

Business Networking

Products Guide



CONTENTS

Business Wi-Fi	01
Omada Cloud SDN	02
Auranet Solution	12
0 :: 1	4.5
Switches	15
JetStream L3 Managed Switches	19
JetStream L2+ Managed Switches	21
JetStream Smart Switches	25
JetStream Easy Smart Switches	31
JetStream Unmanaged Switches	33
LiteWave Unmanaged Switches	36
Power over Ethernet	39
PoE Switches	41
PoE Adapters	45
Accessories	46
Pharos Wireless Broadband	47
Outdoor Radio	50
SafeStream Routers	52
VPN Routers	53
Load Balance Broadband Routers	55
Solutions for Businesses	57

Omâda

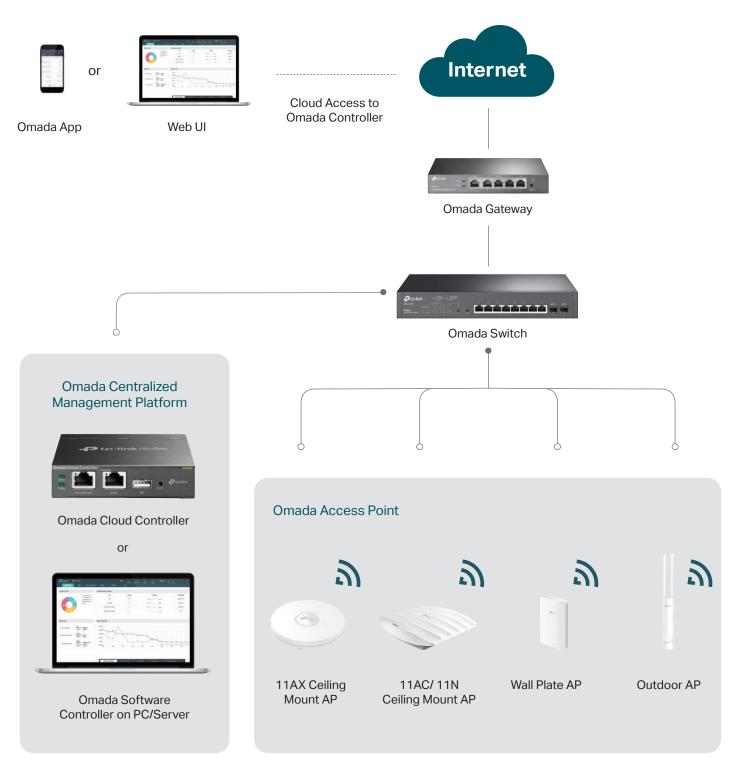
Business Wi-Fi — Professional. Reliable. Secure.

Omada access points work together with Software Controller or Hardware Controller to provide reliable and secure business Wi-Fi solutions, ideal for hospitality, education, retail, and more.



Omada — Network Beyond Wi-Fi

Based on the success of current Omada business Wi-Fi, Omada is integrating switches, gateways, and 802.11ax access points into a software-defined network (SDN) solution.



 $^{^{*}\,\}textrm{Omada gateways, switches and 802.11ax\,access points\,are\,being\,developed\,and\,scheduled\,to\,be\,released\,in\,Q4,\,2010\,access and\,802.11ax\,access are being developed and scheduled to be released in Q4,\,2010\,access and\,802.11ax\,access are being developed and scheduled to be released in Q4,\,2010\,access and\,802.11ax\,access are being developed and scheduled to be released in Q4,\,2010\,access are being developed and scheduled to be released in Q4,\,2010\,access are being developed and scheduled to be released in Q4,\,2010\,access are being developed and scheduled to be released in Q4,\,2010\,access are being developed and scheduled to be released in Q4,\,2010\,access are being developed and scheduled to be released in Q4,\,2010\,access are being developed and scheduled to be released in Q4,\,2010\,access are being developed and scheduled to be released and scheduled are being developed and scheduled to be released and scheduled are being developed are being developed and scheduled are being developed are being dev$

Business Wi-Fi Omāda Cloud Management

Free Cloud Management — Anytime, Anywhere

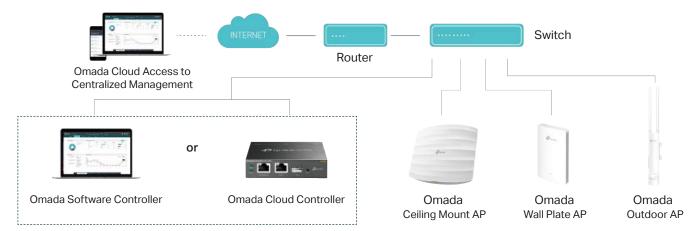
Omada offers free cloud access to its centralized management platform. Take control of your network wherever you go.

- Free Cloud Service with No License Fees
- Convenient Management with Remote Access
- Multi-Site Management for Large-Scale Networks



Omada Hybrid Cloud for Centralized Mangement

Featuring hybrid cloud technology, Omada Cloud Controller or Omada Software Controller allows you to remotely take full control of Omada networks wherever you are in the world, while locally managing Omada access points with stability and security. Network management has never been easier with the intuitive Omada app offering powerful management tools from the palm of your hands.



Two Types of Centralized Management Platform



3 | Business Networking Product Guide

Omada Cloud Controller (OC200 and OC300*)

-Dedicated hardware controller, with no extra device needed.
-Recommended management scale: OC200—APs<100 and clients<1,000;
OC300—APs<500 and clients<10,000.

* OC300 is being developed and scheduled to be released in Q4, 2019.



Omada Software Controller

-Free software controller, need to be installed in a PC or server.
-Management scale is related with PC/server's hardware performance.



Omada Cloud Controller

- Professional centralized management for Wi-Fi network
- Free cloud access to manage from anywhere, anytime
- PoE (802.3af/802.3at) supported for easy installation*
- Industry leading hardware design with powerful chipset, durable metal casing, and USB port for auto backup
- Omada App for a convenient management
- Secure guest network with multiple login options (Facebook Wi-Fi, SMS login, Voucher)

Omada Hybrid Cloud for Centralized Management

Featuring hybrid cloud technology, OC200 and OC300 allow you to take full control of Omada networks via Omada app or Web UI where you are in the world, while locally managing Omada access points with ultimate security and stability.



Model		OC200	OC300			
Produc	t Descriptions	Omada Cloud G	Controller			
	Management Scale	APs<100 and Clients<1,000	APs<500 and Clients<10,000			
	Processor	Dual-Core Cortex-A53 1GHz	Quad-Core Cortex-A72 1.4GHz			
Main Design	Memory Information	1GB DDR3	2GB DDR4			
	Storage	4GB EMMC	TBD			
	Interface	2 × 10/100Mbps Ethernet Port; 1 × USB 2.0 Port; 1 × Micro USB Port	2 × 10/100/1000Mbps Ethernet Port; 1 × USB 3.0 Port			
	Power Supply	802.3af/802.3at PoE; Micro USB(DC 5V/Minimum 1A)	100~240V AC, 50/60Hz			
Hardware Design	Dimensions	3.9 × 3.9 × 1.0 in. (100 × 98 × 25 mm)	6.2 × 4.0 × 1.0 in. (158 × 101 × 25 mm)			
	Environment	Operating Temperature: 0°C~40°C (32°F~104°F), Storage Temperature: -40°C~70°C (-40°F~158°F), Operating Humidity: 10%~90% non-condensing, Storage Humidity: 5%~90% non-condensing				
	Support AP	TP-Link Omada EAP Series				
AP Management	AP Automatic Discovery	•				
	AP Unified Configuration	•				
	L3 Management	•				
	Reboot Schedule	•				
	Online Firmware Upgrade	•				
	Management VLAN	•				
	MAC Filter	•				
Security	Encryption	WEP/WPA-PSK/WPA2-PSK/WPA/WPA2				
	Access Control	•				
	SSID to VLAN Mapping	•				
	Captive Portal	SMS, Facebook Wi-Fi, Voucher, Local User, Si	mple Password, External RADIUS Portal			
	Seamless Roaming	•				
	Mesh	•				
	Band Steering	•				
Wireless Function	Load Balance	•				
	Beamforming	•				
	Rate Limit	Based on SSI	D/Client			
	Transmit Power Adjustment	•				
	Wireless Schedule	•				

* Only OC200 supports PoE. Business Networking Product Guide 4

Business Wi-Fi

Omāda 802.11ax Access Points

Omada 802.11ax

Omada 802.11ax access points optimize every detail of your network connection to significantly improve network efficiency and deliver blistering speed. Buffering will no longer be a problem and say goodbye to crowded web browsing.





EAP3600

AX3600 Wireless Dual Band Ceiling Mount Access Point



EAP3000

AX3000 Wireless Dual Band Ceiling Mount Access Point



EAP1800

AX1800 Wireless Dual Band Ceiling Mount Access Point

Features

Wireless Function

- IEEE 802.11a/b/g/n/ac/ax
- 1024-QAM
- 4× Longer OFDM Symbol
- OFDM
- BBS Color
- Seamless Roaming
- MU-MIMO
- Band SteeringAirtime Fairness

Wireless Security

- Captive Portal Authentication
- Access Control
- MAC Address Filtering
- Wireless Isolation between Clients
- SSID to VLAN Mapping • 802.1x Support

Centralized Network Management

- Omada Cloud Controller Management
- Omada Software Controller Management
- Cloud Access
 Omada App Support
- Omada App Support
- L3 Management
- Automatic Device Discovery
- Centralized Configuration
- Centralized Monitoring
- Online Firmware Upgrade

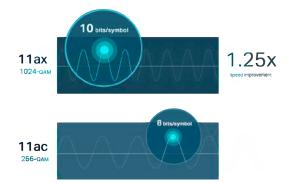
Blistering Speed

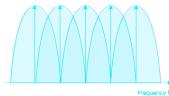
1024 QAM

Higher Level Modulation: 1024-QAM

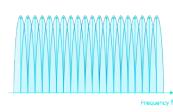
25% faster than 256-QAM

With 1024-QAM, each symbol carries 10 bits rather than 8 bits, improving raw speeds by 25% compared to 802.11ac 256-QAM.





>>> 11ac : 256 Subcarriers in 3.6 µs (0.4 µs Gl)



>>> 11ax : 1024 Subcarriers in 13.6 µs (0.8 µs Gl)

4× Longer OFDM Symbol

1.1× Faster Speed and Greater Stability

In 802.11ax, a 4× longer OFDM symbol and a longer GI are applied to generate 4× sub-carriers. Coverage grows, as does the proportion of data sub-carriers, helping AX Wi-Fi to be 11% faster.

