

# Business Switch and Router

Ideal Wired Networking for Small and Medium Businesses

## Products Guide



2022

Professional  
Reliable  
Secure





# CORPORATE PROFILE

TP-Link serves as the network backbone for homes and businesses worldwide. With humble beginnings in 1996, the company has grown to what it is today: a global leader.

You can find our Reliably Smart devices connecting 1.7 billion people in over 170 countries and regions. These numbers have led analyst firm IDC to rank us as the No. 1 provider of Wi-Fi devices for over a decade.\*

We understand the importance of the always-connected lifestyle. Our products feature the latest technologies and are engineered to last. The TP-Link portfolio includes home-business-ISP networking, surveillance, and consumer electronics. Rest assured that you're receiving our proven stability, performance, and value with every device.

As our lives grow ever more connected, TP-Link will continue to pursue excellence and explore the possibilities of tomorrow.

\*According to the latest published IDC Worldwide Quarterly WLAN Tracker Report, Q3 2021 Final Release.

## CONTENTS

<b>Switches</b>	<b>01</b>
JetStream L2+ Managed/ Smart Switches	05
JetStream Easy Smart Switches	09
10G/ 2.5G Unmanaged Switches	10
GE/ FE Unmanaged Switches	11
Power over Ethernet	15
PoE Switches	20
Reverse PoE Switches	23
PoE Adapters	23
Accessories	24
<b>Business Routers</b>	<b>25</b>
<b>Solutions for Businesses</b>	<b>28</b>
Solution for ISP Networks	28
Solution for Surveillance	29
Solution for Hospitality	30
Solution for Education	31
<b>Training, Partner Program and SMB Community</b>	<b>32</b>

# The TP-Link Switch Family

JetStream LiteWave

TP-Link provides a variety of switches for business networking solutions, aiming to provide premium network performance while maintaining a competitive cost. Our products are comprised of LiteWave and JetStream Unmanaged Switches, JetStream Easy Smart Switches, JetStream Smart Switches, and JetStream L2+ Managed Switches.



## TP-Link Switch Solutions

### Professional, Reliable and Affordable

TP-Link switches are designed to offer reliable and professional choices to businesses of all sizes. Unmanaged switches are well suited for businesses requiring no management or monitoring of their LAN, smart/ L2+ Managed switches provide a cost-effective solution for small and medium-sized businesses, and L2+ Managed switches provide a scalable and stable solution for large organizations, campus networks, and ISP networks.

### 10G/Multi-Gigabit Switching Solution

TP-Link's 10G/multi-gigabit managed switches are equipped with 10 Gbps fiber, 10 Gbps copper, or 2.5 Gbps copper ports, offering maximum performance and low latency. Reliable and lightning-fast connections to Wi-Fi 6 access points, storage servers, and other switches and devices are easily established. All the managed multi-gigabit switches are integrated into the Omada Software Defined Networking (SDN) system and are equipped with centralized management.



### Unlock the Real Wi-Fi 6 with 10/2.5 Gbps PoE Ports

The best option to meet the full bandwidth potential of Wi-Fi 6 access points with 10 Gbps and 2.5 Gbps PoE connections. Up to 10x faster Wi-Fi is delivered with 10G ports, and 2.5x faster with 2.5G ports when compared with gigabit ports.



## Power Over Ethernet

TP-Link's Power over Ethernet (PoE) switches are specially designed to meet either the 802.3af PoE, 802.3at PoE+, or 802.3bt PoE++ standard for powering network devices. Electrical power is transmitted along with data in a single cable, allowing users to expand their networks to places where there are no power outlets.



802.3bt PoE++  
Max. 60/90 W Output per Port



802.3at PoE+  
Max. 30 W Output per Port



802.3af PoE  
Max. 15.4 W Output per Port

## Typical PoE Application

JetStream 6-Port 10GE L2+ Managed Switch with 4-Port PoE++



Note: Please refer to page 15 to find more details about power over Ethernet.

## Omada—Smarter Cloud Solution for Business Networking

Omada's Software Defined Networking (SDN) platform integrates network devices including access points, switches, and routers, providing 100% centralized cloud management to create a highly scalable network—all controlled from a single interface.



Centralized Cloud Management



Zero-Touch Provisioning\*



Multi-Site Management



Omada App



## JetStream Switches Supported by Omada SDN

<b>L2+ Managed Switches</b>	TL-SX3016F TL-SX3008F TL-SG3452X TL-SG3428X TL-SG3428XF	TL-SG3452 TL-SG3428 TL-SG3210	TL-SX3206HPP TL-SG3210XHP-M2 TL-SG3452XP TL-SG3428XMP	TL-SG3452P TL-SG3428MP	
<b>Smart Switches</b>		TL-SG2218 TL-SG2008		TL-SG2428P TL-SG2210MP TL-SG2210P TL-SG2008P	TL-SL2428P
	Non-PoE (10G)	Non-PoE (1G)	POE (10G/2.5G)	POE (1G)	PoE (FE)

\*Zero-Touch Provisioning requires the use of Omada Cloud-Based Controller. Please go to [www.tp-link.com/omada-cloud-based-controller/product-list](http://www.tp-link.com/omada-cloud-based-controller/product-list) to confirm which models are compatible with Omada Cloud-Based Controller.

## Advanced Features Bring Premium Network Performance

### Abundant Advanced Features

An abundance of L2+ features, including advanced QoS, static routing, IPv6 support, 802.1Q VLAN, Port Mirroring, STP/RSTP/MSTP, Link Aggregation Control Protocol, sFlow, QinQ, and more, are supported to help build a highly scalable and robust network, providing a reliable and efficient solution for enterprises, campus, ISPs, and more.

### IPv6 Support

IPv6 functions supported are Dual IPv4/IPv6 Stack, MLD Snooping, IPv6 ACL, DHCPv6 Snooping, IPv6 Interface, Path Maximum Transmission Unit (PMTU) Discovery and IPv6 Neighbor Discovery.

### Secure Networking

TP-Link Switches provide IP-MAC-Port Binding, Port Security, Storm control and DHCP Snooping which protect against broadcast storms, ARP attacks, etc. You can protect these attacks more easily than ever 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.

### Flexible Management

TP-Link switches support various management features. The L2+ Managed and Smart switches are integrated in to Omada SDN platform and capable of be centrally managed via web UI, software, or Omada app. Standalone mode supports such as intuitive web-based Graphical User Interface (GUI) or industry-standard Command Line Interface (CLI), either administration traffic can be protected through SSL or SSH encryptions. SNMP v1/v2c/v3) and RMON support enables the switch to be polled for valuable status information and send traps on abnormal events.

### Green Technology

TP-Link power saving technology helps you build your network with less investment. What's more, TP-Link consciously strives to commit to reducing our own environmental footprint, so as to protect our environment for now and the future.

## TP-Link JetStream and LiteWave Switches

<b>L2+ Managed Switches</b> (Integration to Omada SDN Platform)	TL-SX3016F TL-SX3008F TL-SG3452X TL-SG3428X TL-SG3428XF	TL-SG3452 TL-SG3428 TL-SG3210		TL-SX3206HPP TL-SG3210XHP-M2 TL-SG3452XP TL-SG3428XMP	TL-SG3452P TL-SG3428MP	
<b>Smart Switches</b> (Integration to Omada SDN Platform)		TL-SG2218 TL-SG2008			TL-SG2428P TL-SG2210MP TL-SG2210P TL-SG2008P	TL-SL2428P
<b>Easy Smart Switches</b> (Manageable via Web UI or Utility)		TL-SG1024DE TL-SG1016DE TL-SG116E TL-SG108E TL-SG105E			TL-SG1428PE TL-SG1218MPE TL-SG1016PE TL-SG1210MPE TL-SG108PE TL-SG105PE	
<b>Unmanaged Switches — Rackmount</b>	TL-SX1008	TL-SG1048 TL-SG1024 TL-SG1024D TL-SG1016 TL-SG1016D TL-SG1008	TL-SF1048 TL-SF1024 TL-SF1016 TL-SF1024D TL-SF1016DS		TL-SG1218MP TL-SG1008MP	TL-SL1226P TL-SL1218MP TL-SL1218P
<b>Unmanaged Switches — Desktop</b>	TL-SX105 TL-SG108-M2 TL-SG105-M2	TL-SG116 TL-SG108 TL-SG1008D TL-SG105 TL-SG1005D	TL-SF1024M TL-SF1016D TL-SF1008D TL-SF1005D		TL-SG1210MP TL-SG1210P TL-SG1008P TL-SG1005P TL-SG1005LP	TL-SL1311MP TL-SF1009P TL-SF1008P TL-SF1005P TL-SF1008LP TL-SF1006P TL-SF1005LP
<b>LiteWave Unmanaged Switches</b>		LS108G LS105G LS1008G LS1005G	LS1008 LS1005			
	Non-PoE (2.5G/10G)	Non-PoE (1G)	Non-PoE (FE)	PoE (2.5G/10G)	POE (1G)	POE (FE)

# L2+ Managed Switches

## Enterprise L2+ Managed Solutions for Demanding Networking Applications

TP-Link's JetStream L2+ Managed Switches provide ideal networking solutions for both small and medium-sized businesses, as well as enterprise networks and campus networks. Features include enterprise-level QoS, advanced security strategies, abundant management features and enhanced L2+/L2 features, such as static routing, DHCP Server, DHCP Relay, OAM, and DDM. Additionally, all of them are integrated into Omada Software Defined Networking (SDN), meaning the access of convenient centralized management anywhere, anytime.

Note: Please refer to page 15 for L2+ Managed PoE Switches.

### Lightning-Fast Full 10G Aggregation Switch with Centralized Management Capability

JetStream 16/8-Port 10GE SFP+ L2+ Managed Switch

**TL-SX3016F**  
16× 10G SFP+ Ports, 1× RJ45 Console Port, 1× Micro-USB Console Port, 19-Inch Rackmount, Redundant Dual Power Supplies

**TL-SX3008F**  
8× 10G SFP+ Ports, 1× RJ45 Console Port, 1× Micro-USB Console Port, 19-Inch Rackmount

Omada SDN Integration

Centralized Cloud Management

Full 10G SFP+ Ports

Static Routing

Abundant L2 & L2+ Features

Robust Security Strategies

IPv6 Support

**TL-SG3452X**  
JetStream 48-Port Gigabit L2+ Managed Switch with 4 10GE SFP+ Slots

48× Gigabit RJ45 Ports, 4× 10G SFP+ Ports, 1× RJ45 Console Port, 1× Micro-USB Console Port, 19-Inch Rackmount

**TL-SG3428X**  
JetStream 24-Port Gigabit L2+ Managed Switch with 4 10GE SFP+ Slots

24× Gigabit RJ45 Ports, 4× 10G SFP+ Ports, 1× RJ45 Console Port, 1× Micro-USB Console Port, 19-Inch Rackmount

**TL-SG3428XF**  
JetStream 24-Port SFP L2+ Managed Switch with 4 10GE SFP+ Slots

20× Gigabit SFP Ports, 4× Gigabit RJ45/SFP Combo Ports, 4× 10G SFP+ Ports, 1× RJ45 Console Port, 1× Micro-USB Console Port, 19-Inch Rackmount, Redundant Dual Power Supplies

**TL-SG3452**  
JetStream 48-Port Gigabit L2+ Managed Switch with 4 SFP Slots

48× Gigabit RJ45 Ports, 4× Gigabit SFP Ports, 1× RJ45 Console Port, 1× Micro-USB Console Port, 19-Inch Rackmount

**TL-SG3428**  
JetStream 24-Port Gigabit L2+ Managed Switch with 4 SFP Slots

24× Gigabit RJ45 Ports, 4× Gigabit SFP Ports, 1× RJ45 Console Port, 1× Micro-USB Console Port, 19-Inch Rackmount

**TL-SG3210**  
JetStream 8-Port Gigabit L2+ Managed Switch with 2 SFP Slots

8× Gigabit RJ45 Ports, 2× Gigabit SFP Ports, 1× RJ45 Console Port, 1× Micro-USB Console Port, 13-Inch Desktop/Rackmount

# Smart Switches

## Cost-Effective Solution with Enhanced Usability and Exceptional Performance

Integrated with useful L2 and L2+ features such as static routing and DHCP Server, they provide cost-effective networking solutions for small and medium-sized businesses, offering enhanced usability and better performance. Additionally, all of them are integrated into Omada Software Defined Networking (SDN), meaning the access of convenient centralized management anywhere at anytime.

Note: Please refer to page 15 for Smart PoE Switches.

