chassis for MC Series Media Converter, 19-inch rack-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 |
| FC1400 | 14-slot power supply chassis for FC Series Media Converter, 19-inch rack-mountable |

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.

PoE budget calculations are based on laboratory testing. Actual PoE power budget is not guaranteed and will vary as a result of client limitations and environmental factors.