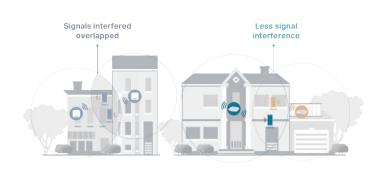
> Improved Efficiency



BBS Color

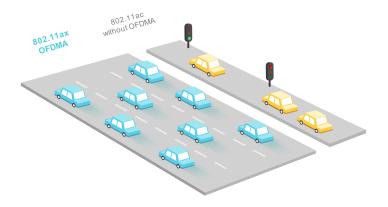
Minimize Wi-Fi Conflicts with Your Neighbors

BSS (Basic Service Set) Color identifies and marks frames from neighboring networks and ignores them, as long as the existing frames are below a threshold of weakness, preventing unnecessary slowdown and minimizing Wi-Fi interference from the neighborhood to the most extent.



Without BBS Color

BBS Color Working





OFDMA

Fully Utilize Bandwidth to Improve Capacity

OFDMA divides the spectrum into Resource Units and allocates them to multiple different clients, if necessary, allowing multiple clients with varying bandwidth needs to be served simultaneously.

Business Wi-Fi Omādo 802.11ac Access Points



Highlights

The 802.11ac Omada EAP series is a new generation of high-performance products designed to be easily mounted to walls, ceilings, poles, or Ethernet wall jacks. Seamless Roaming, Omada Mesh, and advanced RF features like MU-MIMO, Airtime Fairness, Beamforming, etc, make the 11AC ideal for demanding multi-user business environments like campuses, hotels, malls, and offices.

Omada 802.11ac Access Points

Breakthrough Wi-Fi Speeds Ensure a True Business-Class Experience for High-density Client Environments

- Omada Mesh technology enables wireless connections between access points for extended range, making wireless deployments more flexible and convenient
- 802.11k and 802.11v seamless roaming provide seamless switching to the access point with optimal signal when moving between APs
- MU-MIMO Technologies, Airtime Fairness, Beamforming, and Band Steering guarantee optimal RF performance for business-level applications
- Supports Power over Ethernet (802.3at/802.3af/ Passive PoE) for flexible deployment



EAP245

1-pack/ 3-pack
AC1750 Wireless MU-MIMO Gigabit
Ceiling Mount Access Point



EAP225

1-pack/ 3-pack

AC1350 Wireless MU-MIMO Gigabit Ceiling Mount Access Point



EAP235-Wall*

AC1200 Wireless MU-MIMO Gigabit Wall Plate Access Point



EAP230-Wall*

AC1200 Wireless MU-MIMO Gigabit Wall Plate Access Point



EAP225-Wall

AC1200 Wireless MU-MIMO Wall Plate Access Point



EAP225-Outdoor

AC1200 Wireless MU-MIMO Gigabit Indoor/Outdoor Access Point

^{7 |} Business Networking Product Guide

Pr	oduct Picture		\$ \$		@ @ @		0			
	Model	EAP245	EAP245 (3-pack)	EAP225	EAP225 (3-pack)	EAP235-Wall	EAP230-Wall	EAP225-Wall	EAP225- Outdoor	
Proc	luct Description	AC1750 Wireless MU-MIMO Gigabit Ceiling Mount Access Point		MU-MIMO G	AC1350 Wireless MU-MIMO Gigabit Ceiling Mount Access Point		AC1200 Wireless MU-MIMO Gigabit Wall Plate Access Point		AC1200 Wireless MU-MIMO Gigabi Indoor/Outdoor Access Point	
	Wireless Frequency				2.4GHz a	and 5GHz				
	Compatibility		IEEE 802.11a/b/g/n/ac							
	Maximum Data Rate	1,300 Mb	ps (5 GHz) os (2.4 GHz)	867 Mbj	ps (5 GHz) ps (2.4 GHz)		867 Mbps (5 GHz) + 3	300 Mbps (2.4 GHz)		
			3 × 3.5 dBi		: 3 × 4 dBi		2.4 GHz: 2	× 3 dBi		
Main Design	Internal Antennas	5 GHz:	3 × 4 dBi	5 GHz:	2 × 5 dBi		5 GHz: 2	× 4 dBi		
	Transmit Power			CE:<20d	Bm(2.4GHz, EIRP), <25	dBm(5GHz, EIRP); FC	C<24dBm			
	Ethernet Ports	2× Giga	bit Ports	1× Gig.	abit Port	Uplink: 1× Gigabit Port Downlink: 3× Gigabit Ports	Uplink: 1× Gigabit Port Downlink: 1× Gigabit Port	Uplink: 1× 10/100 Mbps Port Downlink: 3× 10/100 Mbps Ports	1× Gigabit Port	
	Power Supply		af PoE ssive PoE		Baf PoE ssive PoE	802.3at PoE	802.3af PoE	802.3at PoE	802.3af PoE 24V Passive PoB	
	PoE Adapter Included in the Box	•	-	•	-		-		•	
	Mesh			•			-		•	
	Seamless Roaming			•			-		•	
	Multiple SSIDs				16 (8 on e	ach radio)				
	Automatic Channel Assignment					•				
	Transmit Power Control				Adjust Transmi	t Power on dBm				
Wireless	QoS(WMM)					•				
Function	MU-MIMO		•							
	Band Steering		•							
	Beamforming / Airtime Fairness		•							
	Load Balance	•								
	Rate Limit		•							
	Reboot / Wireless Schedule		•							
	Omada Software Controller		•							
	Omada Cloud Controller	•								
	Omada app	•								
	Built-in Web Interface	•								
Management	L3 Management	•								
	Multi-site Management	•								
	Management VLAN	•								
	Management MAC Access Control	•								
	System Logging		Local/Remote Syslog							
	Email Alerts	•								
	Captive Portal Authentication				• (Facebook Log	in, SMS Support)				
	Access Control		•							
	Wireless MAC Address Filtering Wireless Isolation		•							
Security	between Clients					•				
	SSID to VLAN Mapping				-	•				
	Rogue AP Detection					•				
	802.1X Support					•				
	Encryption	10.2	watts		VEP, WPA/WPA2-PSK,	WPA/WPA2-Enterpri		9 watts /25.5 watts	10.5 watts	
	Max. Power Consumption	12.3	watto	9.80			TBD	(PoE Out Included)	10.0 Walls	
	Button					Button				
	Certification Mounting	Ceiling	/Wall mounting (Kits i	ncluded)	CE, FCC,	C, RoHS, IC Wall Plate Mouting			Pole/Wall Mounting	
Hardware	Dimensions (W x D x H)		1 × 1.5 in. 1 × 37.1 mm)		1 × 1.5 in. 1 × 37.1 mm)	5.6 × 3.4 × 0.8 in. (143 × 86 × 19.7 mm)	3.4 × 3.4 × 1.2 in. (86.8 × 86.8 × 30.2 mm)	5.6 × 3.4 × 0.8 in. (143 × 86 × 19.7 mm)	(Kits included) 8.5 × 1.8 × 1.1 in (215 × 46 × 27 mm)	
	System Requirements			Microsoft Win	dows XP, Vista, Windo				<u> </u>	
					emperature: 0°C~40°				Operating Temperature: -30°C~70°C (-22°F~158°F)	
	Environment		Ope		orage Temperature: -4 ~90% non-condensin		3°F), 5%~90% non-condens	sing	, (== 1 100 F)	

^{*}These two access points are being developed and scheduled to be released in Q3 or Q4, 2019, and the pictures are design sketches for reference only.

Business Wi-Fi Omâda 802.11n Access Points



Highlights

The 11n Omada EAP series is designed for small and medium-sized business environments as a cost effective solution. This centralized management platform with free cloud access, either the cloud controller or free software controller, allows you to manage the whole network at once — anytime, anywhere.

Omâda 802.11n Access Points

Cost Effective Wi-Fi Solution for Small to Medium-sized Businesses

- Supports (Passive) PoE for convenient installation
- Captive portal provides one convenient method of authentication for Wi-Fi guests
- Multi-SSID divides multiple wireless networks for different users
- Supports management vlan for an enhanced network management
- Ceiling/Wall/Pole mounting design for both indoor and outdoor applications



EAP115

300Mbps Wireless N Ceiling Mount Access Point



EAP115-Wall

300Mbps Wireless N Wall-Plate **Access Point**



EAP110

300Mbps Wireless N Ceiling Mount Access Point



EAP110-Outdoor

300Mbps Wireless N Outdoor Access Point



Wireless Function

- Multiple SSIDs
- Automatic Channel Assignment
- Transmit Power Control
- Load Balance
- Rate Limit
- Wireless Schedule

Wireless Security

- Captive Portal Authentication
- Access Control
- MAC Address Filtering
- SSID to VLAN Mapping
- Rogue AP Detection
- 802.1x Support

Centralized Network Management

- Omada Cloud Controller Management
- Omada Software Controller Management
- Cloud Access Omada App Support
- L3 Management
- Multi-Site Management
- Automatic Device Discovery
- Centralized Configuration
- Centralized Monitoring
- Online Firmware Upgrade

Product Picture				**************************************					
	Model	EAP115	EAP110	EAP115-Wall	EAP110-Outdoor				
Prod	uct Description	300Mbps Wireless N Ceiling Mount Access Point	300Mbps Wireless N Ceiling Mount Access Point	300Mbps Wireless N Wall-Plate wAccess Point	300Mbps Wireless N Outdoor Access Point				
	Wireless Frequency		2.40	GHz					
	Compatibility		IEEE 802	2.11b/g/n					
	Maximum Data Rate		Up to 30	00Mbps					
Main Design	Antennas	2×4	4dBi	2 × 1.8dBi	2 × 3dBi (External)				
	Transmit power		CE: <20dBm;	FCC: <22dBm					
	Ethernet Ports	1× 10/100 Mbp	s Ethernet Port	2× 10/100 Mbps Ethernet Ports	1× 10/100 Mbps Ethernet Port				
	Power Supply	802.3af PoE or External 9V/ 0.6A	24V Passive PoE	802.3af PoE	24V Passive PoE				
	Multiple SSIDs	SSEISGIT SE SI EXISTINI STOCK		3	211143315152				
	Automatic Channel								
	Assignment								
Wireless	Transmit Power Control			t Power on dBm					
Function	QoS(WMM)		•						
	Load Balance		•						
	Reboot Schedule	•							
	Wireless Schedule		•						
	Omada Software Controller		•						
	Omada Cloud Controller	•							
	Omada app Built-in Web Interface	•							
	L3 Management	•							
Management	Multi-site Management	•							
	Management VLAN	•							
	Management MAC Access								
	Control	•							
	System Logging	Local/Remote Syslog							
	Email Alerts			•					
	Captive Portal Authentication	● (Facebook Login, SMS Support)							
	Access Control	•							
	Wireless MAC Address Filtering Wireless Isolation between	•							
Security	Clients	•							
	SSID to VLAN Mapping	•							
	Rogue AP Detection	•							
	802.1X Support		•						
	Max. Power Consumption	3.1 watts	2.8 watts	2.8 watts	3.1 watts				
	Button		Reset	Button					
	Watch Dog								
	Certification	CE, FCC	C, RoHS	CE, RoHS	CE, RoHS, FCC				
	Mounting	Ceiling /Wall moun	ting (Kits included)	Wall Plate Mouting	Pole/Wall Mounting (Kits included)				
Hardware	Dimensions (W x D x H)	7.5 × 6.8 × 1.2 in. (189	.4 × 172.3 × 29.5 mm)	3.4 × 3.4 × 1.2 in. (86.8 × 86.8 × 30.2 mm)	8.5 × 1.8 × 1.1 in. (216 × 46 × 27 mm)				
	System Requirements		Microsoft Windows XP, Vista, Windo	ws 7, Windows 8, Windows 10, Linux					
		Ор	erating Temperature: 0°C~40°C (32°F~104	i°F)	Operating Temperature: -30°C~65°C (-22°F~149°F)				
	Environment	Oper	Storage Temperature: -4 ating Humidity: 10%90% non-condensin	0°C~70°C (-40°F~158°F), g, Storage Humidity: 5%~90% non-conde	nsing				

Business Wi-Fi Omâdo Advanced Functions

Omada Mesh

Omada mesh technology enable wireless connectivity between access points for extended range, making wireless deployment more flexible and convenient.