### Convenient Gigabit Switch for a Complete Omada Network

JetStream Smart Switches

Omada SDN Integration

Centralized Cloud Management

Static Routing

Abundant L2 & L2+ Features

Abundant Security Strategies

IPv6 Support

**TL-SG2218**  
JetStream 16-Port Gigabit Smart Switch with 2 SFP Slots

16× Gigabit RJ45 Ports, 2× Gigabit SFP Ports, 19-Inch Rackmount

**TL-SG2008**  
JetStream 8-Port Gigabit Smart Switch

8× Gigabit RJ45 Ports (Including 1× 802.3af PD Port), Desktop Design

## Features

### L2 and L2+ Features

- Static Routing (IPv4/IPv6)
- ARP Proxy
- DHCP Relay/Server
- IGMP/MLD Snooping
- GARP VLAN Registration Protocol (GVRP)
- Link Aggregation Group (LAG)
- Link Aggregation Control Protocol (LACP)
- STP/RSTP/MSTP
- 802.1Q/MAC/Protocol VLAN
- LLDP/LLDP-MED

### Quality of Service






- 8 Priority Queues
- IEEE 802.1p Priority
- DSCP QoS
- Rate Limit
- IPv6 QoS
- Voice VLAN

### Security Strategies






- AAA
- IP-MAC-Port-VID Binding
- Access Control List (L2-L4 ACL, IPv6 ACL)
- ARP Inspection
- IP Source Guard
- 802.1x and RADIUS/TACACS+ Authentication
- DoS Defend
- Port Isolation
- DHCP Snooping
- Loopback Detection

### Management

- Web-based GUI
- Command Line Interface
- SNMP V1/V2c/V3
- RMON (1, 2, 3, 9 group)
- IPv6 Management
- Dual Image

Product Picture						
Model		TL-SX3016F	TL-SX3008F	TL-SG3452X	TL-SG3428X	TL-SG3428XF*
Layer		L2+ Managed				
Product Description		JetStream 16-Port 10GE SFP+ L2+ Managed Switch	JetStream 8-Port 10GE SFP+ L2+ Managed Switch	JetStream 48-Port Gigabit L2+ Managed Switch with 4 10GE SFP+ Slots	JetStream 24-Port Gigabit L2+ Managed Switch with 4 10GE SFP+ Slots	JetStream 24-Port SFP L2+ Managed Switch with 4 10GE SFP+ Slots
Omada SDN Integration		•	•	•	•	•
Hardware	Gigabit RJ45 Ports	-	-	48	24	-
	Gigabit SFP Ports	-	-	-	-	20
	Gigabit RJ45/SFP Combo Ports	-	-	-	-	4
	10G SFP+ Ports	16	8	4	4	4
	Console Ports	1 (RJ45) + 1 (Micro-USB)				
	Standards	IEEE 802.3i, 802.3u, 802.3ab, 802.3z, 802.3ad, 802.3ae, 802.3x, 802.1Q, 802.1p, 802.1d, 802.1w, 802.1s, 802.1x		IEEE 802.3i, 802.3u, 802.3ab, 802.3ad, 802.3x, 802.3ae, 802.3an, 802.1Q, 802.1p, 802.1d, 802.1w, 802.1s, 802.1x		
	Auto-Negotiation / Auto MDI/MDIX	•				
	Flow Control	•				
	Power Supply	100-240 VAC, 50/60 Hz				
	RPS (Redundant Power Supply)	•	-	-	-	•
Performance	Switching Capacity	320 Gbps	160 Gbps	176 Gbps	128 Gbps	128 Gbps
	Forwarding Rate	238.1 Mpps	119.0 Mpps	130.9 Mpps	95.2 Mpps	95.2 Mpps
	MAC Address Table	32 K	32 K	16 K	16 K	16 K
	Jumbo Frame	9 KB	9 KB	9 KB	9 KB	9 KB
L2+ Features	Static Routing	•				
	DHCP Server/Relay	•				
	ARP Proxy	•				
L2 Features	IGMP Snooping	V1/V2/V3				
	STP/RSTP/MSTP	•				
	Loopback Detection	•				
	QinQ	•				
	VLAN	802.1Q/MAC/Protocol/Private/Voice VLAN				
	QoS	8 Queues, Port/802.1p/DSCP QoS				
	Rate Limit	•				
	Port Isolation	•				
	Port Mirroring	•				
	Link Aggregation	Static LAG / LACP				
Security	Access Control List	•				
	IP + MAC + PORT + VID Binding	•				
	Storm Control	•				
	Port Security	•				
	SSH & SSL	•				
	IP Source Guard	•				
	DoS Defend	•				
	Dynamic ARP Inspection	•				
	IEEE 802.1X Authentication	•				
System Management	Centralized Cloud Management	•				
	SNMP	v1/v2c/v3				
	RMON	Group 1, 2, 3, 9				
	Command Line Interface (CLI)	Telnet/SSH				
	Dual Image	•				
	sFlow	•				
	Ethernet OAM	•				
	IPv6	•				
	Firmware Upgrade	HTTP/TFTP				
	System Diagnose	VCT/CPU Monitor/Ping/Tracert				
Web Interface/SYS LOG/MIBS	•					

\*These products are being developed, and the product images and specifications may vary then.  
07 | Business Switch and Router Products Guide

Product Picture						
Model		TL-SG3452	TL-SG3428	TL-SG3210 (v3 and above)	TL-SG2218	TL-SG2008 (v3 and above)
Layer		L2+ Managed			Smart	
Product Description		JetStream 48-Port Gigabit L2+ Managed Switch with 4 SFP Slots	JetStream 24-Port Gigabit L2+ Managed Switch with 4 SFP Slots	JetStream 8-Port Gigabit L2+ Managed Switch with 2 SFP Slots	JetStream 16-Port Gigabit Smart Switch with 2 SFP Slots	JetStream 8-Port Gigabit Smart Switch
Omada SDN Integration		•	•	•	•	•
Hardware	Gigabit RJ45 Ports	48	24	8	16	8 (including 1 PD Port)
	Gigabit SFP Ports	4	4	2	2	-
	10G SFP+ Ports	-	-	-	-	-
	Console Ports	1 (RJ45) + 1 (Micro-USB)				
	Standards	IEEE 802.3i, 802.3u, 802.3ab, 802.3z, 802.3ad, 802.3x, 802.1Q, 802.1p, 802.1d, 802.1w, 802.1s, 802.1x			IEEE 802.3i, 802.3u, 802.3ab, 802.3ad, 802.3x, 802.1Q, 802.1p, 802.1d, 802.1w, 802.1s, 802.1x	
	Auto-Negotiation / Auto MDI/MDIX	•				
	Flow Control	•				
	Power Supply	100-240 VAC, 50/60 Hz			100-240 VAC, 50/60 Hz	12 VDC/1 A External Adapter or Obtain Power from PoE Source
	Fanless	•	•	•	•	•
	Dimensions (W × D × H)	17.3×8.7×1.7 in (440×220×44 mm)	17.3×7.1×1.7 in (440×180×44 mm)	11.6×7.1×1.7 in (294×180×44 mm)	17.3×7.1×1.7 in (440×180×44 mm)	8.2×5.0×1.0 in (209×126×26 mm)
Performance	Switching Capacity	104 Gbps	56 Gbps	20 Gbps	36 Gbps	16 Gbps
	Forwarding Rate	77.4 Mpps	41.7 Mpps	14.9 Mpps	26.8 Mpps	11.9 Mpps
	MAC Address Table	16 K	16 K (v2.x), 8 K (v1.x)	8 K	8 K	8 K
	Jumbo Frame	9 KB	9 KB	9 KB	9 KB	9 KB
L2+ Features	Static Routing	•				
	DHCP Server/Relay	•				
	ARP Proxy	•				
L2 Features	IGMP Snooping	V1/V2/V3				
	STP/RSTP/MSTP	•				
	Loopback Detection	•				
	QinQ	•				
	VLAN	802.1Q/MAC/Protocol/Private/Voice VLAN			802.1Q/MAC/Protocol/Voice VLAN	
	QoS	8 Queues, Port/802.1p/DSCP QoS				
	Rate Limit	•				
	Port Isolation	•				
	Port Mirroring	•				
	Link Aggregation	Static LAG / LACP				
Security	Access Control List	•				
	IP + MAC + PORT + VID Binding	•				
	Storm Control	•				
	Port Security	•				
	SSH & SSL	•				
	IP Source Guard	•				
	DoS Defend	•				
	Dynamic ARP Inspection	•				
	IEEE 802.1X Authentication	•				
System Management	Centralized Cloud Management	•				
	SNMP	v1/v2c/v3				
	RMON	Group 1, 2, 3, 9				
	Command Line Interface (CLI)	Telnet/SSH				
	Dual Image	•				
	sFlow	-	•	-	-	-
	Ethernet OAM	•**				
	IPv6	•				
	Firmware Upgrade	HTTP/TFTP				
	System Diagnose	VCT/CPU Monitor/Ping/Tracert				
Web Interface/SYS LOG/MIBS	•					

\*\*Ethernet OAM of TL-SG3452 requires further software update.  
\*\*\*The highest temperature of TL-SG3428 and TL-SG3210 is 45 °C.  
Note: Please refer to page 15 for L2+ Managed / Smart PoE Switches.

# JetStream Easy Smart Switches


## Simple and Professional Gigabit Networking for Small Businesses

TP-Link Easy Smart Switches are the perfect upgrade from Unmanaged Switches. Configuration is simple with the Easy Smart Configuration Utility management software. The switch is equipped with many practical basic features, including Port-based/Tag-based/MTU VLAN, QoS, and IGMP Snooping. Easy Smart Switches provide network administrators with a simple and cost-effective networking solution for small business networks.


Note: Please refer to page 15 for Easy Smart PoE Switches.

### Easily Expand Your Gigabit Network and Save Energy






5/8/16/24-Port Gigabit Easy Smart Switch



**TL-SG116E/ TL-SG108E/ TL-SG105E**  
16/8/5-Port Gigabit Easy Smart Switch  
16/8/5× Gigabit RJ45 Ports, Desktop Design



**TL-SG1024DE/ TL-SG1016DE**  
24/16-Port Gigabit Easy Smart Switch  
24/16× Gigabit RJ45 Ports, 13-Inch Desktop/Rackmount

Product Picture						
Model	TL-SG1024DE	TL-SG1016DE	TL-SG116E	TL-SG108E	TL-SG105E	
Product Description	24-Port Gigabit Easy Smart Switch	16-Port Gigabit Easy Smart Switch	16-Port Gigabit Easy Smart Switch	8-Port Gigabit Easy Smart Switch	5-Port Gigabit Easy Smart Switch	
Hardware	Gigabit RJ45 Ports	24	16	16	8	
	Standards	IEEE 802.3i, 802.3u, 802.3ab, 802.3x, 802.1q, 802.1p				
	Flow Control	•				
	Power Supply	100-240 VAC, 50/60 Hz		External Power Adapter (12 VDC/ 1 A)	External Power Adapter (5 VDC/0.6 A)	External Power Adapter (5 VDC/0.6 A)
	Fanless	•	•	•	•	•
	Dimensions (W × D × H)	11.6×7.1×1.7 in (294×180×44 mm)		11.3×4.4×1.0 in (286×112×25 mm)	6.2×4.0×1.0 in (158×101×25 mm)	3.9×3.9×1.0 in (100×98×25 mm)
	Installation	Rackmount/Desktop		Desktop/Wall-Mounting		
Operating Temperature	0~40°C (32~104 °F)					
Environment	Storage Temperature: -40~70 °C (-40~158 °F) Operating Humidity: 10~90% RH Non-Condensing; Storage Humidity: 5~90% RH Non-Condensing					
Performance	Switch Capacity	48 Gbps	32 Gbps	32 Gbps	16 Gbps	10 Gbps
	Forwarding Rate	35.7 Mbps	23.8 Mbps	23.8 Mbps	11.9 Mbps	7.4 Mbps
	MAC Address Table	8 K	8 K	8 K	4 K	2 K
	Jumbo Frame	10 KB	10 KB	10 KB	16 KB	16 KB
	IGMP Snooping	V1/V2/V3				
Software Features	Link Aggregation (Static LAG)	•				
	Port Mirroring	•				
	Cable Test	•				
	Loop Prevention	•				
	VLAN	MTU/Port/802.1Q VLAN				
	QoS	4 Queues/Port/802.1p/DSCP				
Rate Limit	•					

# Experience Future Networking with Lightning-Fast Connections

## 10G / 2.5 G Multi-Gigabit Unmanaged Switches

TP-Link 10G and 2.5G switches deliver reliable, lightning-fast connections with the lowest latency possible, and unlock the highest potentials of your Multi-Gig bandwidth and devices. Ideal for gaming, LAN party, home entertainment, and backup and restore as well as use in small offices and home offices. Don't hesitate to enjoy the highest performance of your NAS, server, gaming computer, workstation, 8K video, Wi-Fi 6 AP, USB to Ethernet adapter, and more.



TL-SX1008 / TL-SX105



TL-SG108-M2 / TL-SG105-M2



## 10G Multi-Gigabit Unmanaged Switches ▾

### Futuristic Networking with Lightning-Fast 10G/Multi-Gig Connections



**10G Ports**  
Lightning-fast connections



**Optimal 5-Speed Connections**  
100Mbps/1G/2.5G/5G/10G auto-negotiation



**Low-Noise Operation\*\***  
Intelligent fan speed adjustment or fanless design



**Plug & Play**  
Easy installation, no configuration required



**Metal Casing**  
Premium design with remarkable durability

## 2.5G Multi-Gigabit Unmanaged Switches ▾

### Upgrade to a Super-Fast, Futuristic Network Without Changing Cables



**2.5G Ports**  
Super-fast connections



**Hassle-Free Cabling**  
Upgrade to 2.5G without changing cables\*



**Silent Operation**  
Industry-leading fanless design



**Plug & Play**  
Easy installation, no configuration required



**Metal Casing**  
Premium design with remarkable durability

Product Picture					
Model	TL-SX1008	TL-SX105	TL-SG108-M2	TL-SG105-M2	
Product Description	8-Port 10G Multi-Gigabit Desktop/Rackmount Switch	5-Port 10G Multi-Gigabit Desktop Switch	8-Port 2.5G Multi-Gigabit Desktop Switch	5-Port 2.5G Multi-Gigabit Desktop Switch	
Hardware	10G RJ45 Ports	8	5	-	
	2.5G RJ45 Ports	-	-	8	
	Fanless	1 Fan	•	•	
	Auto-Negotiation Ports	100Mbps/1Gbps/2.5Gbps/5Gbps/10Gbps Auto-Negotiation		100Mbps/1Gbps/2.5Gbps Auto-Negotiation	
	Dimensions (W × D × H)	11.6×7.1×1.7 in (294×180×44 mm)		8.9×5.2×1.4 in (226×131×35 mm)	8.2×4.9×1.0 in (209×126×26 mm)
	Installation	Rackmount/Desktop		Desktop/Wall-Mounting	
	Operating Temperature	0~50 °C (32~122 °F)		0~40 °C (32~104 °F)	
Environment	Storage Temperature: -40~70 °C (-40~158 °F); Operating Humidity: 10~90% RH Non-Condensing; Storage Humidity: 5~90% RH Non-Condensing				
Performance	Switch Capacity	160 Gbps	100 Gbps	40 Gbps	25 Gbps
	Forwarding Rate	119.0 Mbps	74.4 Mbps	29.8 Mbps	18.6 Mbps
	MAC Address Table	32 K		16 K	
	Jumbo Frame	10 KB		10 KB	
	QoS	•			
Software Features	Flow Control	•			
	MAC Address Learning	•			

\*Only Cat5e or better cables do not need to be replaced.

\*\*TL-SX105 is equipped with fanless design, ensuring silent operation.

# Unmanaged Rackmount Switches


## Unmanaged Rackmount Switches

### Reliable Wired Network Expansion with Plug and Play


TP-Link's Unmanaged Switches are simple plug and play products, with no software configuration required. They are designed to meet the needs of different network connections, with high performance ports provided that allow for simple and effective expansion of small and medium business networks, making work more efficient.

Note: Please refer to page 15 for unmanaged PoE switches.

## Expand Your Gigabit Network with Plug and Play



**TL-SG1024D**  
24-Port Gigabit Desktop/Rackmount Switch



**TL-SG1016D**  
16-Port Gigabit Desktop/Rackmount Switch



**TL-SG1048**  
48-Port Gigabit Rackmount Switch



**TL-SG1024**  
24-Port Gigabit Rackmount Switch



**TL-SG1016**  
16-Port Gigabit Rackmount Switch



**TL-SG1008**  
8-Port Gigabit Desktop/Rackmount Switch



**TL-SF1016/TL-SF1024/TL-SF1048**  
16/24/48-Port 10/100 Mbps Rackmount Switch



**TL-SF1016DS/TL-SF1024D**  
16/24-Port 10/100 Mbps Desktop/Rackmount Switch

Product Picture						
Model	TL-SG1048	TL-SG1024	TL-SG1016	TL-SG1024D	TL-SG1016D	TL-SG1008
Product Description	48-Port Gigabit Rackmount Switch	24-Port Gigabit Rackmount Switch	16-Port Gigabit Rackmount Switch	24-Port Gigabit Desktop / Rackmount Switch	16-Port Gigabit Desktop / Rackmount Switch	8-Port Gigabit Desktop / Rackmount Switch
Gigabit RJ45 Ports	48	24	16	24	16	8
MAC Address Table	16 K	8 K			4K	
Switching Capacity	96 Gbps	48 Gbps	32 Gbps	48 Gbps	32 Gbps	16 Gbps
Forwarding Rate	71.4 Mpps	35.7 Mpps	23.8 Mpps	35.7 Mpps	23.8 Mpps	11.9 Mpps
Jumbo Frame	12 KB	10 KB			16 KB	
Fanless	•					
Green Technology	•					
Auto-Negotiation / Auto MDI/MDIX	•					
802.3X Flow Control & Back Pressure	•					
QoS	-	802.1p/DSCP				
IGMP Snooping						•
Transfer Method	Store and Forward					
Power Supply	100-240 VAC, 50/60 Hz					
Certifications	CE, FCC					
Dimensions (W × D × H)	17.3x8.7x1.7 in (440x220x44 mm)	17.3x7.1x1.7 in (440x180x44 mm)				11.6x7.1x1.7 in (294x180x44 mm)
Environment	Operating Temperature: 0-40 °C(32-104 °F); Storage Temperature: -40-70 °C (-40-158 °F) Operating Humidity: 10-90% RH non-condensing; Storage Humidity: 5-90% RH non-condensing					

Product Picture					
Model	TL-SF1048	TL-SF1024	TL-SF1016	TL-SF1024D	TL-SF1016DS
Product Description	48-Port 10/100 Mbps Rackmount Switch	24-Port 10/100 Mbps Rackmount Switch	16-Port 10/100 Mbps Rackmount Switch	24-Port 10/100 Mbps Desktop/Rackmount Switch	16-Port 10/100 Mbps Desktop/Rackmount Switch
10/100 Mbps RJ45 Ports	48	24	16	24	16
MAC Address Table	16 K	8 K			
Switching Capacity	9.6 Gbps	4.8 Gbps	3.2 Gbps	4.8 Gbps	3.2 Gbps
Forwarding Rate	7.14 Mpps	3.57 Mpps	2.38 Mpps	3.57 Mpps	2.38 Mpps
Jumbo Frame	10 KB	2 KB			
Fanless	•				
Green Technology	•				
Auto Negotiation / Auto MDI / MDIX	•				
Flow Control & Back Pressure	•				
Transfer Method	Store and Forward				
Power Supply	100-240 VAC, 50/60 Hz				
Certifications	CE, FCC				
Dimensions (W × D × H)				17.3x7.1x1.7 in (440x180x44 mm)	11.6x7.1x1.7 in (294x180x44 mm)
Environment	Operating Temperature: 0-40 °C(32-104 °F); Storage Temperature: -40-70 °C (-40-158 °F) Operating Humidity: 10-90% RH non-condensing; Storage Humidity: 5-90% RH non-condensing				



# Unmanaged Desktop Switches

## Unmanaged Desktop Switches Bring Connectivity and Flexibility to Your Desktop

TP-Link's Unmanaged Desktop Switches are simple plug and play products, providing an easy way to expand your wired network. Plug-and-play setup and green technology, allow you to enjoy a smooth, reliable and energy-efficient network experience, instantly.


-   
**Plug and Play**
-   
**Gigabit Ports\***
-   
**Durable Metal Casing\***
-   
**Compact Desktop Design**
-   
**Traffic Prioritization\***
-   
**Green Technology**


\*These features vary in different models, please check the details in the next pages  
**Note: Please refer to page 15 for unmanaged PoE switches.**

### JetStream Switches



**TL-SG105 (5 ports)**  
**TL-SG108 (8 ports)**  
**TL-SG116 (16 ports)**

 **Gigabit Ethernet**  
Support 10/100/1000 Mbps Speeds


 **Compact Metal Housing**  
Steel Casing and Desktop Design


 **Traffic Prioritization**  
Support 802.1p/DSCP QoS

 **Multi-Cast Optimization**  
Support IGMP Snooping



**TL-SG1005D (5 ports)**  
**TL-SG1008D (8 ports)**


 **Gigabit Ethernet**  
Support 10/100/1000 Mbps Speeds


 **Compact Plastic Housing**  
Plastic Casing and Desktop Design

 **Traffic Prioritization**  
Support 802.1p/DSCP QoS




**TL-SF1005D (5 ports)**  
**TL-SF1008D (8 ports)**


 **Fast Ethernet**  
Support 10/100 Mbps Speeds

 **Compact Plastic Housing**  
Plastic Casing and Desktop Design



**TL-SF1016 (16 ports)**  
**TL-SF1024M (24 ports)**


 **Fast Ethernet**  
Support 10/100 Mbps Speeds

 **Compact Plastic Housing**  
Plastic Casing and Desktop Design


### LiteWave Switches



**LS105G (5 ports)**  
**LS108G (8 ports)**


 **Gigabit Ethernet**  
Support 10/100/1000 Mbps Speeds

 **Compact Metal Housing**  
Steel Casing and Desktop Design

 **Traffic Prioritization**  
Support 802.1p/DSCP QoS




**LS1005G (5 ports)**  
**LG1008G (8 ports)**


 **Gigabit Ethernet**  
Support 10/100/1000 Mbps Speeds




 **Compact Plastic Housing**  
Plastic Casing and Desktop Design









**LS1005 (5 ports)**  
**LS1008 (8 ports)**

 **Fast Ethernet**  
Support 10/100 Mbps Speeds

 **Compact Plastic Housing**  
Plastic Casing and Desktop Design

	JetStream Gigabit Switches		JetStream Fast Ethernet Switches
Product Picture			
Model	TL-SG105/TL-SG108/TL-SG116	TL-SG1005D/TL-SG1008D	TL-SF1005D/TL-SF1008D/TL-SF1016D/TL-SF1024M
Product Description	5/8/16-Port Gigabit Desktop Switch	5/8-Port Gigabit Desktop Switch	5/8/16/24-Port 10/100 Mbps Desktop Switch
Gigabit RJ45 Ports	5/8/16	5/8	-
10/100 Mbps RJ45 Ports	-	-	5/8/16/24
MAC Address Table	2 K/4 K/8 K	2 K/4 K	2 K/2 K/2 K/8 K
Switching Capacity	10/16/32 Gbps	10 Gbps/16 Gbps	1.0 Gbps/1.6 Gbps/3.2 Gbps/4.8 Gbps
Forwarding Rate	7.4 Mpps/11.9 Mpps/23.8 Mpps	7.4 Mpps/11.9 Mpps	0.74 Mpps/1.19 Mpps/2.38 Mpps/3.57 Mpps
Fanless		•	
Green Technology		•	
Auto Negotiation / Auto MDI/MDIX		•	
Flow Control & Back Pressure		•	
QoS	802.1p/DSCP		-
IGMP Snooping	•		-
Transfer Method	Store and Forward		
Power Supply	External Power Adapter	External Power Adapter	External Power Adapter
Certifications	CE, FCC		
Housing	Steel Shell	Plastic Shell	
Dimensions (W × D × H)	TL-SG116: 11.3x4.4x1.0 in (286x112x25 mm) TL-SG108: 6.2x4.0x1.0 in (158x100x25 mm) TL-SG105: 3.9x3.9x1.0 in (100x98x25 mm)	TL-SG1008D: 7.1x3.5x1.0 in (180x90x25.5 mm) TL-SG1005D: 5.5x3.5x0.9 in (140x88x23 mm)	TL-SF1024M: 8.7x5.0x1.7 in (222x126x42 mm) TL-SF1016D: 7.9x5.6x1.6 in (201x143x41 mm) TL-SF1008D: 5.3x3.1x0.9 in (135x79x23 mm) TL-SF1005D: 4.1x2.8x0.9 in (103x70x22 mm)
Environment	Operating Temperature: 0-40 °C(32-104 °F); Storage Temperature: -40-70 °C (-40-158 °F) Operating Humidity: 10-90% RH non-condensing; Storage Humidity: 5-90% RH non-condensing		

	LiteWave Gigabit Switches				LiteWave Fast Ethernet Switches	
Product Picture						
Model	LS105G	LS108G	LS1005G	LS1008G	LS1005	LS1008
Product Description	5/8-Port Gigabit Desktop Switch		5/8-Port Gigabit Desktop Switch		5/8-Port 10/100 Mbps Desktop Switch	
Gigabit RJ45 Ports	5	8	5	8	-	-
10/100 Mbps RJ45 Ports	-				5	8
MAC Address Table	2 K	4 K	2 K	4 K	2 K	
Switching Capacity	10 Gbps	16 Gbps	10 Gbps	16 Gbps	1.0 Gbps	1.6 Gbps
Forwarding Rate	7.4 Mpps	11.9 Mpps	7.4 Mpps	11.9 Mpps	0.7 Mpps	1.2 Mpps
Fanless	•					
Green Technology	•					
Auto Negotiation / Auto MDI/MDIX	•					
Flow Control & Back Pressure	•					
QoS	802.1p/DSCP		-			
IGMP Snooping	-					
Transfer Method	Store and Forward					
Power Supply	External Power Adapter		External Power Adapter		External Power Adapter	
Certifications	CE, FCC				CE	
Housing	Steel Shell			Plastic Shell		
Dimensions (W × D × H)	3.9×3.9×1.0 in (99.8×98×25 mm)	6.2×3.9×1.0 in (158×99.1×25 mm)	3.5×2.8×0.9 in (90×72×23 mm)	5.0×2.6×0.9 in (127×66.5×23 mm)	3.3×1.8×0.9 in (83.6×45.7×22.8 mm)	4.9×1.9×0.9 in (124.6×48.7×22.8 mm)
Environment	Operating Temperature: 0-40 °C(32-104 °F); Storage Temperature: -40-70 °C (-40-158 °F) Operating Humidity: 10-90% RH non-condensing; Storage Humidity: 5-90% RH non-condensing					

# Power over Ethernet

TP-Link's Power over Ethernet (PoE) Switches are specifically designed to meet either the 802.3af PoE, 802.3at PoE+, or 802.3bt PoE++ standard for powering network devices. Electrical power is transmitted along with data in a single cable, allowing users to expand their networks to places where there are no power outlets. With PoE, installation of network devices such as APs, IP cameras, IP phones, and other PoE enabled devices in hard-to-reach outdoor, and remote areas is simplified.



## Empowering Your Business Growth

Surveillance | Access Points | and More

## Power over Ethernet PoE Solution

### Multiple Application Scenarios



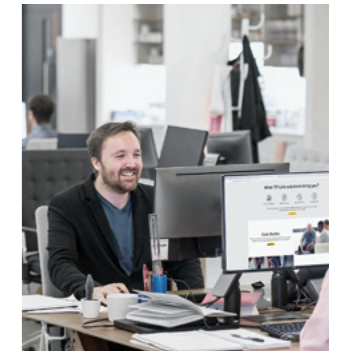
**Surveillance**  
Works with IP Cameras



**Conference Calls**  
Works with IP Phones



**Wi-Fi Coverage**  
Works with Access Points



**Wired Connections**  
Works with PCs and Printers

### Why Do You Need PoE?



#### No Fuss

Simplify the installation and streamline the deployment—no need for electricians.



#### Cost-Efficiency

No need for additional cables and power adapters—reduce costs on infrastructure.



#### Flexibility

More placement options allow for deployment in complex environments.



#### Power Management

Intelligently protects your devices from power surges and maximizes power usages.

### Why Choose TP-Link PoE Switches?



#### 250 m PoE Transmission

With Extend Mode\*, PoE supports data and power transmissions up to 250 m away—perfect for surveillance camera deployment in large areas.



#### Port Prioritization

Priority Mode ensures the quality of sensitive applications like video and voice in critical business areas by prioritizing the data of certain ports.



#### One-Click Traffic Separation

Isolation Mode easily divides traffic for downlink ports to avoid snooping and tampering. It isolates broadcast storm for higher security and performance.



#### PoE Auto Recovery

Automatically detects and reboots dropped or unresponsive PoE-powered devices to reduce the possibility of downtime. And it saves maintenance costs by eliminating manual monitoring and reboot, important for the hard-to-reach devices.



#### Cloud Centralized Management

Managed PoE Switches integrated Omada SDN provide 100% centralized cloud management to create a highly scalable networks—all controlled from a single interface anywhere, anytime.