Guest Network

Provide secure Wi-Fi access along with multiple authentication options (SMS/Facebook Wi-Fi/Voucher, etc.) and abundant wireless security technologies.



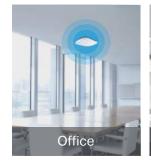
Band Steering

Band Steering pushes dual-band devices to the wider and faster 5GHz band, improving overall network performance, especially in high client density environments.

Airtime Fairness

Airtime Fairness improves total Wi-Fi throughput by limiting access time for low speed devices.

Ideal for Small and Medium Business











Seamless Roaming

802.11k and 802.11v seamless roaming provide seamless switching to the access point with optimal signal when moving between APs.



Omada APP

Follow configuration instructions on the free Omada app to get set up in minutes. Omada lets you configure settings, monitor the network status and manage clients, all from the convenience of a smart phone or tablet.



Beamforming Technology

Beamforming Technology achieves superior Wi-Fi bandwidth utilization and increases Wi-Fi range by creating efficient, highly targeted Wi-Fi connections.

Simultaneously sends data to multiple devices for faster speed.

Business Wi-Fi

Auranet Hardware Managed Solution

Auranet CAP access points work together with Auranet Wireless Controllers (AC) to provide stable and secure business Wi-Fi solutions with easy deployment.



Wireless Controller AC500

- Manage up to 500 CAPs
- 1GHz Dual-core MIPS64 network dedicated processors
- 5 Gigabit Ethernet ports
- Automatically discover APs and configure all APs from one access controller with unified configuration.

Product Picture			- Anna			
	Model	AC500	AC50			
Produc	ct Description	AC500 Wireless Controller	AC50 Wireless Controller			
	Processor	1GHz Dual-core MIPS64 Network dedicated processor	650MHz Network dedicated processor			
Main Danina	Memory Information	2× 256MB DDR3, 2× 32MB Flash	1× 128MB DDR2, 1× 16MB Flash			
Main Design	Interface	5× Gigabit Ethernet Ports	5× 10/100 Mbps Ethernet Ports			
	Management Scale	Up to 500 APs	Up to 50 APs			
	Communication protocol	CAP	WAP			
Caarmiter	AP Isolation	•	•			
Security	SSID Isolation	•	•			
	SSID to VLAN Mapping	•	•			
	Support AP	TP-Link Auran	et Access Point			
	AP Automatic Discovery	•	•			
	AP Unified Configuration	•				
AP Management	Reboot Schedule	•				
	Batch Firmware Upgrade	•	•			
	L3 Management	•	•			
	AP LED ON/OFF	•				
	System	•				
A december of the color of	AP Statistics	•				
Monitoring	Client Statistics	•				
	Authentication User Statistics	•	•			
	Load Balance	•				
	Band Steering	•	•			
Wireless Function	Auto Channel Adjustment	•	•			
	Transmit Power Adjustment	•	•			
	WMM	•	•			
Authentication	Captive Portal	•	•			
Function	MAC Filtering	•	•			
	Web-based Management	•	•			
System	Configuration Backup/Import	•	•			
Management	Ping/Tracert Tool	•	•			
	System Log	•				
	Power Supply	100~240V A	AC, 50/60Hz			
Hardware Design	Dimensions (W × D × H)	17.3 × 8.7 × 1.7 in. (440 × 220 × 44 mm)	8.2 × 5.0 × 1.0 in. (209 × 126 × 26 mm)			
Tidi dware Design	Environment	Operating Temperature: 0°C~40°C (32°F~104°F), Operating Humidity: 10%~90% non-condensin	Storage Temperature: -40°C~70°C (-40°F~158°F), g, Storage Humidity: 5%~90% non-condensing			

Business Wi-Fi

Auranet Hardware Managed Solution



Highlights

TP-Link's Auranet Business Wi-Fi Solution provides a scalable, manageable and secure business-class wireless network solution for devices including wireless controllers and access points. The Auranet APs can either be centrally managed by Auranet Wireless Controllers or work as standalone access points. With captive portal and advanced RF management functions, Auranet solution is ideal for the demanding multi-user business environments found in campuses, hotels, malls and offices.

Auranet Hardware Managed Access Point

Secure and Reliable Wi-Fi Solution for **Business Environments**

- Supports 802.3at or 802.3af PoE for convenient installation
- Captive portal provides one convenient method of authentication for Wi-Fi guests
- Multi-SSID divides multiple wireless networks for different users
- Supports management vlan for an enhanced network management
- Ceiling/Wall/Pole mounting design for both indoor and outdoor applications



CAP1750

AC1750 Wireless Dual **Band Gigabit Ceiling Mount** Access Point



CAP1200

AC1200 Wireless Dual **Band Gigabit Ceiling Mount** Access Point



CAP300

300Mbps Wireless N Ceiling Mount Access Point



CAP300-Outdoor

300Mbps Wireless N Outdoor Access Point

Features

Wireless Function

- IEEE 802.11a/b/g/n/ac
- Multiple SSIDs
- Transmit Power Control • QoS (WMM)
- Load Balance
- Wireless Schedule • MU-MIMO*
- Fast Roaming*
- Airtime Fairness

Wireless Security

- Captive Portal Authentication
- Access Control
- MAC Address Filtering
- · Wireless Isolation between Clients
- SSID to VLAN Mapping • 802.1x Support

Centralized Network Management

- · Wireless Controller without license fees
- Automatic Device Discovery
- Centralized Configuration
- Centralized Monitoring • Unified Firmware Upgrade

Product Picture CAP300 CAP300-Outdoor **Product Description** IEEE802.11a/b/g/n/ac IEEE 802.11b/g/n Compatibility Main Design Ethernet Ports 1× Gigabit Ethernet Port 1× 10/100 Mbps Ethernet Port Power over Ethernet (PoE) IEEE 802.3at IEEE 802.3af Captive Portal Authentication • (Facebook Login, SMS Support) SSID to VLAN Mapping 802.1X Support WEP, WPA/WPA2-PSK, WPA/WPA2-Enterprise Multiple SSIDs 16 (8 on each radio) Adjust Transmit Power on dBm Transmit Power Control Band Steering Reboot Schedule LED ON/OFF Control Telnet System Logging 802.3at PoE or nal 12VDC/1.5A pow 802.3af PoE or al 12VDC/1.5A pow 80.23af PoE or al 9V/0.6A power suppl 802.3af PoF Power Supply Button Fit/Fat Switch, Reset Button Watch Dog CE, FCC, RoHS CE, FCC, RoHS 8.2 × 3.7 × 1.7 in. (209 × 95 × 42.6 mm) Dimensions (W × D × H) Microsoft Windows XP, Vista, Windows 7, Windows 8, Windows 10

^{*} Only CAP1200 supports MU-MIMO, Fast Roaming, Airtime Fairness.

The TP-Link **Switch Family**

Stream 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, Jetstream L2+ Managed



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+ switches provide a cost-effective solution for small and medium-sized businesses, and L3 managed switches provide a scalable and stable solution for large organizations, campus networks and ISP networks.

Abundant Advanced Features

An array of L2 features are supported, including 802.1Q tag VLAN, Port Mirroring, STP/RSTP/MSTP, Link Aggregation Control Protocol and 802.3x Flow Control. The switch also provides advanced features for network maintenance, including Loopback Detection and Cable Diagnostics.

10GBase-T Technology

10GBase-T Technology is becoming more common and affordable. Low-Latency, Line-Rate 10G Copper Base-T is backward compatible with Fast Ethernet and Gigabit Ethernet and can automatically negotiate between higher and lower speed connections. Most importantly, 10GBase-T provides a cost-effective method for migrating from your current network to 10G Ethernet by utilizing your existing CAT5e/CAT6 RJ-45 short connections (up to 55m) and CAT6A/CAT7 connections (up to 100m). This reduces cabling complexity and ultimately results in significant savings for customers.

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.

Physical Stacking

With True Physical Stacking Technology, up to 8 units can be stacked with a single IP address. This provides enhanced scalability, simple management, and increased redundancy for high-density deployment. It also supports efficient network expansion in the future.

Enterprise Level and Flexible Management

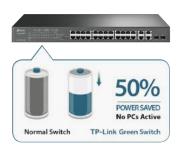
TP-Link switches support various management features, such as intuitive web-based Graphical User Interface (GUI) or industry-standard Command Line Interface (CLI), either administration traffic can be protected through SSL or SSH encryptions. SNMP (v1/v2c/v3) and RMON support enables the switch to be polled for valuable status information and send traps on abnormal events.

IPv6 Support

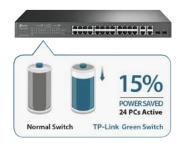
IPv6 functions supported are Dual IPv4/IPv6 Stack, MLD Snooping, IPv6 ACL, DHCPv6 Snooping, IPv6 Interface, Path Maximum Transmission Unit (PMTU) Discovery and IPv6 Neighbor Discovery.

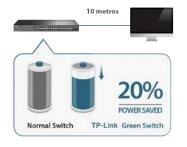
Green Technology

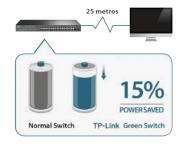
TP-Link power saving technology helps you build your network with less investment. What's more, TP-Link consciously strives to commit to reducing our own environmental footprint, so as to protect our environment for now and the future.