#### 2.5/10 GE for Wi-Fi 6

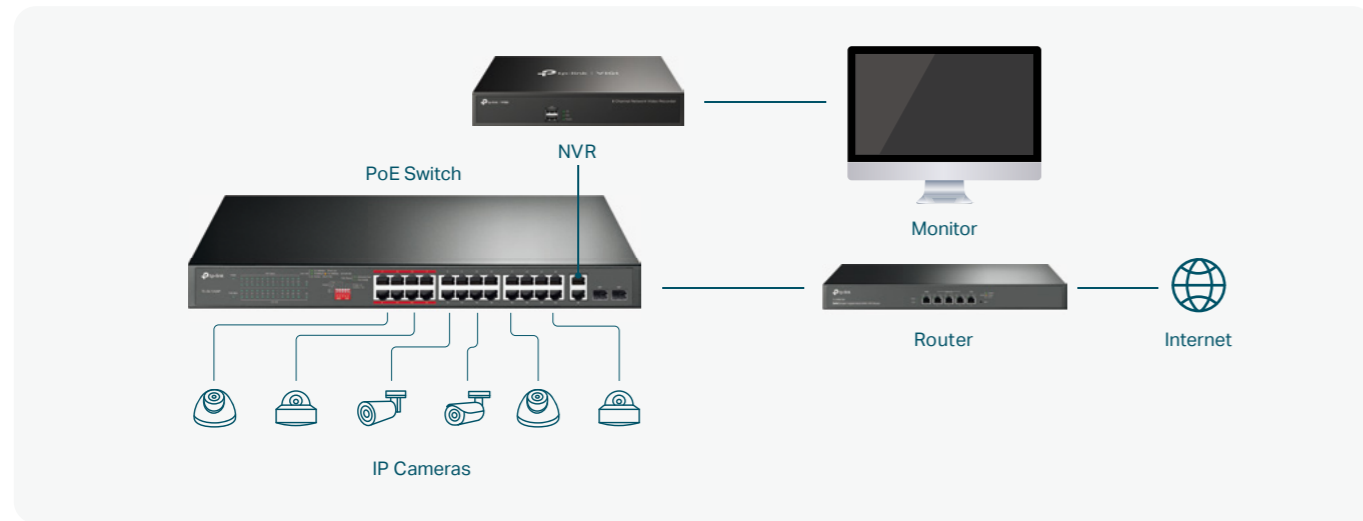
Premium 10G/multi-gigabit PoE switches are provided to meet the full bandwidth potential of Wi-Fi 6 access points. PoE, PoE+, and PoE++ are also supported to fully power up your Wi-Fi 6 APs.

\*Extend mode supports up to 250 meters' PoE power supply for surveillance cameras. The speed of the ports in extend mode will downgrade to 10 Mbps. The actual transmission distance may vary due to power consumption of PoE-powered devices or the cable quality and type.

## Affordable Solutions Designed for Surveillance

### TP-Link 100 Mbps PoE Switches

TP-Link's 100 Mbps PoE Switch series is designed to address specific SMB surveillance needs and satisfy the demands of most IP cameras. Many robust features like Extend Mode, Priority Mode, Isolation Mode, and PoE Auto Recovery provide value well beyond basic networking needs, creating a versatile and reliable surveillance network to grow your business.



- 250 m PoE Transmission\***
- Port Prioritization\***
- One-Click Traffic Separation\***
- PoE Auto Recovery\***
- Silent Operation**
- Energy Efficient**

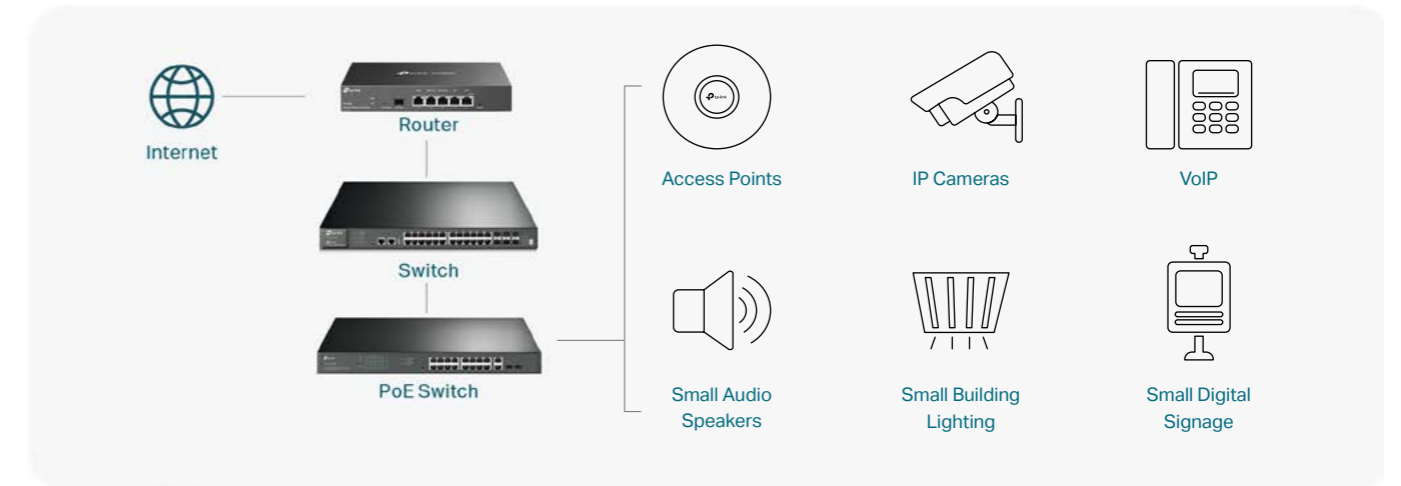
Layer	PoE Ports	Non-PoE Ports	Model	PoE Budget <sup>1</sup> (w)	PoE Standard	Extend Mode Button	Priority Mode Button	Isolation Mode Button	PoE Auto Recovery	Fanless Design	Deployment	Dimension (mm)
Unmanaged	4FE	1FE	TL-SF1005LP	41	802.3af	Ports 1-4	Ports 1-2	-	-	•	Desktop Wall Mounting	99.8×98×25
			TL-SF1005P	67	802.3af/at	Ports 1-4	Ports 1-2	-	-	•	Desktop Wall Mounting	99.8×98×25
	4FE	2FE	TL-SF1006P	67	802.3af/at	Ports 1-4	Ports 1-2	-	-	•	Desktop Wall Mounting	158×101×25
			TL-SF1008LP	41	802.3af	Ports 1-4	Ports 1-2	-	-	•	Desktop Wall Mounting	171×98×27
	4FE	4FE	TL-SF1008P	66	802.3af/at	Ports 1-4	Ports 1-2	-	Ports 1-4	•	Desktop Wall Mounting	171×98×27
			TL-SF1009P	65	802.3af/at	Ports 1-4/1-8	Ports 1-2	Ports 1-8	-	•	Desktop Wall Mounting	171×98×27
	8FE	2GE + 1SFP	TL-SL1311MP	124	802.3af/at	Ports 1-4/1-8	-	Ports 1-8	Ports 1-8	•	Desktop Wall Mounting	209×126×26
			1GE + 1Combo	TL-SL1218P	150	802.3af/at	Ports 1-8/9-16	Ports 1-8	Ports 1-16	-	-	Rackmount
	16FE	2Combo	TL-SL1218MP	250	802.3af/at	Ports 1-8/9-16	Ports 1-8	Ports 1-16	-	-	Rackmount	440×180×44
			TL-SL1226P	250	802.3af/at	Ports 1-8/9-16/17-24	Ports 1-8	Ports 1-24	-	-	Rackmount	440×180×44
Smart	24FE	2GE + 2Combo	TL-SL2428P v4.2 and above**	250	802.3af/at	Extend Mode achieves long-distance transmissions by limiting the maximum port speed to 10 Mbps.	Priority and Isolation Mode can be accessed through the QoS and VLAN functions.	PoE Auto Recovery can be configured on management interface.	-	-	Rackmount	440×220×44

\*These functions are supported by certain products, please refer to the below table for details.  
\*\*TL-SL2428P supports Omada SDN, and details about SDN could be found on page 19.

## Gigabit Switching Solutions for Growing SMBs

### TP-Link Gigabit PoE Switches—Unmanaged and Easy Smart

TP-Link's Unmanaged and Easy Smart PoE Switches offer more efficient and cost-effective solutions to meet the various needs of access points, surveillance, VoIP, and other applications. Robust features like Extend Mode, Priority Mode, Isolation Mode, and PoE Auto Recovery are inserted into some unmanaged switches. Advanced useful functions, such as QoS and VLAN, are integrated into Easy Smart Switches, providing a PoE solution more than expected.



- VLAN\***
- QoS\***
- IGMP Snooping**
- PoE Auto Recovery\***
- Easy to Use**
- Energy Efficient**

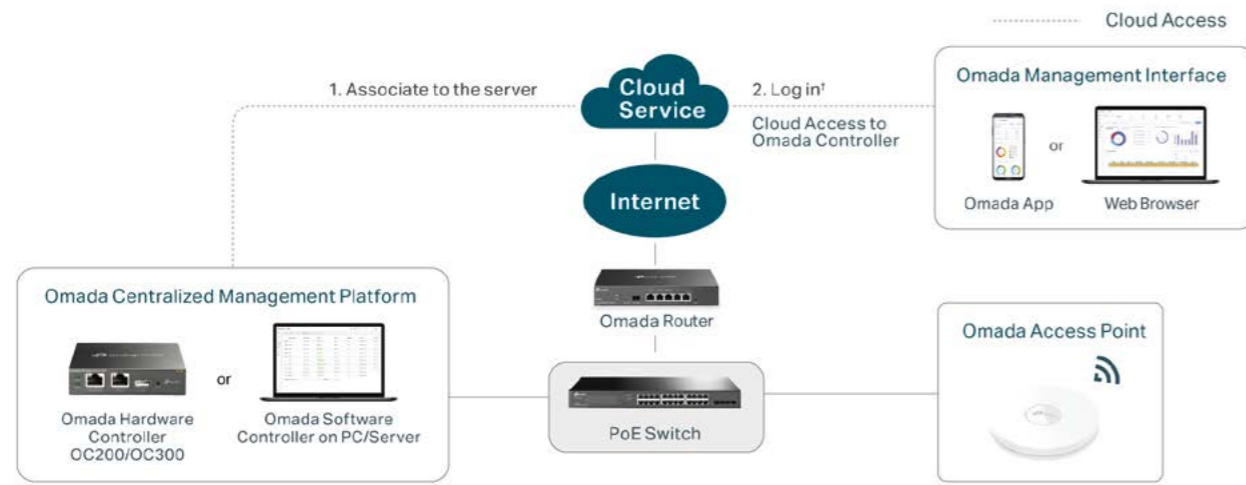
Layer	PoE Ports	Non-PoE Ports	Model	PoE Budget <sup>1</sup> (w)	PoE Standard	Extend Mode, Priority Mode, Isolation Mode, PoE Auto Recovery	Fanless Design	Deployment	Dimension (mm)
Unmanaged	4GE	1GE	TL-SG1005LP	40	802.3af/at	-	•	Desktop Wall Mounting	99.8×98×25
			TL-SG1005P	65	802.3af/at	-	•	Desktop Wall Mounting	99.8×98×25
	4GE	4GE	TL-SG1008P	64	802.3af/at	-	•	Desktop Wall Mounting	171×98×27
			TL-SG1008MP	153	802.3af/at	-	-	Desktop Rackmount	294×180×44
	8GE	1GE+1SFP	TL-SG1210P	63	802.3af/at	-	•	Desktop Wall Mounting	209×126×26
			TL-SG1210MP	123	802.3af/at	• Extend Mode: Ports 1-4 • Priority Mode: Ports 1-2 • Isolation Mode: Ports 1-4 / 5-8 • PoE Auto Recovery: Ports 1-8	•	Desktop Wall Mounting	209×126×26
16GE	2Combo	TL-SG1218MP	250	802.3af/at	-	-	Rackmount	440×180×44	
Easy Smart	4GE	1GE	TL-SG105PE	65	802.3af/at	Extend Mode achieves long-distance transmission by limiting the maximum port speed to 10 Mbps. Priority and Isolation Mode can be realized through QoS and VLAN functions. PoE Auto Recovery can be configured on management interface.	•	Desktop Wall Mounting	99.8×98×25
			TL-SG108PE	64	802.3af/at		•	Desktop Wall Mounting	158×101×25
	8GE	1GE+1Combo	TL-SG1210MPE	123	802.3af/at		•	Desktop Wall Mounting	209×126×26
			TL-SG1016PE	150	802.3af/at		-	Desktop Rackmount	294×180×44
	16GE	2Combo	TL-SG1218MPE	250	802.3af/at		-	Rackmount	440×180×44
			TL-SG1428PE	250	802.3af/at		-	Rackmount	440×220×44

\*These functions are supported by certain products, please refer to the below table for details.  
<sup>1</sup>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.

# The Smarter Cloud Solutions for Business Networking

## TP-Link L2+ Managed/ Smart PoE Switches—SDN Integration

Managed switches integrating Omada SDN (Software Defined Networking) provide 100% centralized management to create highly scalable networks. Seamless wireless and wired connections are provided—ideal for hospitality, education, retail, office, and more.