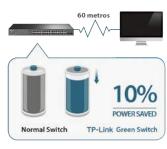












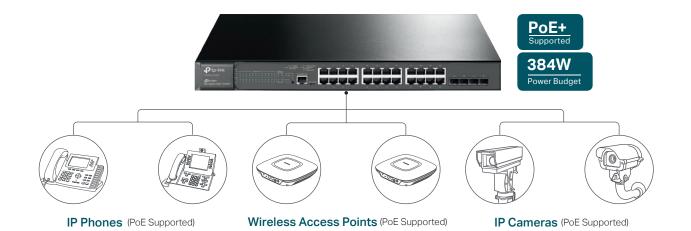
Power Over Ethernet

TP-Link's Power over Ethernet (PoE) switches are specially designed to meet either the 802.3af standard, or the 802.3at 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 sockets.

Typical PoE Application

JetStream 24-Port Gigabit L2+ Managed PoE+ Switch with 4 SFP Slots

T2600G-28MPS



Stream L3 Managed Switches



Highlights

TP-Link's JetStream L3 switches are designed to build highly accessible, scalable, and robust networks. Our L3 managed switches include T3700G-52TQ and T3700G-28TQ. With physical stacking and Dual Hot-Swappable Power Supply modules, all two provide robust networks with efficient redundancy.

Stream T3700 Series

Reliable Solution for Highly Accessible, Scalable and Robust Networks

- Abundant Layer 3 routing protocols including RIP/ OSPF/ECMP/VRRP that support a scalable network
- True Physical Stacking technology supports up to 8 units for high scalability and efficient redundancy
- 10 Gigabit Ethernet uplink provides high-bandwidth applications for congestion relief and smooth data delivery
- Dual removable power units minimize downtime
- PIM-SM/PIM-DM/IGMP Snooping for resilient video deployments



T3700G-52TQ

JetStream 52-Port Gigabit Stackable L3 Managed Switch

48 Gigabit RJ45, 4 Combo Gigabit SFP and 4 10G SFP+, 1 RJ45 Console Port, 1 Micro-USB Console Port, 1 RJ45 Management Port, 19-inch rackmount



T3700G-28TQ

JetStream 28-Port Gigabit Stackable L3 Managed Switch

24 Gigabit RJ45, 4 Combo Gigabit SFP and 4 10G SFP+, 1 RJ45 Console Port, 1 Micro-USB Console Port, 1 RJ45 Management Port, 19-inch rackmount

Features

L2 and L2+ Features

- Static Routing
- RIP v1, v2
- OSPF v2 • PIM-SM/PIM-DM/IGMP
- DHCP Server/Relay

19 Business Networking Product Guide

- ARP Proxy
- VRRP

Physical Stacking

- Up to 8 Units Physical Stacking
- Up to 32 Gigabit combo SFP and
 16.10C SEP Lelete
- 16 10G SFP+ slots
 Up to 320Gbps Stacking
- bandwidth
 Ring Stacking for Link
- Distributed Link Aggregation

Layer 2 Features & Security

- AAA
- IP-MAC-Port-VID Binding
- Access Control List (L2~L4 ACL)
 Link Aggregation Control Protocol(LACP)
- 4K VI AN
- IGMP/MLD Snooping
- Quality of Service
 802.1x and RADIUS/TACACS+ Authentication

Management

- Physical Stacking for
- Unified Management
 Web-based GUI
- Command Line Interface
- SNMP v1/v2c/v3 • RMON (1, 2, 3, 9 group)
- Dual Image
- IPv6 Management
- Business Networking Product Guide | 20

Pi	roduct Picture						
Model		T3700G-52TQ V1	T3700G-28TQ V3				
Proc	duct Description	JetStream 52-Port Gigabit Stackable L3 Managed Switch	JetStream 28-Port Gigabit Stackable L3 Managed Switch				
	Gigabit RJ45 Ports	48	24				
	Gigabit SFP Ports	4 (Con	nbo)				
	10G SFP+ Slots	Up to 4 (2 fixed and 2 optional)					
	Console Port	1 (RJ45), 1 (N	Micro-USB)				
	Management Port	1(RJ-	45)				
	USB Port	1 USB Stor	rage Slot				
Hardware	Standards	IEEE 802.3i, 802.3u, 802.3ab, 802.3z, 802.3ae, 802.3ad, 802.3s	x, 802.1v, 802.1d, 802.1s, 802.1w, 802.1Q, 802.1x, 802.1p				
	Flow Control	•					
	Power Supply	Dual Hot-swappable Power Supply Module (PSM150-AC)					
	Certifications	100-240VAC					
_		17.3 × 16.5 × 1.7 in.	17.3 × 13 × 1.7 in.				
	Dimensions (W × D × H)	(440 × 420 × 44 mm)	(440 × 330 × 44 mm)				
	Environment	Operating Temperature: 0°C~40°C (32°F~104°F); S Operating Humidity: 10%~90% non-condensing	Storage Temperature: -40°C~70°C (-40°F~158°F) r; Storage Humidity: 5%~90% non-condensing				
	Max Number of Stacking Ports Installable	2 SF	P+				
Physical Stacking	No. of Units Per Stack	8					
	Stacking Speed (Per Port)	20Gbps (Fu	ill-Duplex)				
	Switch Capacity	Up to 176Gbps for a standalone switch	Up to 128 Gbps for a standalone switch				
		standalone switch Up to 130.9Mpps for	standalone switch Up to 95.2Mpps for				
	Forwarding Rate	a standalone switch	a standalone switch				
	MAC Address Table	32K					
Performance	Packet Buffer Memory	32 Mbits					
	Number of IP Interfaces	128					
	Number of Routes	8K IPv4					
	Number of Static Routes	256					
	Jumbo Frame	12KB					
	Wire-speed IP forwarding	•					
	Static Routing	•					
L3 Features	RIP	v1/	v2				
	OSPF	V2	2				
	ECMP	•					
	PIM-SM/PIM-DM/IGMP	•					
	DHCP Server/Relay	•					
	ARP Proxy	•					
	VRRP	•					
	IGMP Snooping	V1/V2	2/V3				
_	STP/RSTP/MSTP	•					
	Loopback Detection	•					
	QinQ	•					
	VLAN	802.1Q/MAC-based/Protocol-based/GVRP/Private/Voice VLAN					
L2 Features	QoS	8 Queues,Port/80					
	Rate Limit	•					
	Port Isolation	•					
	Port Mirroring	•					
	Link Aggregation	Static LAC	G/LACP				
	DHCP Snooping	•					
	Access Control List						
	IP + MAC + Port + VID Binding	•					
	Storm Control	•					
	Port Security	•					
	SSH & SSL						
Security	IP Source Guard						
	DoS Defend	•					
	Dynamic ARP Inspection	•					
	IEEE 802.1X Authentication	•					
	Guest VLAN	•					
	SNMP	V1/V2	c/V3				
	RMON						
		Group 1,	ى , ك , ك				
	Command Line Interface (CLI)						
System	Dual Image/Configuration	•					
System Management	LLDP/LLDP-MED	•					
	IPv6	•					
	Firmware Upgrade	VOTION LIMITARY					
	System Diagnose	VCT/CPU Monito	nrPing/ nacert				
	Web Interface/SYSLOG/MIBS	•					

Stream L2+ Managed Switches



Highlights

TP-Link's JetStream T2600 series 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, OAM, L2PT and sFlow.

Stream T2600 Series

L2+ Managed Solutions for Demanding **Networking Applications**

- L2+ feature—Static Routing, helps route internal traffic for more efficient use of network resources
- IP-MAC-Port Binding, ACL, Port Security, DoS Defend, Storm control, DHCP Snooping, 802.1X Authentication and Radius provide you robust security strategies
- L2/L3/L4 QoS and IGMP snooping optimize voice and video application
- Web, CLI (Console Port, Telnet, SSH), SNMP, RMON and Dual Image bring abundant management policies



T2600G-52TS (TL-SG3452)

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

48 Gigabit RJ45, 4 Gigabit SFP, 1 RJ45 Console Port, 1 Micro-USB Console



T2600G-28TS-DC

JetStream 24-Port Gigabit L2+ Managed Switch with DC Power Supply

24 Gigabit RJ45, 4 Gigabit SFP, 1 RJ45 Console Port, 1 Micro-USB Console Port, 19-inch rackmount, DC Power Supply



T2600G-28MPS (TL-SG3424P)

JetStream 24-Port Gigabit L2+ Managed PoE+ Switch with 4 SFP Slots

24 Gigabit RJ45 (all ports support 802.3at/af PoE+), 4 Gigabit SFP, 1 RJ45 Console Port, 1 Micro-USB Console Port, 19-inch rackmount



T2600G-28TS (TL-SG3424)

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

24 Gigabit RJ45, 4 Gigabit SFP, 1 RJ45 Console Port, 1 Micro-USB Console



T2600G-18TS (TL-SG3216)

JetStream 16-Port Gigabit L2+ Managed Switch with 2 SFP Slots

16 Gigabit RJ45, 2 Gigabit SFP, 1 RJ45 Console Port, 1 Micro-USB Console Port, 19-inch rackmount



T2600G-28SQ

JetStream 28-Port Gigabit SFP L2+ Managed Switch

24 Gigabit SFP, 4 Gigabit Combo RJ45 and 4 10G SFP+,1 RJ45 Console Port, 1 Micro-USB Console Port, 19-inch rackmount

Features

L2 and L2+ Features

- Static Routing (IPv4/IPv6)
- DHCP Relay/Server
- IGMP/MLD Snooping VI AN VPN (QinQ)
- GARP VLAN Registration
- Protocol (GVRP)
- Link Aggregation Group (LAG)
- Layer2 Protocol Tunneling (L2PT)

Quality of Service

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

Security Strategies

- 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

Management

- Web-based GUI
- Command Line Interface • Ethernet OAM³
- sFlow*
- SNMP V1/V2c/V3
- RMON (1, 2, 3, 9 group) • IPv6 Management
- Dual Image

Gigabit L2+ Managed witch with 4 SFP Slots

Slots

802.3at/af

ch with 2 SFP Slots

h with 4 SFP Slot

1 (RJ45), 1 (Micro-USB)

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

Operating Temperature: 0°C~40°C(32°F~104°F); Storage Temperature: -40°C~70°C (-40°F~158°F)

V1/V2/V3

ch with 4 SFP Slots

Product Picture

Model

Product Description

Hardware

Performance

Gigabit RJ45 Ports Gigabit SFP Ports

Console Port

Standards

Flow Control

PoE Power Budge

PoE Standard

Dimensions (W \times D \times H)

Environment

Switching Capacity

MAC Address Table

Static Routing

IGMP Snooping

STP/RSTP/MSTP

^{*} T2600G-18TS doesn't support these functions

QinQ VLAN 802.1Q/GVRP/MAC/Protoc L2 Features Port Isolation Port Mirroring Link Aggregation Static LAG / LACP DHCP Snooping Access Control List IP+MAC+Port+VID Binding Security IP Source Guard DoS Defend Dynamic ARP Inspection RMON Dual Image/Configuration sFlow System Managemen Ethernet OAM LLDP/LLDP-MED Firmware Upgrade Business Networking Product Guide | 22

^{*} T2600G-18TS doesn't support private VLAN.

Stream L2+ Managed Switches



Stream T2500 Series

Ideal Solution for Small and Medium-sized Business Networks

Highlights

TP-Link's JetStream T2500 series L2+ managed switches are designed exclusively for the networking needs of growing businesses, with an extensive suite of management features and security functions available. These TP-Link products are cost-effective for small and medium-sized businesses, making them ideal networking solutions.

- L2+ feature—Static Routing, helps route internal traffic for more efficient use of network resources
- AAA, ACL, 802.1X Authentication, Port Security, IP Filtering, Storm Control, DHCP Snooping, IP Source Guard and DoS Defend provide you robust security
- DDM provides the monitoring of all SFP Modules inserting to the switch
- L2/L3/L4 QoS and IGMP snooping optimize voice and video application
- SNMP, RMON, WEB/CLI/Telnet Log-in bring abundant management policies



T2500G-10TS (TL-SG3210) JetStream 8-Port Gigabit L2+ Managed Switch with 2 SFP Slots

8 Gigabit RJ45, 2 Gigabit SFP, 1 RJ45 Console Port, 1 Micro-USB Console Port, 13-inch desktop/rackmount

Features

L2 and L2+ Features

- Static Routing (IPv4/IPv6) • DHCP Relay/Server
- Link Aggregation Control Protocol (LACP)
- IGMP/MLD Snooping
- IEEE 802.1Q VLAN
- VLAN VPN (QinQ) GARP VLAN Registration
- Protocol (GVRP)
- STP/RSTP/MSTP

Quality of Service

- 8 Priority Queues
- IEEE 802.1p Priority
- DSCP Priority
- Rate Limit

Security Strategies

- AAA
- IP-MAC-Port-VID Binding Access Control List (L2~L4 ACL)
- ARP Inspection
- 802.1x and RADIUS/TACACS+ Authentication
- DoS Defend

Management

- Web-based GUI
- Command Line Interface
- SNMP v1/v2c/v3
- RMON (1,2,3,9 group) • SNMP V1/V2c/V3

 IPv6 Management 	

Product Picture		
	Model	T2500G-10TS (TL-SG3210) V3
Produ	ct Description	JetStream 8-Port Gigabit L2+ Managed Switch with 2 SFP Slots
	Gigabit RJ45 Ports	8
	Gigabit SFP Ports	2
_	Console Port	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
_	Flow Control	•
_	Power Supply	100-240VAC, 50/60Hz
Hardware	PoE Power Budget	-
	PoE Standard	
	Fanless	•
	Certifications	CE, FCC
	Dimensions (W × D × H)	11.6 × 7.1 × 1.7 in. (294 × 180 × 44 mm)
	Environment	Operating Temperature: 0°C~40°C(32°F~104°F); Storage Temperature: ~40°C~70°C (-40°F~158°F) Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing
	Switching Capacity	20Gbps
	Forwarding Rate	14.9Mpps
Performance	MAC Address Table	8K
	Jumbo Frame	10KB
	Static Routing	•
L2+ Features	DHCP Server/Relay	•
L2+1 eatures	ARP Proxy	•
	IGMP Snooping	V1/V2/V3
	STP/RSTP/MSTP	•
	Loopback Detection	•
	QinQ	•
	VLAN	802.1Q/GVRP/MAC/Protocol/Voice VLAN
	QoS	8 Queues, Port/802.1p/DSCP QoS
L2 Features	Rate Limit	•
	Port Isolation	•
	LACP	•
	Link Aggregation	Static LAG / LACP
	Port Mirroring	•
	DHCP Snooping	•
	Access Control List	•
	IP + MAC + PORT + VID Binding	•
	Storm Control	•
0 "	Port Security	•
Security	SSH & SSL	•
_	DoS Defend	•
	Dynamic ARP Inspection	•
	IEEE 802.1X Authentication	•
	Guest VLAN	•
	SNMP	V1/V2c/V3
	RMON	Group 1, 2, 3, 9
	Command Line Interface (CLI)	•
System Management	LLDP/LLDP-MED	•
	IPv6	•
	Firmware Upgrade	•
	System Diagnose	VCT/CPU Monitor/Ping/Tracert

Stream Smart Switches



Stream T1700 Series

Affordable 10-Gigabit Switching Solution for Growing SMBs

Highlights

In a world of expanding enterprises and growing virtualization, cloud-based services and applications, like VoIP, HD streaming video, and IP surveillance, SMB networks need to evolve beyond simple reliability to provide increased scalability, higher bandwidth, and enhanced performance. TP-Link's new T1700 Series 10G Smart Switches represent an ideal solution that meets these requirements. The series includes the T1700X-16TS Full 10-Gigabit Smart Switch and the T1700G-28TQ Gigabit Stackable Smart Switch with 10G Uplink, which both provide high levels of performance, scalability, and cost-effectiveness that SMBs require from their 10G networking solutions.

- 10GBase-T Technology provides a cost-effective method for migrating from current network to 10G Ethernet
- True physical stacking supports up to 6 units and 40Gbps bi-directional bandwidth for high scalability and efficient redundancy
- 10G SFP+ ports for stacking and uplink, providing support for high-bandwidth applications for congestion relief and smooth data delivery
- L2+ feature—Static Routing, helps route internal traffic for more efficient use of network resources



T1700Y-16T

JetStream 12-Port 10GBase-T Smart Switch with 4 10G SFP+ Slots

12 10GBase-T RJ45, 4 10G SFP+, 19-inch rackmount



T1700G-28TG

JetStream 24-Port Gigabit Stackable Smart Switch with 4 10GE SFP+ Slots

24 Gigabit RJ45, 4 10G SFP+, 19-inch rackmount

Features

L2 and L2+ Features

- Static Routing (IPv4/IPv6)
 IGMP/MLD Snooping
- IGMP/MLD Snooping4K IEEE 802.1Q VLAN
- GARP VLAN Registration
- Protocol (GVRP)
 Link Aggregation Group (LAG)

Quality of Service

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

Security Strategies

- AAA
- IP-MAC-Port-VID Binding
- Access Control List (L2~L4 ACL, IPv6 ACL)
- ARP Inspection
- 802.1x and RADIUS/TACACS+
- Authentication
 DoS Defend

Management

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

Product Picture							
	Model	T1700X-16TS V3	T1700G-28TQ V3				
	Product Description	JetStream 12-Port 10GBase-T Smart Switch with 4 10G SFP+ Slots	JetStream 24-Port Gigabit Stackable Smart Switch with 4 10GE SFP+ Slots				
	Gigabit RJ45 Ports	-	24				
	10GBase-T RJ45 Ports	12	-				
	10G SFP+ Ports	4	4				
	Standards	IEEE 802.3i, 802.3u, 802.3ab, 802.3ad, 802.3x, 802.3ae, 8	802.3an, 802.1Q, 802.1p, 802.1d, 802.1w, 802.1s, 802.1x				
	Flow Control		•				
	Power Supply	100-240VAC, 50/60Hz					
Hardware	PoE Power Budget		-				
	Fanless	2 Fans	•				
	Certifications	CE,	FCC				
	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)				
	Environment	Operating Temperature: 0°C~40°C(32°F~104°F); Operating Humidity: 10%~90% non-condensin	Storage Temperature: -40°C~70°C (-40°F~158°F) gg; Storage Humidity: 5%~90% non-condensing				
	Switching Capacity	320Gbps	128Gbps				
Performance	Forwarding Rate	238.1Mpps	95.2Mpps				
Performance	MAC Address Table	16	SK				
	Jumbo Frame	94	KB				
Physical	Max Number of Stacking Ports	-	2 SFP+				
Stacking	Stacking Units	-	6				
L2+ Features	Static Routing	•	•				
	DHCP Server/Relay	•					
	ARP Proxy	•					
	IGMP Snooping	V1/V	/2/V3				
	STP/RSTP/MSTP	•	•				
	Loopback Detection	•					
	VLAN	802.1Q/GVRP/MAC/Protocol/Private*/Voice VLAN					
L2 Features	QoS	8 Queues, Port/802.1p/IP DSCP QoS					
L2 Features	Rate Limit	•	•				
	Port Isolation	•	•				
	Link Aggregation	Static LA	G/LACP				
	Port Mirroring	•	•				
	DHCP Snooping	•					
	Access Control List	•	•				
	IP + MAC + PORT + VID Binding						
	Storm Control	•					
	Port Security						
Security	SSH & SSL	•					
	DoS Defend						
	Dynamic ARP Inspection						
	IEEE 802.1X Authentication						
	Guest VLAN						
	SNMP	V1/V2	2c/V3				
	RMON	Group 1	1, 2, 3, 9				
	Command Line Interface (CLI)	Teli	net				
System Management	IPv6		•				
Management	Dual Image						
	Firmware Upgrade		•				
	System Diagnose	VCT/CPU Monit	tor/Ping/Tracert				
	Web Interface/SYSLOG/Public MIBS		•				
* Private VI AN is only	supported by T1700X-16TS.						

^{*} Private VLAN is only supported by T1700X-16TS.

Stream Smart Switches



Highlights

TP-Link's new JetStream Gigabit Smart Switches feature significant upgrades when compared with previous models. Integrated with useful L2 and L2+ features such as static routing, 802.1Q VLAN, QoS, and IGMP Snooping, they provide cost-effective networking solutions for small and medium-sized businesses, offering enhanced usability and better performance.