- Cloud Centralized Management<sup>Δ</sup>**
- Zero-Touch Provisioning<sup>‡</sup>**
- Easy Network Monitoring**
- 2.5/10 GE for Wi-Fi 6<sup>§</sup>**
- Multi-Site Management<sup>Δ</sup>**
- Omada App<sup>Δ</sup>**

Layer	PoE Ports	Non-PoE Ports	Model	PoE Budget* (W)	PoE Standard	PoE Auto Recovery**	SDN	Deployment	Dimension (mm)
Smart	24FE	2GE+2Combo	TL-SL2428P (v4.2 and above, except v4.6)	250	802.3af/at	✓	✓	Rackmount	440×180×44
	4GE	4GE	TL-SG2008P	62	802.3af/at	✓	✓	Desktop Wall Mounting	209×126×26
	8GE	2SFP	TL-SG2210P (v3.2 and above, except v3.6)	61	802.3af/at	✓	✓	Desktop Wall Mounting	209×126×26
			TL-SG2210MP	150	802.3af/at	✓	✓	Desktop Rackmount	294×180×44
	24GE	4SFP	TL-SG2428P	250	802.3af/at	✓	✓	Rackmount	440×220×44
L2+ Managed	24GE	4SFP	TL-SG3428MP	384	802.3af/at	✓	✓	Rackmount	440×330×44
	48GE	4SFP	TL-SG3452P	384	802.3af/at	✓	✓	Rackmount	440×330×44
	24GE	4SFP+	TL-SG3428XMP	384	802.3af/at	✓	✓	Rackmount	440×330×44
	48GE	4SFP+	TL-SG3452XP	500	802.3af/at	✓	✓	Rackmount	440×330×44
	8× 2.5G	2SFP+	TL-SG3210XHP-M2	240	802.3af/at	✓	✓	Rackmount	440×180×44
	4× 10G	2SFP+	TL-SX3206HPP	200	802.3af/at/bt	✓	✓	Desktop Rackmount	294×180×44

<sup>Δ</sup>Please go to <https://omada.tplinkcloud.com> to log in with your TP-Link ID.  
<sup>‡</sup>Zero-Touch Provisioning requires the use of the Omada Cloud-Based Controller. Please go to [www.tp-link.com/omada-cloud-based-controller/product-list](http://www.tp-link.com/omada-cloud-based-controller/product-list) to confirm which models are compatible with Omada Cloud-Based Controller.  
<sup>§</sup>Not all PoE Switches support this feature. Please refer to the below table for details.  
<sup>\*</sup>These functions require the use of Omada Hardware Controller, Software Controller, or Cloud-Based Controller.  
<sup>\*</sup>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.  
<sup>\*\*</sup>Under Controller Mode, use of the feature may require further software upgrades.

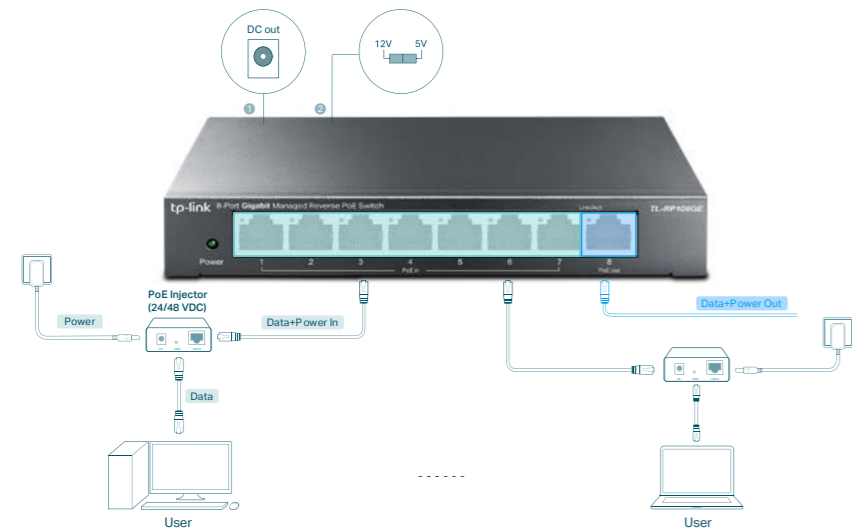
Product Picture												
Model	TL-SX3206HPP	TL-SG3210XHP-M2	TL-SG3452XP	TL-SG3428XMP	TL-SG3452P	TL-SG3428MP	TL-SG2428P	TL-SG2210MP	TL-SG2210P (v3.2 and above, except v3.6)	TL-SG2008P	TL-SL2428P (v4.2 and above, except v4.6)	
Layer	L2+ Managed						Smart					
Omada SDN Integration	•	•	•	•	•	•	•	•	•	•	•	
Hardware	10/100 Mbps RJ45 Ports	-	-	-	-	-	-	-	-	-	24, all support PoE+	
	Gigabit RJ45 Ports	-	-	48, all support PoE+	24, all support PoE+	48, all support PoE+	24, all support PoE+	24, all support PoE+	8, all support PoE+	8, all support PoE+	8 (PoE+ ports 1-4)	
	2.5G RJ45 Ports	-	8, all support PoE+	-	-	-	-	-	-	-	-	
	10G RJ45 Ports	4, all support PoE++	-	-	-	-	-	-	-	-	-	
	Gigabit SFP Ports	-	-	-	-	4	4	4	2	2	-	
	RJ45/SFP Combo Ports	-	-	-	-	-	-	-	-	-	2	
	10G SFP+ Ports	2	2	4	4	-	-	-	-	-	-	
	Console Ports	1 (RJ45) + 1 (Micro-USB)						-	-	-	-	-
	Power Supply	100-240 VAC, 50/60 Hz						100-240 VAC, 50/60 Hz		53.5 VDC / 1.31A		100-240 VAC, 50/60 Hz
	Fanless	2 Fans	2 Fans	3 Fans	2 Fans	3 Fans	2 Fans	2 Fans	1 Fan	•	•	2 Fans
	Dimensions (W × D × H)	294×180×44 mm	440×180×44 mm	440×330×44 mm	440×330×44 mm	440×330×44 mm	440×330×44 mm	440×220×44 mm	294×180×44 mm	209×126×26 mm	209×126×26 mm	440×180×44 mm
	Installation	Rackmount/ Desktop	Rackmount					Rackmount	Rackmount/ Desktop	Desktop/Wall-Mounting	Rackmount	
	Operating Temperature	0-50 °C	0-50 °C	0-40 °C	0-45 °C	0-40 °C	0-45 °C	0-50 °C	0-50 °C	0-40 °C	0-40 °C	0-50 °C
	PoE	PoE Standard	802.3af/at/bt		802.3af/at				802.3af/at			
PoE Port		4× PoE++	8× PoE+	48× PoE+	24× PoE+	48× PoE+	24× PoE+	24× PoE+	8× PoE+	8× PoE+	4× PoE+	24× PoE+
PoE Power Budget		200 W	240 W	500 W	384 W	384 W	384 W	250 W	150 W	61 W	62 W	250 W
PoE Auto Recovery		•	•	•	•	•	•	•	•	•	•	•
Performance	Switch Capacity	120 Gbps	80 Gbps	176 Gbps	128 Gbps	104 Gbps	56 Gbps	56 Gbps	20 Gbps	20 Gbps	16 Gbps	12.8 Gbps
	Forwarding Rate	89.3 Mpps	59.5 Mpps	130.9 Mpps	95.2 Mpps	77.4 Mpps	41.7 Mpps	41.7 Mpps	14.9 Mpps	14.9 Mpps	11.9 Mpps	9.5 Mpps
	MAC Address Table	32 K	16 K	16 K	16 K	16 K	16 K (v2 and above), 8 K (v1.x)	8 K				
	Jumbo Frame	9 KB						9 KB				
L2 Features	IGMP Snooping	V1/V2/V3						V1/V2/V3				
	STP/RSTP/MSTP	•						•				
	Loopback Detection	•						•				
	VLAN	802.1Q/MAC/Protocol/Private/Voice VLAN						802.1Q/MAC/Protocol/Voice VLAN				
	QoS	8 Queues, Port/802.1p/DSCP QoS						8 Queues, Port/802.1p/IP DSCP QoS				
	Rate Limit	•						•				
	Port Isolation	•						•				
	Port Mirroring	•						•				
	Link Aggregation	Static LAG, LACP						Static LAG, LACP				
	DHCP Snooping	•						•				
Security	Access Control List	•						•				
	IP+MAC+PORT+VID Binding	•						•				
	Storm Control	•						•				
	Port Security	•						•				
	SSH & SSL	•						•				
	DoS Defend	•						•				
System Management	Dynamic ARP Inspection	•						•				
	Centralized Cloud Management	•						•				
	SNMP	v1/v2c/v3						v1/v2c/v3				
	Command Line Interface (CLI)	Telnet/SSH						Telnet/SSH				
Web Interface/SYS LOG/ MIBS	•						•					

Product Picture														
Model	TL-SG 1428PE	TL-SG 1218MPE	TL-SG 1016PE	TL-SG 1210MPE	TL-SG 108PE	TL-SG 105PE	TL-SG 1218MP	TL-SG 1210MP	TL-SG 1008MP	TL-SG 1210P	TL-SG 1008P	TL-SG 1005P	TL-SG 1005LP	
Layer	Easy Smart						Unmanaged							
Hardware	10/100 Mbps RJ45 Ports	-												
	Gigabit RJ45 Ports	26 (PoE+: ports 1-24)	16, all support PoE+	16 (PoE+: ports 1-8)	9 (PoE+: ports 1-8)	8 (PoE+: ports 1-4)	5 (PoE+: ports 1-4)	16, all support PoE+	9 (PoE+: ports 1-8)	8, all support PoE+	9 (PoE+: ports 1-8)	8 (PoE+: ports 1-4)	5 (PoE+: ports 1-4)	5 (PoE+: ports 1-4)
	Gigabit SFP Ports	2	-	-	-	-	-	-	-	1	-	-	-	
	RJ45/SFP Combo Ports	-	2	-	1	-	-	2	1	-	-	-	-	
	Power Supply	100-240 VAC, 50/60 Hz			53.5 VDC/ 2.43 A	53.5 VDC/ 1.31 A		100-240 VAC, 50/60 Hz	53.5 VDC/ 2.43 A	100-240 VAC, 50/60 Hz	53.5 VDC/ 1.31 A			53.5 VDC/0.81 A
	Fanless	2 Fans	2 Fans	1 Fan	•	•	•	2 Fans	•	1 Fan	•	•	•	•
	Dimensions (W x D x H)	440 x 220 x 44 mm	440x180 x44 mm	294x180 x44 mm	209x126 x26 mm	158x101 x25 mm	100x98 x25 mm	440x180 x44 mm	209x126 x26 mm	294x180 x44 mm	209x126 x26 mm	171x98 x27 mm	100x98 x25mm	100x98 x25mm
	Installation	Rackmount		Rackmount/ Desktop	Desktop/Wall-Mounting			Rackmount	Desktop/ Wall-Mounting	Rackmount/ Desktop	Desktop/Wall-Mounting			
	Operating Temperature	0-50 °C			0-40 °C			0-50 °C	0-40 °C	0-50 °C	0-40 °C			
PoE	PoE Standard	802.3af/at						802.3af/at						
	PoE Port	24x PoE+	16x PoE+	8x PoE+	8x PoE+	4x PoE+	4x PoE+	16x PoE+	8x PoE+	8x PoE+	8x PoE+	4x PoE+	4x PoE+	4x PoE+
	PoE Power Budget	250 W	250 W	150 W	123 W	64 W	65 W	250 W	123 W	153 W	63 W	64 W	65 W	40 W
	PoE Auto Recovery	•	•	•	•	•	•	-	•	-	-	-	-	-
Performance	Switch Capacity	56 Gbps	36 Gbps	32 Gbps	20 Gbps	16 Gbps	10 Gbps	36 Gbps	20 Gbps	16 Gbps	20 Gbps	16 Gbps	16 Gbps	10 Gbps
	Forwarding Rate	41.7 Mpps	26.8 Mpps	23.8 Mpps	14.9 Mpps	11.9 Mpps	7.44 Mpps	26.8 Mpps	14.9 Mpps	11.9 Mpps	14.9 Mpps	11.9 Mpps	11.9 Mpps	7.44 Mpps
	MAC Address Table	8 K	8 K	8 K	4 K	4 K	2 K	8 K	4 K	4 K	4 K	4 K	2 K	2 K
	Jumbo Frame	9 KB	10 KB	10 KB	16 KB	16 KB	16 KB	10 KB	16 KB	16 KB	16 KB	16 KB	16 KB	16 KB
L2 Features	IGMP Snooping	V1/V2/V3						V1/V2						
	STP/RSTP/ MSTP	-												
	Loopback Detection	•												
	VLAN	Tag-based VLAN/802.1Q												
	QoS	4 Queues, Port/802.1p/DSCP QoS						802.1p/DSCP QoS						
	Rate Limit	•												
	Port Mirroring	•												
	Link Aggregation	Static LAG, LACP												
DHCP Snooping	-													
Security	Access Control List	-												
	IP+MAC+PORT +VID Binding	-												
	Storm Control	•												
	Port Security	-												
	SSH & SSL	-												
	DoS Defend	-												
	Dynamic ARP Inspection	-												
System Management	SNMP	-												
	RMON	-												
	Command Line Interface (CLI)	-												
	Web Interface/ SYS LOG/MIBS	Web Interface/MIBS						-						