Stream T1600 Series

Cost-effective Solution with Enhanced Usability and Exceptional Performance

- Gigabit Ethernet connections on all ports provide full speed of data transferring
- L2+ Feature—Static Routing, helps route internal traffic for more efficient use of network resources
- Integrated security strategy including 802.1Q VLAN,
 Port Security and Storm control help protect LAN area investment
- L2/L3/L4 QoS and IGMP snooping optimize voice and video applications
- WEB/CLI managed modes, SNMP, RMON and Dual Image bring abundant management features



T1600G-52TS (TL-SG2452)
JetStream 48-Port Gigabit Smart Switch with 4 SFP Slots

48 Gigabit RJ45, 4 Gigabit SFP, 19-inch rackmount



T1600G-28PS / T1600G-52PS (TL-SG2452P)

JetStream 24/48-Port Gigabit Smart PoE+ Switch with 4 SFP Slots

24/48 Gigabit RJ45 (all support 802.3at/af PoE+), 4 Gigabit SFP, 19-inch rackmount



T1600G-28TS

 ${\sf JetStream\,24-Port\,Gigabit\,Smart\,Switch\,with\,4\,SFP\,Slots}$

 $24\ Gigabit\ RJ45, 4\ Gigabit\ SFP, 19\mbox{-inch}\ rack\mbox{-mountable}$



T1600G-18TS (TL-SG2216)

JetStream 16-Port Gigabit Smart Switch with 2 SFP Slots

16 Gigabit RJ45, 2 Gigabit SFP, 19-inch rackmount

Features

L2 and L2+ Features

- Static Routing (IPv4/IPv6)
- Link Aggregation Control Protocol (LACP)
- 802.1Q/MAC/Protocol VLAN
- Port Isolation
 STP/RSTP/MSTP
- IGMP/MLD Snooping
- LLDP/LLDP-MED

Quality of Service

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

Security Strategies

- AAA
- IP-MAC-Port-VID Binding
 ARP Inspection
- DHCP Snooping
- DHCP Snooping
- Access Control List (L2~L4 ACL, IPv6 ACL)
 802.1x and RADIUS/TACACS+
- Authentication
- Port Isolation
 Loopback Detection
- Port Security
- SSL and SSH Encryptions

Management

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

Product Picture		· · · · · · · · · · · · · · · · · · ·	Т инихиникиния		 	-			
	Model	T1600G-52PS (TL-SG2452P) V4	T1600G-52TS (TL-SG2452) V4	T1600G-28PS V3	T1600G-28TS V3	T1600G-18TS (TL-SG2216) V2			
Produc	ct Description	JetStream 48-Port Gigabit Smart PoE+ Switch with 4 SFP Slots	JetStream 48-Port Gigabit Smart Switch with 4 SFP Slots	JetStream 24-Port Gigabit Smart PoE+ Switch with 4 SFP Slots	JetStream 24-Port Gigabit Smart Switch with 4 SFP Slots	JetStream 16-Port Gigabit Smart Switch with 2 SFP Slots			
	Gigabit RJ45 Ports	48, all support PoE+	48	24, all support PoE+	24	16			
	Gigabit SFP Ports	4	4	4	4	2			
	Standards	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			100-240VAC, 50/60Hz					
Hardware	PoE Power Budget	384W	-	192W	-				
	PoE Standard	802.3at/af	-	802.3at/af	-				
	Fanless	3 Fans	•	2 Fans	•	,			
	Certifications			CE, FCC					
	Dimensions (W × D × H)	17.3 × 13 × 1.7 in. (440 × 330 × 44mm)	17.3 × 8.7 × 1.7 in. (440 × 220 × 44 mm)	17.3 × 8.7 × 1.7 in. (440 × 220 × 44 mm)	17.3 × 7.1 (440 × 180	× 1.7 in. × 44 mm)			
	Environment	Opera Ope	ating Temperature: 0°C~40°C(3 rrating Humidity: 10%~90% no	32°F~104°F); Storage Temper on-condensing; Storage Hum	rature: -40°C~70°C (-40°F~15 idity: 5%~90% non-condensi	B°F)			
	Switch Capacity	1049	ibps	560	Gbps	36Gbps			
	Forwarding Rate	77.4N	1pps	41.7	Mpps	26.8Mpps			
Performance	MAC Address Table	16	К		8K				
	Jumbo Frame								
	Static Routing	•							
L2+ Features	DHCP Server/Relay	•							
	ARP Proxy	•							
	IGMP Snooping	V1/V2/V3							
	STP/RSTP/MSTP	•							
	Loopback Detection	•							
	VLAN	802.1Q/GVRP/MAC/Protocol/Voice VLAN							
	QoS	8 Queues, Port/802.1p/DSCP QoS							
L2 Features	Rate Limit			•					
	Port Isolation			•					
	Link Aggregation	Static LAG, LACP							
	Port Mirroring	•							
	DHCP Snooping								
	Access Control List			•					
	IP + MAC + PORT + VID Binding			•					
	Storm Control			•					
	Port Security			•					
Security	SSL & SSH			•					
	DoS Defend			•					
	Dynamic ARP Inspection			•					
	IEEE 802.1X Authentication			•					
	Guest VLAN			•					
	SNMP			V1/V2c/V3					
	RMON			Group 1,2,3,9					
	Command Line Interface (CLI)			Telnet					
System Management	IPv6			•					
System Management	Dual Image			•					
	Firmware Upgrade			•					
	System Diagnose		V	CT/CPU Monitor/Ping/Tracert					
	Web Interface/SYSLOG/Public MIBs			•					

Stream Smart Switches



Highlights

TP-Link's JetStream T1500 Series Smart Switches have been specially developed for the access layer of small and medium networks. Integrated with useful L2 features such as 802.1Q VLAN, QoS, IGMP Snooping, STP, Storm Control and SNMP, TP-Link's T1500 Series provide administrators with simple, cost-effective and yet intelligent networking solutions.

Stream T1500 Series

A Simple, Intelligent Networking Solution for the Access Layer

- Integrated security strategy including 802.1Q VLAN, Port Security and Storm control help protect LAN area investment
- L2/L3/L4 QoS and IGMP snooping optimize voice and video applications
- WEB/CLI managed modes, SNMP, RMON bring abundant management features
- Dual Firmware Image improves reliability and up-time of your network



T1500G-10MPS JetStream 8-Port Gigabit Smart PoE+ Switch with 2 SFP Slots

8 Gigabit RJ45 (all support 802.3at/af PoE+), 2 Gigabit SFP, 13-inch desktop/rackmount



T1500G-8T (TL-SG2008)

JetStream 8-Port Gigabit Smart Switch

8 Gigabit RJ45 (1 802.3af PD Port), desktop design



T1500G-10PS (TL-SG2210P)

JetStream 8-Port Gigabit Smart PoE Switch with 2 SFP Slots

8 Gigabit RJ45 (all support 802.3af PoE), 2 Gigabit SFP, desktop design



T1500-28PCT (TL-SL2428P)

JetStream 24-Port 10/100Mbps + 4-Port Gigabit Smart PoE+ Switch

24 10/100Mbps RJ45 (all support 802.3at/af PoE+), 4 Gigabit RJ45, 2 Combo Gigabit SFP, 19-inch rackmount

Features

Layer 2 Features

- Link Aggregation Control Protocol (LACP)
- 802.1Q VLAN
- Port Isolation
- STP/RSTP/MSTP
- IGMP/MLD Snooping
- LLDP/LLDP-MED

Quality of Service

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

Security Strategies

- AAA
- IP-MAC-Port-VID Binding
- ARP Inspection
- DHCP Snooping
- Access Control List (L2~L4 ACL)
- 802.1x and RADIUS/TACACS+
- Loopback Detection

Management

- Web-based GUI
- SNMP (V1/V2C/V3) RMON (1, 2, 3, 9 group)

	Product Picture				= (1113)(111)(111)(111)				
	Model	T1500G-10MPS V2	T1500G-10PS (TL-SG2210P) V2	T1500G-8T (TL-SG2008) V2	T1500-28PCT (TL-SL2428P) V3				
Product Description		JetStream 8-Port Gigabit Smart PoE+ Switch with 2 SFP Slots Switch with 2 SFP Slots Switch with 2 SFP Slots		JetStream 8-Port Gigabit Smart Switch	JetStream 24-Port 10/100Mbps + 4-Port Gigabit Smart Switch				
	10/100Mbps RJ45 Ports		-		24, all support PoE+				
	Gigabit RJ45 Ports	8, all support PoE+	8, all support PoE	8, including 1 PD port	4				
	Gigabit SFP Ports	2	2	-	2 (Combo)				
	Standards	IEEE 8	02.3i, 802.3u, 802.3ab, 802.3ad, 802.3x,	802.1Q, 802.1p, 802.1d, 802.1w, 802.1s,	302.1x				
	Flow Control			•					
	Power Supply	100-240VAC 50/60Hz	48VDC/1.25A External Adapter	12VDC/1A External Adapter or Obtain Power from PoE Source	100-240VAC, 50/60Hz				
Hardware	PoE Power Budget	116W	53W	-	192W				
	PoE Standard	802.3at/af	802.3af	-	802.3at/af				
	Fanless	1 Fan	•	•	2 Fans				
	Certifications		CE,	FCC					
	Dimensions (W \times D \times H)	11.6 × 7.1 × 1.7 in. (294 × 180 × 44 mm)	8.2 × 4.9 × 1.0 in. (209 × 126 × 26 mm)	8.2 × 4.9 × 1.0 in. (209 × 126 × 26 mm)	17.3 × 8.7 × 1.7 in. (440 × 180 × 44 mm)				
	Environment	Operatii Opera	ng Temperature: 0°C~40°C(32°F~104°F); ting Humidity: 10%~90% non-condensir	Storage Temperature: -40°C~70°C (-40°F ng; Storage Humidity: 5%~90% non-cond	~158°F) ensing				
	Switching Capacity	200	Sbps	16Gbps	12.8Gbps				
Performance	Forwarding Rate	14.9	Mpps	11.9Mpps	9.5Mpps				
	MAC Address Table	8K							
	Jumbo Frame	9KB							
_	IGMP Snooping	V1/V2/V3							
	STP/RSTP/MSTP	•							
	Loopback Detection	•							
	VLAN	802.1Q/GVRP/MAC/Protocol/Voice VLAN							
L2 Features	QoS	8 Queues,Port/802.1p/DSCP QoS							
	Rate Limit	•							
	Port Isolation	•							
	Link Aggregation	Static LAG, LACP							
	Port Mirroring	•							
	DHCP Snooping	•							
	Access Control List	•							
	IP + MAC + Port + VID Binding	•							
	Storm Control			•					
	Port Security			•					
Security	SSL & SSH			•					
	DoS Defend			•					
	Dynamic ARP Inspection			•					
	IEEE 802.1X Authentication			•					
	Guest VLAN			•					
	SNMP		V1/V	2c/V3					
	RMON	Group 1,2,3,9							
	Command Line Interface(CLI)		Tel	net					
System Management	LLDP/LLDP-MED			•					
Management	IPv6			•					
	Firmware Upgrade			•					
	System Diagnose		VCT/CPU Moni	tor/Ping/Tracert					
	Web Interface/Syslog/Public MIBS			•					

Stream Easy Smart Switches



Highlights

TP-Link Easy Smart Switches are the perfect upgrade from Unmanaged Switches. Configuration is simple with the Easy Smart Configuration Utility management software, while the switch is equipped with many basic practical 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.

Easy Smart Switches

A Simple and Cost-Effective Networking Solution for Small Businesses

- Provides network monitoring, traffic prioritization and VLAN features
- Innovative energy-efficient technology reduces power output by up to 18%
- Simple network set-up on top of plug-and-play connectivity
- Web-based user interface and management utility simplify configuration



TL-SG1024DE

24-Port Gigabit Easy Smart Switch

24 Gigabit RJ45, 13-inch desktop/rackmount



TL-SG1218MPE

16-Port Gigabit Easy Smart PoE+ Switch with 2 SFP Slots

16 Gigabit RJ45 (All support 802.3at/af PoE+), 2 Gigabit SFP, 19-inch rackmount



TL-SG116E

16-Port Gigabit Easy Smart Switch

16 Gigabit RJ45, desktop design



TL-SG108E

8-Port Gigabit Easy Smart Switch

8 Gigabit RJ45, desktop design



TL-SG1016DE

16-Port Gigabit Easy Smart Switch

16 Gigabit RJ45, 13-inch desktop/rackmount



TL-SG1016PE

16-Port Gigabit Easy Smart Switch with 8-Port PoE+

16 Gigabit RJ45 (Port 1 to Port 8 support 802.3at/af PoE+), 13-inch desktop/rackmount



TL-SG108PE

8-Port Gigabit Easy Smart Switch with 4-Port PoE

8 Gigabit RJ45 (Port 1 to Port 4 support 802.3af PoE), desktop design



TL-SG105E

5-Port Gigabit Easy Smart Switch

5 Gigabit RJ45, desktop design

Prod	uct Picture) 						*****	
	Model	TL-SG1024DE	TL-SG1218MPE	TL-SG1016PE	TL-SG1016DE	TL-SG116E	TL-SG108PE	TL-SG108E	TL-SG105E	
Produc	t Description	24-Port Gigabit Easy Smart Switch	16-Port Gigabit Easy Smart PoE+ Switch with 2 SFP Slots	16-Port Gigabit Easy Smart Switch with 8-Port PoE+	16-Port Gigabit Easy Smart Switch	16-Port Gigabit Easy Smart Switch	8-Port Gigabit Easy Smart Switch with 4-Port PoE	8-Port Gigabit Easy Smart Switch	5-Port Gigabit Easy Smart Switch	
	Gigabit RJ45 Ports	24	16, All ports support PoE+	16, Port 1~8 support PoE+	16	16	8, Port 1~4 support PoE	8	5	
	Standards			IEEE	E 802.3i, 802.3u, 802.3i	ab, 802.3x, 802.1q, 80	2.1p			
	Flow Control				•	•				
	Power Supply		100-240VA	C, 50/60Hz		External Power Adapter (Output: 12VDC / 1A)	External Power Adapter (Output: 48VDC / 1.25A)	External Po (Output: 9\	wer Adapter /DC / 0.6A)	
Hardware	PoE Power Budget	-	192W	110W			55W			
naruware	PoE Standard	-	802.3af/at	802.3af/at			802.3af			
	Fanless	•		-			•			
	Certifications				CE,	FCC				
	Dimensions (W × D × H)	11.6 × 7.1 × 1.7 in. (294 × 180 × 44 mm)	17.3 × 7.1 × 1.7 in. (440 × 180 × 44 mm)	11.6 × 7.1 × 1.7 in. (294 × 180 × 44 mm)	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)	6.2 × 4.0 × 1.0 in. (158 × 101 × 25 mm)	3.9 × 3.9 × 1.0 in. (100 × 98 × 25 mm)	
	Environment		Operating Temperature: 0°C~40°C (32°F~104°F); Storage Temperature: ~40°C~70°C (-40°F~158°F) Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing							
	Switching Capacity	48Gbps	36Gbps 32Gbps			16Gbps		10Gbps		
Performance	Forwarding Rate	35.7Mpps	26.78Mpps	23.8Mpps			11.91	Mbps	7.4Mpps	
renormance	MAC Address Table		8K 4K 2						2K	
	Jumbo Frame			10KB				16KB		
	IGMP Snooping		v1/v2/v3							
	Link Aggregation (Static LAG)		•							
	Port Mirroring				•	•				
Software	Cable Test				•	•				
Features	Loop Prevention				•	•				
	VLAN				MTU/Port/80	02.1Q VLAN				
	QoS				4 Queues/Port	/802.1p/DSCP				
	Rate Limit				•	•				

Stream Unmanaged Switches



Highlights

TP-Link's Gigabit Unmanaged Switches can improve the speed of your network and backbone connection. They are simple plug and play products, with high performance ports provided that allow for simple and effective expansion of small and medium business networks, making work more efficient.

Gigabit Unmanaged Rackmount Switches

- Gigabit Ethernet connections on all ports provide full speed of data transferring
- Green Ethernet technology saves power consumption
- IEEE 802.3x flow control provides reliable data transfer
- Support 802.1p/DSCP QoS function
- Plug and play design, with no configuration required



TL-SG1016/TL-SG1024/TL-SG1048 16/24/48-Port Gigabit Rackmount Switch



TL-SG1008/TL-SG1016D/TL-SG1024D 8/16/24-Port Gigabit Desktop/Rackmount Switch

Product Picture		± managem	* BHH		*********	1011111			
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	16K			ВК		4K			
Switching Capacity	96Gbps	48Gbps	32Gbps	48Gbps	32Gbps	16Gbps			
Forwarding Rate	71.4Mpps	35.7Mpps	23.8Mpps	35.7Mpps	23.8Mpps	11.9Mpps			
Jumbo Frame	12KB 10KB 16KB								
Fanless		•							
Green Technology		•							
Auto-Negotiation /Auto MDI/MDIX		•							
802.3X Flow Control & Back Pressure				•					
QoS	-			802.1p/DSCP					
IGMP Snooping			-			•			
Transfer Method			Store an	d Forward					
Power Supply		100-240VAC, 50/60Hz							
Certifications			CE,	FCC					
Dimensions (W × D × H)	17.3 x 8.7 x 1.7 in. (440 x 220 x 44 mm)								
Environment		Operating Temperature: 0°C~40°C (32°F~104°F); Storage Temperature: -40°C~70°C (-40°F~158°F) Operating Humidity: 10%-90% non-condensing; Storage Humidity: 5%-90% non-condensing							

Switches

Stream Unmanaged Switches



Highlights

TP-Link's Fast Ethernet Unmanaged Switches are simple plug and play products, with no software configuration required. They are designed to meet the needs of different network connections, making work more efficient. At the same time, the updated products in this series feature green technology that can significantly reduce power consumption, effectively reducing network maintenance costs while protecting the environment.

Fast Ethernet Unmanaged Rackmount Switches

- Fast Ethernet connections for high speed data transferring
- IEEE 802.3x flow control provides reliable data transfer
- Steel housing, for rack-mounting design
- Auto MDI/MDIX eliminates the need for crossover cables
- Plug and play design, with no configuration required



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



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

Product Picture		The second secon	** [:::1::::]		2- (4554 4854)			
Model	TL-SF1048	TL-SF1024	TL-SF1016	TL-SF1024D	TL-SF1016DS			
Product Description	48-Port 10/100Mbps Rackmount Switch	24-Port 10/100Mbps Rackmount Switch	16-Port 10/100Mbps Rackmount Switch	24-Port 10/100Mbps Desktop/Rackmount Switch	16-Port 10/100Mbps Desktop/Rackmount Switch			
10/100Mbps RJ45 Ports	48	24	16	24	16			
MAC Address Table	16K		8	K				
Switching Capacity	9.6Gbps	4.8Gbps	3.2Gbps	4.8Gbps	3.2Gbps			
Forwarding Rate	7.14Mpps	3.57Mpps	2.38Mpps	3.57Mpps	2.38Mpps			
Jumbo Frame	10KB 2KB							
Fanless	•							
Green Technology			•					
Auto Negotiation / Auto MDI / MDIX			•					
Flow Control & Back Pressure			•					
Transfer Method			Store and Forward					
Power Supply			100-240VAC, 50/60Hz					
Certifications			CE, FCC					
Dimensions (W × D × H)	17.3 × 7.1 × 1.7 in. (440 × 180 × 44 mm) 11.6 × 7.1 × 1.7 in. (294 × 180 × 44 mm)							
Environment	Operating Temperature: 0°C~40°C (32°F~104°F); Storage Temperature: ~40°C~70°C (-40°F~158°F) Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing							

Stream Unmanaged Switches



Highlights

TP-Link's Unmanaged Desktop Switches are simple plug & play products, providing an easy way to expand your wired network. Gigabit ports effortlessly speed up your wired connections, while steel housing and a compact design ensure flexible placement. Moreover, with TP-Link green technology, Desktop Switches can effectively reduce power consumption, making them an eco-friendly solution for your home or office network.

Unmanaged Desktop Switches

Brings Connectivity and Flexibility to Your Desktop

- Green Ethernet technology saves power consumption
- IEEE 802.3x flow control provides reliable
 data transfer
- Compact form and desktop/wall-mounting design, to meet your needs in any circumstance
- Auto MDI/MDIX eliminates the need for crossover cables
- Plug and play design, with no configuration required









TL-SG105/SG1005D/TL-SG108/TL-SG1008D/TL-SG116 5/8/16-Port Gigabit Desktop Switch

TL-SF1005D/TL-SF1008D/TL-SF1016D/TL-SF1024M 5/8/16/24-Port 10/100Mbps Desktop Switch

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 10/100Mbps Desktop Switch					
Gigabit RJ45 Ports	5/8/16	5/8	-					
10/100Mbps RJ45 Ports	-	-	5/8/16/24					
MAC Address Table	2K/4K/8K	2K/4K	2K/2K/2K/8K					
Switching Capacity	10/16/32Gbps	10Gbps/16Gbps	1.0Gbps/1.6Gbps/3.2Gbps/4.8Gbps					
Forwarding Rate	7.4Mpps/11.9Mpps/23.8MPPS 7.4Mpps/11.9Mpps		0.74Mpps/1.19Mpps/2.38Mpps/3.57Mpps					
Jumbo Frame	16KB/16KB/10KB	16KB	2KB					
Fanless	•							
Green Technology	•							
Auto Negotiation / Auto MDI/MDIX	•							
Flow Control & Back Pressure		•						
QoS	802.1p	n/DSCP	-					
IGMP Snooping	•		-					
Transfer Method		Store and Forward						
Power Supply	External Power Adapter (TL-SG105: 5VDC / 0.6A & TL-SG108: 9VDC / 0.6A TL-SG116: 12VDC / 1A)	External Power Adapter (TL-SG1005D: 5VDC / 0.6A TL-SG1008D: 9VDC / 0.6A)	External Power Adapter (TL-SF1005D & TL-SF1008D: 5VDC / 0.6A TL-SF1016D & TL-SF1024M: 9VDC / 0.6A)					
Certifications		CE, FCC						
Housing	Steel Shell	Plasti	c Shell					
Dimensions (W × D × H)	TL-SG116: 11.3 x4.4 x 1.0 in. (296 x 112 x 25 mm) TL-SG108: 6.2 x 4.0 x 1.0 in. (158 x 101 x 25 mm) TL-SG105: 3.9 x 3.9 x 1.0 in. (100 x 98 x 25 mm)	TL-SG1008D: 7.1 x 3.5 x 1.0 in. (180 x 90 x 25.5 mm) TL-SG1005D: 5.5 x 3.5 x 0.9 in. (140 x 88 x 23 mm)	TL-SF1005D: 4.1 x 2.8 x 0.9 in. (103 x 70 x 22 mm) TL-SF1008D: 5.3 x 3.1 x 0.9 in. (135 x 79 x 23 mm) TL-SF1016D: 7.9 x 5.6 x 1.6 in. (201 x 143 x 41 mm) TL-SF1024M: 8.7 x 5.0 x 1.7 in. (222 x 126 x 42 mm)					
Environment	Operating Temperature: 0°C~40°C (32°F~104°F); Storage Temperature: -40°C~70°C (-40°F~158°F); Operating Humidity: 10%-90% non-condensing; Storage Humidity: 5%-90% non-condensing							

LiteWallana Unmanaged Switches

Let LiteWave Bring You Lighter Network Life



LiteWave Unmanaged Switches



LiteWave Unmanaged Switches

The Simplest and Most Affordable Way to Expand Your Wired Network

Highlights

The TP-Link LiteWave Series Unmanaged Switches provide easy and affordable way to expand your wired network. They are easy to use and reliable. With these plug-and-play switches, you can expand your network connections to multiple devices instantly. With all ports support Auto-MDI/MDIX, there's no need to worry about the type of cable to use.