Product Picture											
Model	TL-SL1226P	TL-SL1218MP	TL-SL1218P	TL-SL1311MP	TL-SF1009P	TL-SF1008P	TL-SF1008LP	TL-SF1006P	TL-SF1005P	TL-SF1005LP	
Layer	Unmanaged										
Product Description	24-Port 10/100Mbps + 2-Port Gigabit Rackmount Switch with 24-Port PoE+	16-Port 10/100Mbps + 2-Port Gigabit Rackmount Switch with 16-Port PoE+	16-Port 10/100Mbps + 2-Port Gigabit Rackmount Switch with 16-Port PoE+	8-Port 10/100Mbps + 3-Port Gigabit Desktop Switch with 8-Port PoE+	9-Port 10/100Mbps Desktop Switch with 8-Port PoE+	8-Port 10/100Mbps Desktop Switch with 4-Port PoE+	8-Port 10/100Mbps Desktop Switch with 4-Port PoE	6-Port 10/100Mbps Desktop Switch with 4-Port PoE+	5-Port 10/100Mbps Desktop Switch with 4-Port PoE+	5-Port 10/100Mbps Desktop Switch with 4-Port PoE	
	Hardware	10/100 Mbps RJ45 Port	24, all support PoE+	16, all support PoE+	16, all support PoE+	8, all support PoE+	9 (PoE+: ports 1-8)	8 (PoE+: ports 1-4)	8 (PoE: ports 1-4)	6 (PoE+: ports 1-4)	5 (PoE+: ports 1-4)
Gigabit RJ45 Ports	-	-	1	2	-	-	-	-	-	-	-
Gigabit SFP Ports	-	-	-	1	-	-	-	-	-	-	-
RJ45/SFP Combo Ports	2	2	1	-	-	-	-	-	-	-	-
Flow Control	•										
Power Supply	100-240 VAC, 50/60 Hz				53.5 VDC/ 2.43 A	53.5 VDC/ 1.31 A		53.5 VDC/ 0.81 A	53.5 VDC/ 1.31 A	53.5 VDC/ 1.31 A	53.5 VDC/ 0.81 A
Fanless	2 Fans	2 Fans	2 Fans	•							
Dimensions (W x D x H)	17.3x7.1x1.7 in (440x180x44 mm)			8.2x5.0x1.0 in (209x126x26 mm)	6.7x3.9x1.1 in (171x98x27 mm)			6.2 x 4.0 x 1.0 in. (158x101x25 mm)	3.9x3.9x1.0 in (100x98x25 mm)		
Installation	Rackmount				Desktop/Wall-Mounting						
Operating Temperature	0-50 °C (32-122 °F)				0-40 °C (32-104 °F)						
PoE	PoE Standard	802.3af/at						802.3af	802.3af/at		802.3af
	PoE Port	24x PoE+	16x PoE+	16x PoE+	8x PoE+	8x PoE+	4x PoE+	4x PoE	4x PoE+	4x PoE+	4x PoE
	PoE Power Budget	250 W	250 W	150 W	124 W	65 W	66 W	41 W	67 W	67 W	41 W
	Extend Mode	Ports 1-8/ 9-16/ 17-24	Ports 1-8/ 9-16	Ports 1-8/ 9-16	Ports 1-4/ 1-8	Ports 1-4/ 1-8	Ports 1-4	Ports 1-4	Ports 1-4	Ports 1-4	Ports 1-4
	Priority Mode	Ports 1-8	Ports 1-8	Ports 1-8	-	Ports 1-2	Ports 1-2	Ports 1-2	Ports 1-2	Ports 1-2	Ports 1-2
	Isolation Mode	Ports 1-24	Ports 1-16	Ports 1-16	Ports 1-8	Ports 1-8	-	-	-	-	-
PoE Auto Recovery	-	-	-	Ports 1-8	-	Ports 1-4	-	-	-	-	
Performance	Switch Capacity	8.8 Gbps	7.2 Gbps		5.6 Gbps	1.8 Gbps	1.6 Gbps		1.2 Gbps	1 Gbps	
	Forwarding Rate	6.55 Mpps	5.36 Mpps		4.16 Mpps	1.34 Mpps	1.2 Mpps		0.89 Mpps	0.7 Mpps	
	MAC Address Table	8 K			2 K	2 K					
	Jumbo Frame	10 KB			16 KB	2 KB					
Software Features	IGMP Snooping	-									
	Loopback Detection	-									
	VLAN	-									
	QoS	-									
	Rate Limit	-									
	Port Mirroring	-									
	Link Aggregation	-									
Storm Control	-										
Firmware Upgrade	-										

# Reverse PoE Switches

The 8-Port Gigabit Managed Reverse PoE Switch TL-RP108GE has seven gigabit PoE input ports that allow it to receive power from user outlets via PoE injectors. Equipped with one PoE output port, the switch can supply power to CPEs and similar devices via Port 8. The DC output port supports both 5 V and 12 V optional output voltage and can be used to power devices like ONTs. Enhanced with basic management features like VLAN and QoS, TL-RP108GE shares the same software functions with TP-Link Easy Smart switches.



Model	TL-RP108GE
Port	7 Gigabit Passive PoE-in RJ45 Ports Voltage: 24/48 V (mixture is not supported)  1 Gigabit Passive PoE-out RJ45 Port Voltage: depending on the input voltage of PoE-in ports  1 DC Output Port Voltage: 5/12 V
Power pin of Ethernet cable	4/5+ 7/8-
PoE Supply	Passive PoE
Dimensions	6.2 × 3.9 × 1.0 in (158 × 99.1 × 25 mm)
Installation	Desktop/Wall-Mounting
Switching Capacity	16 Gbps
Features	VLAN IGMP Snooping QoS Manageable via web browser or Utility

# PoE Adapters

Product Picture						
Model	TL-POE170S	TL-POE160S	TL-POE150S	TL-POE10R	TL-POE2412G	TL-POE4824G
Product Description	PoE++ Injector	PoE+ Injector	PoE Injector	PoE Splitter	24V Passive PoE Adapter	48V Passive PoE Adapter
RJ45 Ports	1× Gigabit RJ45 LAN Port 1× Gigabit RJ45 PoE Port (802.3af/at/bt type3)	1× Gigabit RJ45 LAN Port 1× Gigabit RJ45 PoE Port (802.3af/at)	1× Gigabit RJ45 LAN Port 1× Gigabit RJ45 PoE Port (802.3af)		1× Gigabit RJ45 LAN Port 1× Gigabit RJ45 PoE Port (Passive PoE)	
Standards	IEEE802.3, IEEE802.3u, IEEE802.3ab, 802.3af, 802.3at, 802.3bt, CSMA/CD, TCP/IP	IEEE802.3, IEEE802.3u, IEEE802.3ab, 802.3af, 802.3at, CSMA/CD, TCP/IP	IEEE802.3, IEEE802.3u, IEEE802.3ab, 802.3af, CSMA/CD, TCP/IP		IEEE802.3, IEEE802.3u	
Power	Input: 100-240 V Output: Max. 60 W (Auto-Determination)	Input: 100-240 V, 1.0A Output: Max. 30 W (Auto-Determination)	Input: 48 VDC, 0.5 A Output: Max. 15.4 W (Auto-Determination)	Input: Max. 15.4 W (Auto-Determination) Output: 5/9/12 VDC	Input: 100-240 V 0.4 A Output: 24 V 0.5 A	Input: 100-240 V 0.8 A Output: 48 V 0.5 A
Certifications	CE, FCC					
Plug and Play	•					
Dimensions (W × D × H)	6.1×2.8×1.7 in (155×70×42 mm)	4.9×2.3×1.4 in (125×59.4×36.8 mm)	3.2×2.1×0.9 in (80.8×54×24 mm)		3.4×1.7×1.4 in (85.8×43.9×35 mm)	4.3×2.3×1.5 in (110×57×38.8 mm)
Operating Temperature	0-45 °C (32-113 °F)		0-40 °C (32-104 °F)			
Environment	Storage Temperature: -40-70 °C (-40-158 °F); Operating Humidity: 10-90% RH Non-Condensing; Storage Humidity: 5-90% RH Non-Condensing					

# Accessories

Product Picture		
Model	TL-SM5220-1M	TL-SM5220-3M
Product Description	1 Meter 10G SFP+ Direct Attach Cable	3 Meters 10G SFP+ Direct Attach Cable
Dimensions/Length	1 m	3 m
Certifications	CE, FCC	
Data Rate	10 Gbps	
Temperature	Operating: 0-70 °C (32-158 °F); Storage: -40-80 °C (-40-176 °F)	
Humidity	Operating: 10-90% non-condensing; Storage: 5-90% non-condensing	

## SFP Modules

Product Picture										
Model	TL-SM311LS	TL-SM321A	TL-SM321B	TL-SM321A-2	TL-SM321B-2	TL-SM311LM	TL-SM5110-SR	TL-SM5110-LR	TL-SM5310-T	TL-SM331T
Product Description	Single-mode SFP Module	1000Base-BX WDM Bi-Directional SFP Module			Multi-mode MiniGBIC Module	10GBase-SR SFP+ LC Transceiver	10GBase-LR SFP+ LC Transceiver	10GBASE-T RJ45 SFP+ Module	1000BASE-T RJ45 SFP Module	
Cable	Single-mode Fiber					Multi-mode Fiber	Multi-mode Fiber	Single-mode Fiber	RJ45 Ethernet Cable	
Fiber Type	9/125 μm Single-mode					50/125 μm or 62.5/125 μm Multi-mode	50/125 μm or 62.5/125 μm Multi-mode	9/125 μm Single-mode	-	
MAX. Cable Length	20 km			2 km		550 m	330 m or 33 m	10 km	31 m (Cat6a or above)	100 m (Cat 5e or above)
Standard	IEEE 802.3z					IEEE 802.3z	IEEE 802.3ae, SFF-8431, SFF-8472	IEEE 802.3, 802.3u, 802.3ae, 802.3an		
Data Rate	1.25 Gbps					1.25 Gbps	10 Gbps	10.31 Gbps	1.25 Gbps	
Ports	2× LC Ports	1× LC Port				2× LC Ports	2× LC Ports	1× 10 Gbps RJ45 Port	1× 1000 Mbps RJ45 Port	
Wave Length	1310 nm	TX: 1550 nm RX: 1310 nm	TX: 1310 nm RX: 1550 nm	TX: 1550 nm RX: 1310 nm	TX: 1310 nm RX: 1550 nm	850 nm	850 nm	1310 nm	-	
Power Supply	3.3 V									
Certifications	CE, FCC									
Environment	Operating Temperature: 0-70 °C (32-158 °F); Storage Temperature: -40-85 °C (-40-185 °F) Operating Humidity: 10-90% RH Non-Condensing; Storage Humidity: 5-90% RH Non-Condensing									

## Media Converters

Product Picture									
Model	MC200CM	MC210CS	MC220L	TL-FC311A-2/ TL-FC311B-2	TL-FC311A-20/ TL-FC311B-20	MC100CM/ MC110CS	MC111CS/ MC112CS	TL-FC111A-20/ TL-FC111B-20	TL-FC111PB-20
Product Description	Gigabit Ethernet Media Converter			Gigabit WDM Media Converter		10/100Mbps Multi-Mode Media Converter	WDM Fast Ethernet Media Converter	10/100Mbps WDM Media Converter	10/100Mbps WDM Media Converter
Power Input	9V/0.6A			5V/0.6A		9V/0.6A		5V/0.6A	48V/0.5A
Interface	2× Gigabit SC Fiber Ports		1× SFP Port	1× Gigabit SC Fiber Port		2× 100 Mbps SC Fiber Ports		1× 100 Mbps SC Fiber Port	1× 100 Mbps SC Fiber Port
Standards	IEEE 802.3i, 802.3u, 802.3ab, 802.3z			IEEE 802.3i, 802.3u, 802.3ab, 802.3z		IEEE 802.3i, 802.3u		IEEE 802.3i, 802.3u, 802.3af	
Transmission Media	Multi-mode Fiber	Single-mode Fiber, Cat-5	Multi/Single-mode Fiber, Cat-5	Single-mode Fiber		MC100CM: Multi-mode Fiber MC110CS: Single-mode Fiber		Single-mode Fiber	
Wave Length	850 nm	1310 nm	Depends on the SFP Modules used	A: TX: 1550 nm, RX: 1310 nm; B: TX: 1310 nm, RX: 1550 nm		1310 nm		MC111CS/TL-FC111A-20: TX: 1550 nm, RX: 1310 nm; MC112CS/TL-FC111B-20: TX: 1310 nm, RX: 1550 nm	
Transmission Distance	550 m	20 km	Depends on the SFP Models used	2 km	20 km	MC100CM: 2 km MC110CS: 20 km		20 km	2 km
Certifications	FCC, CE								
Dimensions (W × D × H)	3.7×2.9×1.1 in (94.5×73.0×27.0 mm)								
Operating Temperature	0-40 °C (32-104 °F)	0-50 °C (32-122 °F)	0-40 °C (32-104 °F)	0-50 °C (32-122 °F)		0-40 °C (32-104 °F)		0-50 °C (32-122 °F)	
Environment	Storage Temperature: -40-70 °C (-40-158 °F) Operating Humidity: 10-90% RH Non-Condensing; Storage Humidity: 5-90% RH Non-Condensing								

# Business Router

## Omada VPN Routers SafeStream Load Balance Routers

Keeping a network safe from attacks and unauthorized access is key to the success of any business, now more than ever before. TP-Link's Omada VPN Routers provide an ideal VPN solution to protect your network against attacks and unauthorized access.

## Future-Proof Your Business with 10 Gigabit ER8411



## Omada & SafeStream

# Business Routers

## Omada VPN Routers ▾

### Flexible and Highly secure VPN Networks for Small and Medium-sized Businesses

Keeping a network safe from attacks and unauthorized access is key to the success of any business, now more than ever before. TP-Link's Omada VPN Routers provide an ideal VPN solution to protect your network against attacks and unauthorized access.

### Omada—Smarter Cloud Solution for Business Networking

Omada's Software Defined Networking (SDN) platform integrates network devices including access points, switches, and gateways, providing 100% centralized cloud management to create a highly scalable network—all controlled from a single interface.



### Omada Routers Integrated into Omada SDN

- Centralized Management
- 2x 10GE SFP+ Ports (1 WAN, 1 WAN/LAN)
- Up to 10 WAN Ports
- Load Balance
- IPSec/OpenVPN/PPTP/L2TP/SSL VPN
- Powerful Firewall
- Multi-Net DHCP
- Quad-Core 2.2 GHz CPU



**ER7206**  
Omada Gigabit VPN Router  
• 1x Gigabit SFP + 5x Gigabit RJ45 Ports  
• 1 SFP WAN + 1 WAN + 2 WAN/LAN



**ER605**  
Omada Gigabit VPN Router  
• 5x Gigabit RJ45 Ports  
• 1x WAN + 2x WAN/LAN + 1x USB

## SafeStream Load Balance Broadband Router ▾

### Suitable for Demanding Enterprise Environments with Numerous Users

Load balance broadband routers from TP-Link possess excellent data processing capabilities and multiple powerful functions including Load Balance, Access Control, IM/P2P Blocking, DoS Defense, Bandwidth Control, and Session Limit, which meet the needs of small and medium enterprises, hotels, and communities with large volumes of users.








**TL-R480T+**  
Load Balance Broadband Router  
1x 10/100 Mbps WAN Port,  
3x 10/100 Mbps WAN/LAN Ports,  
1x 10/100 Mbps LAN Port



**TL-R470T+**  
Load Balance Broadband Router  
1x 10/100 Mbps WAN Port,  
3x 10/100 Mbps WAN/LAN Ports,  
1x 10/100 Mbps LAN Port

\*Zero-Touch Provisioning requires the use of Omada Cloud-Based Controller. Please go to [www.tp-link.com/omada-cloud-based-controller/product-list](http://www.tp-link.com/omada-cloud-based-controller/product-list) to confirm which models are compatible with Omada Cloud-Based Controller.

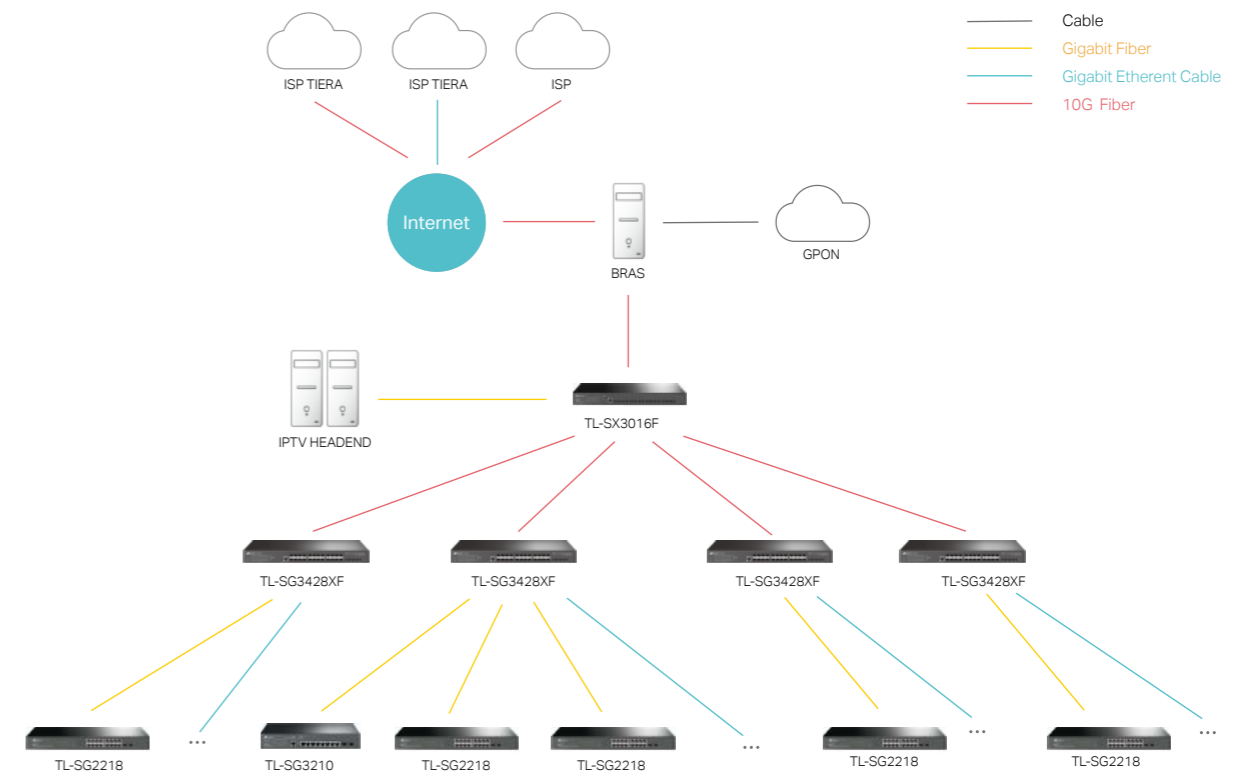
Product Picture						
<b>Model</b>	ER8411	ER7206	ER605 (v2)	TL-R480T+	TL-R470T+	
<b>Product Description</b>	Omada 10G VPN Router	Omada Gigabit VPN Router		SafeStream Load Balance Broadband Router		
<b>Omada SDN Integration</b>	•					
<b>Hardware</b>	Interface	2x 10GE SFP+ Ports (1 WAN, 1 WAN/LAN) 1x GE SFP WAN/LAN Ports 8x GE RJ45 WAN/LAN Ports 1x RJ45 Console Ports 2x USB Ports	6x Gigabit Ports (1x SFP WAN, 1x RJ45 WAN, 2x RJ45 WAN/LAN, 2x RJ45 LAN)	• 4x Gigabit RJ45 Ports (1 WAN, 2 WAN/LAN, 2 LAN) • 1x USB Ports for Connecting 4G/3G Modem as WAN Backup	5x 10/100 Mbps RJ45 Ports (1x WAN, 3x WAN/LAN, 1x LAN)	
	VPN Encryption Accelerator	•				
	Power Supply	100-240 VAC, 50/60 Hz	100-240 VAC, 50/60 Hz	External 12V/1A DC Adapter	100-240 VAC, 50/60 Hz	External 9W/0.6A DC Adapter
	Processor	Quad-Core, 2.2 GHz	Quad-Core, 1 GHz	Quad-Core, 880 MHz	-	-
	Flash	4MB Nor + 256MB NAND	4MB SPI + 128 MB NAND	128 MB NAND	16 MB	16 MB
	DRAM	4GB DDR4	512 MB	256 MB DDR	128 MB	128 MB
	RPS (Redundant Power Supply)	•				
	Certifications	CE, FCC, RoHS	CE, FCC, RoHS		CE, FCC, RoHS	
	Dimensions (W x D x H)	17.3x8.7x1.7 in (440x220x44 mm)	8.9x5.2x1.4 in (226x131x35 mm)	6.2x4.0x1.0 in (158x101x25 mm)	11.6x7.1x1.7 in (294x180x44 mm)	8.2x4.9x1.0 in (209x126x26 mm)
	Installation	Rackmount	Desktop	Desktop	Rackmount/Desktop	Desktop
Environment	Operating Temperature: 0-40 °C (32-104 °F); Storage Temperature: -40-70 °C (-40-158 °F) Operating Humidity: 10-90% RH Non-Condensing; Storage Humidity: 5-90% RH Non-Condensing					
<b>Performance</b>	Concurrent Sessions	(TBD)	150,000	150,000	30,000	10,000
	NAT Throughput	(TBD)	940 Mbps	946 Mbps	100 Mbps	100 Mbps
	IPSec VPN Throughput	(TBD)	294 Mbps	248 Mbps		
	WAN Connection Type	Static/Dynamic IP, PPPoE, PPTP, L2TP	Static/Dynamic IP, PPPoE, PPTP, L2TP	Static/Dynamic IP, PPPoE, PPTP, L2TP	Static/Dynamic IP, PPPoE, PPTP, L2TP	
	Rate Limit	•		•		•
	Port VLAN	•		•		•
	Multiple-Net DHCP	•		•		•
	802.1Q VLAN	•		•		•
	IPTV	•		•		•
	IPv6	•		•		•
<b>IPSec VPN</b>	LTE Backup	•	-	•		-
	Controller Integrated	• (TBD)		-		-
	IPSec VPN Tunnel	(TBD)	100	20		-
	Authentication	(TBD)	MD5/SHA1			-
	Encryption	(TBD)	DES, 3DES, AES128, AES192, AES256			-
	IPSec NAT Traversal (NAT-T)	•		•		-
<b>PPTP VPN</b>	Dead Peer Detection (DPD)	•		•		-
	Perfect Forward Secrecy (PFS)	(TBD)	DH1/DH2/DH5			-
	PPTP VPN Tunnels	(TBD)	50	16		-
<b>L2TP VPN</b>	PPTP VPN Server	•		•		-
	PPTP VPN Client	•		•		-
	PPTP With MPPE Encryption	•		•		-
<b>OpenVPN</b>	L2TP VPN Tunnels	(TBD)	50	16		-
	L2TP VPN Server	•		•		-
	L2TP VPN Client	•		•		-
	L2TP Over IPSec	•		•		-
<b>SSL VPN</b>	OpenVPN Tunnels*	(TBD)	50	16		-
	SSL VPN	•(TBD)		-		-
<b>Security</b>	Access Control List	•		•		•
	URL/Keyword Filter	•		•		•
	Domain Filter	•		•		•
	DoS Defense	•		•		•
	ARP Inspection	•		•		•
<b>Load Balance</b>	MAC Filter	•		•		•
	Line Backup	•		•		•
	Online Detection	•		•		•
<b>NAT</b>	Smart Load Balance	•		•		•
	One-to-One NAT	•		•		•
	Multiple-nets NAT	•		•		•
	Virtual Server	•		•		•
<b>Routing</b>	Port Triggering	•		•		•
	Policy Routing	•		•		•
<b>Web Authentication</b>	ALG	•		•		•
	Static Routing	•		•		•
	Local User Authentication	•		•		•
<b>Service</b>	Radius Sever Authentication	•		•		•
	Onekey Online	•		•		•
<b>System Management</b>	Dynamic DNS	•	Dyndns, No-IP, Peanuthull, Comexe		Dyndns, No-IP, Peanuthull, Comexe	
	UPnP	•		•		-
	Centralized Cloud Management	•		•		-
<b>System Management</b>	SNMP	v1/v2c/v3		v1/v2c/v3		v1/v2c
	Web Interface	•		•		•

\*These features require the use of Omada Hardware Controller, Software Controller, or Cloud-Based Controller

## Business Solution for ISP Networks

### Overview

With consumer appetite for fast internet at unprecedented levels, ISPs are looking for more efficient ways to meet demand within an increasingly competitive environment. It has become necessary to install a gigabit-based access layer network to keep up with the demands that come with IPTV and other technologies and an increasing number of customers. TP-Link professional managed and smart switches and routers help ISPs build reliable, secure and fast gigabit wired internet access.



### Solution Benefits

- **High-Speed Data Transmission.** The core switch is able to support a scalable network with abundant L3 routing protocols and 10Gigabit SFP+ slots enable to provide high-speed data transmission.
- **Abundant L2+/L3 features and ISP features** including Static Routing / DHCP Server / DHCP Relay / sFlow / QinQ / L2PT that support a scalable network..
- **Abundant security features** safeguard the network's various files and sensitive information with consistent stability and security.
- **Business-class routers and switches** provide abundant access control and load balance features that ensure a safe, reliable experience within a stable network.
- **Flexible Management.** Jetstream switches support various management methods: cloud centralized management via Omada SDN platform, Omada app, intuitive web-based Graphical User Interface (GUI), industry-standard Command Line Interface (CLI), SNMP (v1/v2c/v3) and RMON.

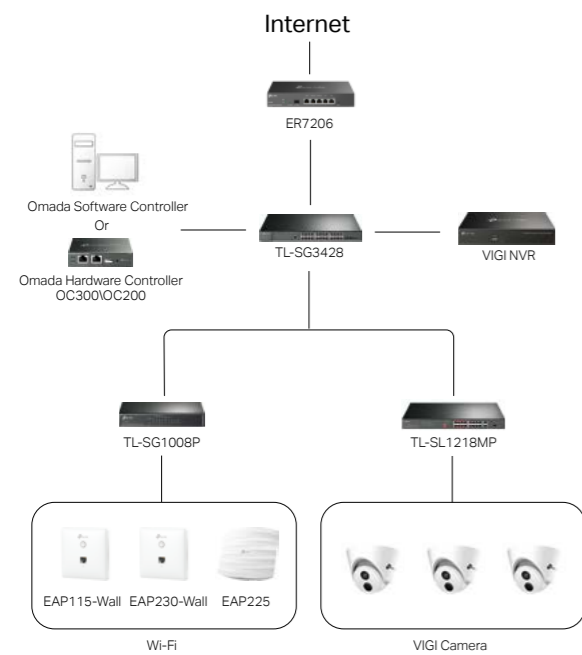


# Business Solution for Surveillance

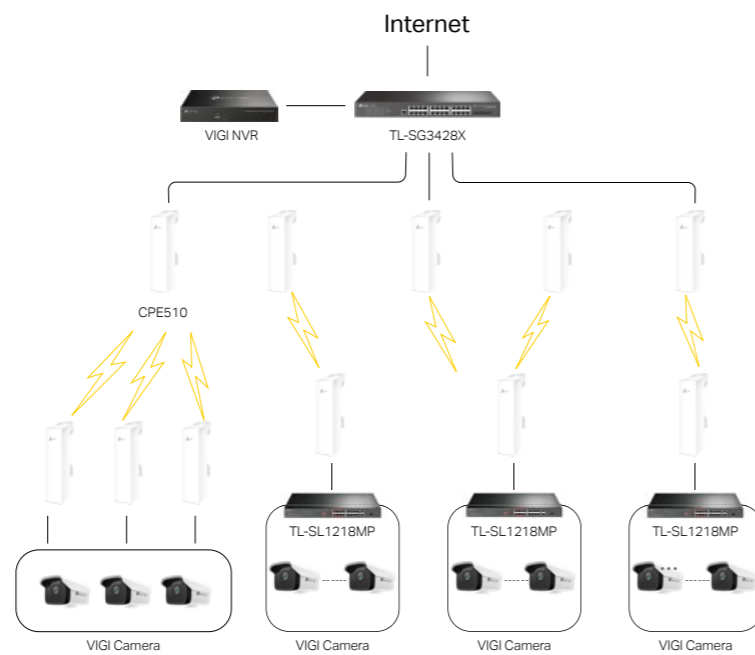
## Overview

As part of the security management system, the network video surveillance system is being used more and more widely in the fields of parks, scenic spots, campuses, and community security. Outdoor parks and scenic spots are generally characterized by large areas and scattered video surveillance equipment. It is inclined to wirelessly transmit monitoring data over long distances, eliminating wiring troubles. The indoor campuses and residential areas require no extra wiring for power supply and simple construction. TP-Link PoE switches provide data and power for IP cameras through a single cable, ideal for small to medium business surveillance systems. TP-Link Pharos broadband is perfect for deployment in areas where wired surveillance systems might not be convenient. TP-Link VIGI integrates security cameras and network video recorder (NVR) into a full surveillance system.

### Small and Medium Business Surveillance



### Outdoor Long-Distance Surveillance



## Solution Benefits

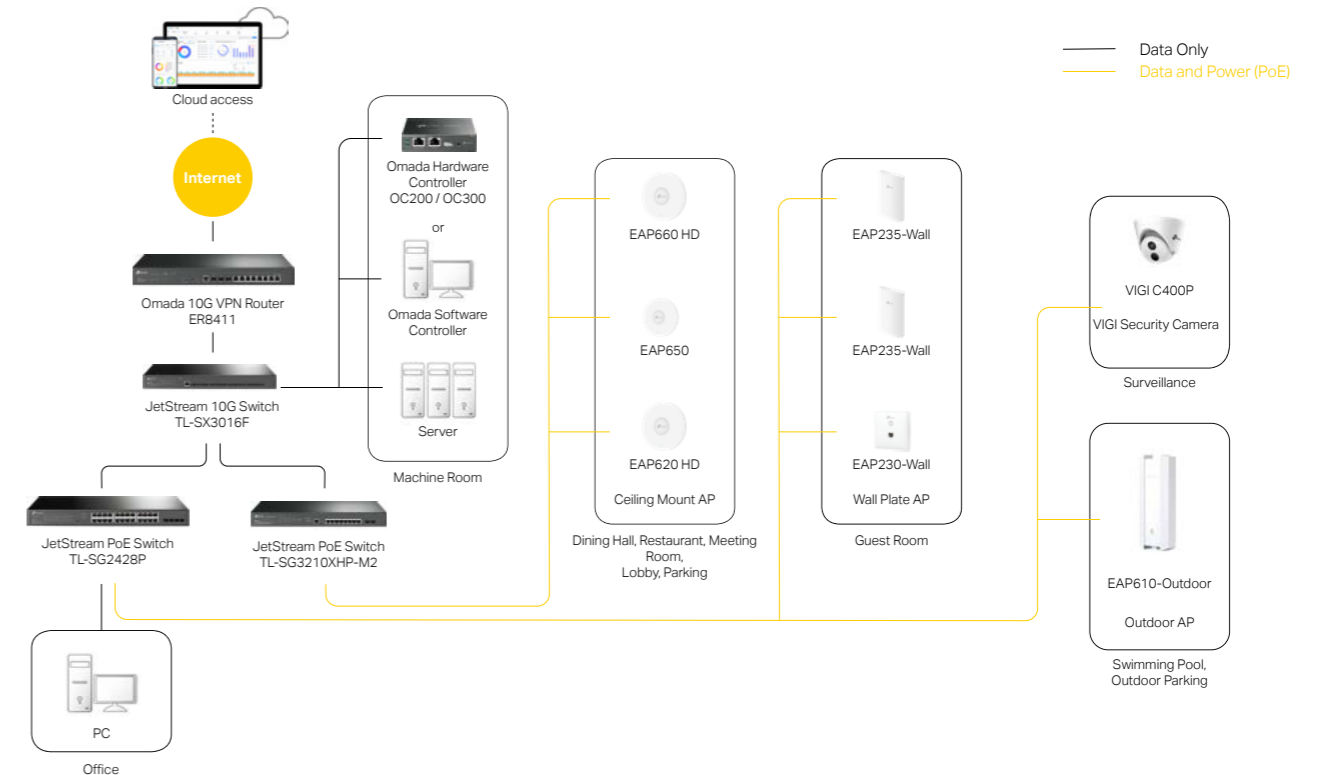
- PoE switches provide data and power for IP cameras and access points through a single cable, eliminating extra wiring troubles.
- PtMP coverage of Pharos broadband provides long distance wireless data transmission, creating a perfect wireless surveillance solution for construction sites, mining sites, logging sites, and more.
- Up to 250 m data and power transmission under extend mode\* specially designed for surveillance system.
- Priority mode\* guarantees the quality of sensitive applications like video monitor.
- High-performance full-gigabit enterprise routers support Facebook Wi-Fi, Web authentication and other authentication functions, and support multiple VPN and online behavior management.
- Full gigabit L2+ Managed switch, with gigabit ports and 10G SFP slots, supports static routing, supports quaternary binding, and has rich VLAN functions.

\*Extend mode and priority mode are supported by certain PoE switches of TP-Link, please refer to page 16 for details.

# Business Solution for Hospitality Networks

## Overview

Wi-Fi is air. It's not an overstatement; it's reality. In any household, a strong, stable wireless network is simply an expectation. In fact, the ability to offer convenient connections makes a significant impact on overall customer satisfaction and ratings. Now, TP-Link Omada SDN allows hotels to build the reliable, cost-effective wireless networks that drive progress and keep guests happy and coming back for another stay.



## Solution Benefits

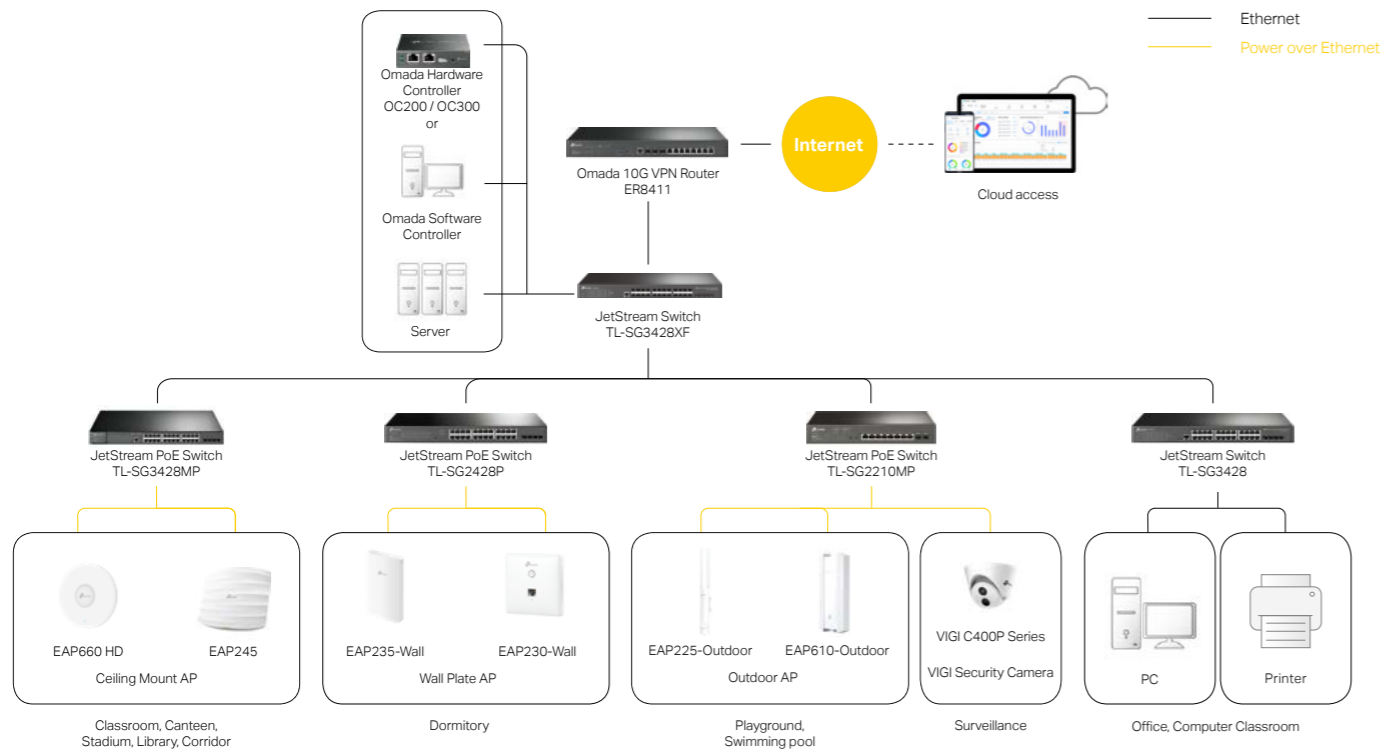
- **Full Wireless Coverage:** Ceiling mount, wall plate and outdoor APs provide the high-speed Wi-Fi for all indoor and outdoor places and scenarios.
- **Seamless Roaming for Uninterrupted Streaming:** Ensure customers enjoy uninterrupted streaming when moving around by switching clients automatically to the access points with the optimal signal.
- **Easy Centralized Management:** Centrally manage your access points, switches, routers, and more—all controlled from a single easy-to-use interface. Batch configuration and remotely firmware updates greatly benefit the maintenance.
- **Stable Wired Connections:** High-speed wired connections are provided with 10GE, 2.5GE, or 1 GE ports (802.3bt/at/af PoE).
- **High-Density Wi-Fi Deployment:** Omada Wi-Fi 6 and Wi-Fi 5 APs improve efficiency and ensure top-tier performance for restaurants and meeting rooms with high-density clients.
- **Boost Business with Customized Page:** Boost the online business through guest Wi-Fi with Facebook and authentication page, which displays promotional or marketing contents.
- **Quickly Troubleshoot\*:** Locate network faults, warn and notify users, and analyze potential network problems even when the IT manager is away with Omada's easy-to-use management interface and AI-Driven technology.
- **Easy Installation and Deployment:** Easy mount construction; PoE support; and a refined, minimalist appearance allow for easy installation and deployment.

Note: Omada Hardware Controller and Omada Software Controller can also be replaced with the Omada Cloud-Based Controller  
\*Quick troubleshooting is being developed and scheduled to be released in 2022.

# Business Solution for Education Networks

## Overview

Reliable, secure, and convenient Wi-Fi allows teachers to access a wider variety of resources that promote more effective learning and development. It also provides students with unlimited access to information to enrich their education. Moreover, teachers and students can access the campus network with high-security VPN to teach and learn at anywhere. Due to its reliable, scalable, and secure network solution, TP-Link has been widely acknowledged by global customers in the Education market ranging from infant schools with a few APs up to colleges and universities with hundreds of APs.



## Solution Benefits

- **Easy Centralized Management:** Centrally manage your access points, switches, routers, and more, anywhere, anytime—all controlled from a single easy-to-use interface.
- **Quickly Troubleshoot\*:** Locate network faults and analyze potential network problems with Omada's easy-to-use interface and AI-Driven technology.
- **Full Wireless Coverage:** Ceiling mount, wall plate, and outdoor APs provide high-speed Wi-Fi for indoor/ outdoor places.
- **High-Density Wi-Fi Deployment:** Omada Wi-Fi 6 and Wi-Fi 5 APs improve efficiency and ensure top-tier performance for classrooms, canteens, stadiums, and libraries with high-density clients.
- **Protects Your Network from Threats:** Utilize powerful firewalls, device security detection and protection, URL identification and filter, and more advanced security functions.
- **Flexible Criteria Management:** Use different SSIDs, Access Control, and VLAN binding technologies to identify key network user profiles to deploy customized operating criteria.
- **Stable Wired Connections:** High-speed wired connections are provided with 10GE, 2.5GE, or 1GE ports (802.3bt/at/af PoE).
- **Secure Network with Authentication:** Provide secure Wi-Fi access to authorized users (students, teachers, etc.) with multiple authentications options (802.1X/Radius, etc.).
- **High-Security VPN:** Allow students or teachers to visit the campus network even at home with a secure and enterprise-standard VPN.
- **Seamless Roaming for Uninterrupted Streaming:** Ensure uninterrupted streaming when moving around by switching clients automatically to the access points with the optimal signal.

Note: Omada Hardware Controller and Omada Software Controller can also be replaced with the Omada Cloud-Based Controller.  
\*Quick troubleshooting is being developed and scheduled to be released in 2022.

## Certification and Training

The TP-Link Certification and Training system is a free online, on-demand training program that provides professional coursework and exams focused on specific technologies. Currently, TPNA for SMB, TPNP for SMB Routing & Switching, and TPNP for SMB Business Wi-Fi are provided. Access professional training to develop your skills and gain certification to enhance your career.



Designed for sales professionals, the TPNA SMB (TP-Link Network Associate for SMB) Certification attests to your acquired advanced network and wireless knowledge. It also certifies that you can explain and differentiate TP-Link SMB products based on criteria such as usage scenarios, configuration methods, software functions, and involved technologies.



Designed for technical professionals, the TPNP (TP-Link Network Professional) SMB Routing & Switching and Business Wi-Fi Certifications attest to your knowledge of Routing & Switching related to TP-Link Switches. Both also certify your ability to deploy business indoor and outdoor Wi-Fi, including assessment, installation, and maintenance.

## TP-Link Partner Program

<https://partner.tp-link.com/>

TP-Link's success as a provider of network solutions has been built on its relationship and unrivaled commitment to its partners. For Value-Added Resellers (VARs) and System Integrators (SIs) looking for access to even better deals and tailored support, TP-Link has designed the TP-Link Partner Program to reward loyalty and help grow business.



- Deal Registration
- Sales Tools
- Knowledge Base
- Marketing Materials
- Promotions
- Support
- Training & Certification

## Join TP-Link Partner Program, Earn More Margin

Note: The Partner Program and benefits may vary according to your region. Please contact your local TP-Link representative for more information.

## SMB Community

<https://community.tp-link.com/en/business/>



Technical support and case sharing.  
Your direct dialogue with TP-Link.  
When it comes to SMB, we know you want to learn more...



Forums



Stories



Knowledge Base

## Excellent Pre- and After-Sales Services

TP-Link provides not only products with outstanding quality but also whole service for complete client satisfaction.

### After-Sales Services

- Global Call Center Providing Hotline Support
- 24/7 Post-Sales Email Service
- Online SMB Community

### Quality of Service

- Replacement and Warranty
- Constant Firmware Updates from the Cloud Service

### Tech Solutions

- Online Training and Certifications—TPNA & TPNP
- Specialized Support Teams Local and Abroad