- Green Ethernet technology saves power consumption
- IEEE 802.3X flow control provides reliable data transfer
- Compact form and desktop/wall-mounting design, to meet your needs in any circumstance
- Support 802.1p/DSCP QoS function
- Plug and play, no configuration needed
- Fanless design ensures quiet operations















Product Picture

Product Description

Gigabit RJ45 Ports

10/100Mbps RJ45 Ports

MAC Address Table

Switching Capacity

Forwarding Rate

Jumbo Frame

Fanless

Green Technology

Auto Negotiation / Auto MDI/MDIX

Flow Control & Back Pressure

QoS

IGMP Snooping

Power Supply

Certifications

Housing

Dimensions (W × D × H)

Environment

LS108G

16 Gbps

11.9 Mpps

5/8-Port Gigabit Desktop Switch

802.1p/DSCP

Steel Shell

10 Gbps

LS1008G

16 Gbps

11.9 Mpps

5/8-Port Gigabit Desktop Switch

7.4 Mpps

LS1008

1.6 Gbps

1.2 Mpps

5/8-Port 10/100Mbps Desktop Switch

1.0 Gbps

0.7 Mpps

Plastic Shell

5.0×2.6×0.9 in. (127×66.5×23 mm)

Operating Temperature: 0°C~40°C (32°F~104°F); Storage Temperature: -40°C~70°C (-40°F~158°F); Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing

Plug and Play

Gigabit Ethernet*

Durable Steel Casing*

Compact Desktop Design Traffic Prioritization*

Green Tech



LS108G

8-Port 10/100/1000Mbps Desktop Switch



LS105G

5-Port 10/100/1000Mbps Desktop Switch



LS1008G

8-Port 10/100/1000Mbps Desktop Switch



LS1005G

5-Port 10/100/1000Mbps Desktop Switch



LS1008**

8-Port 10/100Mbps Desktop Switch



LS1005**

5-Port 10/100Mbps Desktop Switch

se features vary in different models, please check the details in the next pages.

^{**}LS1008 and LS1005 are being developed and scheduled to be released in Q3, 2019, and the pictures are design sketches for reference only.

Power over Ethernet

TP-Link's Power over Ethernet (PoE) Switches can automatically detect and supply power to IEEE 802.3at/af compliant Powered Devices (PDs). In this setup, electrical power is transmitted along with data in a single cable.



Power over Ethernet

Managed PoE Switches



Highlights

TP-Link's Power over Ethernet (PoE) Switches can automatically detect and supply power to IEEE 802.3at/af compliant Powered Devices (PDs). In this setup, electrical power is transmitted along with data in a single cable. Users can expand their network in places where there are no power sockets available, to fixed devices such as APs, IP cameras or IP phones.

Managed PoE Switches

Stream 24-Port Gigabit L2+ Managed PoE+ Switch with 4 SFP Slots T2600G-28MPS (TL-SG3424P)

- 24 Gigabit RJ45 (all support 802.3at/af PoE+), 4 Gigabit SFP, 1 RJ45 Console port and 1-Micro USB Console port
- Switching capacity: 56Gbps
- Forwarding rate: 41.7Mpps
- 384W PoE Power Budget
- 16K MAC Address table and 9KB Jumbo Frame
- 19-inch rack-mountable steel case



T2600G-28MPS (TL-SG3424P)

JetStream 24-port Gigabit L2+ Managed PoE+ Switch with 4 SFP Slots

24 Gigabit RJ45 (all support 802.3at/af PoE+), 4 Gigabit SFP, 384W PoE Power Budget, 19-inch Rackmount



T1600G-28PS

JetStream 24-Port Gigabit Smart PoE+ Switch with 4 SFP Slots

24 Gigabit RJ45 (all support 802.3at/af PoE+), 4 Gigabit SFP, 192W PoE Power Budget, 19-inch rackmount



T1500G-10PS (TL-SG2210P)

JetStream 8-Port Gigabit Smart PoE Switch with 2 SFP Slots

8 Gigabit RJ45 (all support 802.3af PoE), 2 Gigabit SFP, 53W PoE Power Budget, desktop design



T1600G-52PS (TL-SG2452P)

JetStream 48-Port Gigabit Smart PoE+ Switch with 4 SFP Slots

48 Gigabit RJ45 (all support 802.3at/af PoE+), 4 Gigabit SFP, 384W PoE Power Budget, 19-inch rackmount



JetStream 8-Port Gigabit Smart PoE+ Switch with 2 SFP Slots

8 Gigabit RJ45 (all support 802.3at/af PoE+), 2 Gigabit SFP, 116W PoE Power Budget, 13-inch desktop/rackmount



T1500-28PCT (TL-SL2428P)

JetStream 24-Port 10/100Mbps + 4-Port Gigabit Smart PoE+Switch

24 10/100Mbps RJ45 (all support 802.3at/af PoE+), 4 Gigabit RJ45, 2 Combo Gigabit SFP, 192W PoE Power Budget, 19-inch rackmount

Proc	duct Picture											
	Model	T2600G-28MPS (TL-SG3424P) V4	T1600G-52PS (TL-SG2452P) V4	T1600G-28PS V3	T1500G-10MPS V2	T1500G-10PS (TL-SG2210P) V2	T1500-28PCT (TL-SL2428P) V3					
Produc					JetStream 8-Port Gigabit Smart PoE+	JetStream 8-Port Gigabit Smart PoE Switch with 2 SFP Slots	JetStream 24-Port 10/100Mbps + 4-Port Gigabit Smart PoE+ Switch					
	10/100Mbps RJ45 Ports			-			24, all support PoE+					
	Gigabit RJ45 Ports	24, all support PoE+	48, all support PoE+	24, all support PoE+	8, all support PoE+	8, all support PoE	4					
	Gigabit SFP Ports		4	1	:	2	2 (Combo)					
	Console Port	1 (RJ45), 1 (Micro-USB)			-							
	Standards		IEEE 802.3i, 802.3u, 802.3ab, 802.3ad, 802.3x, 802.1Q, 802.1p, 802.1d, 802.1w, 802.1s, 802.1x, 802.3at*, 802.3af									
	Flow Control		•									
Hardware	Power Supply		100-240V	AC, 50/60Hz		48VDC/1.25A External Adapter	100-240VAC, 50/60Hz					
	PoE Power Budget	384W	384W	192W	116W	53W	192W					
	PoE Standard		802.	3af/at		802.3af	802.3af/at					
	Fanless	2 Fans	3 Fans	2 Fans	1 Fan	•	2 Fans					
	Certifications			CE	FCC							
	Dimensions (W × D × H)	17.3 x 13 x 1.7 in. (440 x 330 x 44 mm)	17.3 × 13 × 1.7 in. (440 × 330 × 44 mm)	17.3 × 8.7 × 1.7 in. (440 × 220 × 44 mm)	11.6 × 7.1 × 1.7in. (294 × 180 × 44mm)	8.2 × 4.9 × 1.0 in. (209 × 126 × 26 mm)	17.3 × 8.7 × 1.7 in. (440 × 180 × 44 mm)					
	Environment		Operating Temperat Operating Humidi	ure: 0°C ~40°C (32°F~104°F); ity: 10%~90% non-condensin	Storage Temperature: -40°C / ng; Storage Humidity: 5%~90%	~70°C (-40°F~158°F); 6 non-condensing						
	Switch Capacity	56Gbps	104Gbps	56Gbps	200	Bbps	12.8Gbps					
	Forwarding Rate	Forwarding Rate 41.7Mpps 77.4Mpps 41.7Mpps 1.					9.5Mpps					
Performance	MAC Address Table	16K 16K 8K										
	Jumbo Frame			9	KB							
	IGMP Snooping			V1/\	/2/V3							
	STP/RSTP/MSTP				•							
	Loopback Detection				•							
	QinQ				•							
	VLAN	802.1Q/MAC/Protocol/Private**/Voice VLAN										
L2 Features	QoS	8 Queues, Port/802.1p/IP DSCP QoS										
LZ i catarco	Rate Limit	• •										
	Port Isolation	•										
	Port Mirroring	◆ Static LAG, LACP										
	Link Aggregation											
	DHCP Snooping				•							
	Access Control List				•							
	IP+MAC+PORT+VID Binding				•							
	Storm Control				•							
Security	Port Security				•							
	SSH & SSL				•							
	DoS Defend				•							
	Dynamic ARP Inspection				•							
	SNMP			V1/V	2c/V3							
	RMON				1, 2, 3, 9							
	Command Line Interface											
	(CLI)			Tel	Inet							
	Dual Image				•							
	sFlow	•			-							
System Management	Ethernet OAM	•			-							
	LLDP/LLDP-MED				•							
	IPv6				•							
	Firmware Upgrade				•							
	System Diagnose			VCT/Looback Detection/	CPU Monitor/Ping/Tracert							
	Web Interface/SYS LOG/				•							
* T1500G-10PS only	MIBS supports 802.3af.											

^{*}T1500G-10PS only supports 802.3af.

Power over Ethernet

Unmanaged / Easy Smart PoE Switches



Highlights

TP-Link's Power over Ethernet (PoE) Switches can automatically detect and supply power to IEEE 802.3at/af compliant Powered Devices (PDs). In this setup, electrical power is transmitted along with data in a single cable. Users can expand their network in places where there are no power sockets available, to fixed devices such as APs, IP cameras or IP phones.

Unmanaged / Easy Smart PoE Switches

16-Port Gigabit Easy Smart Switch with 8-Port PoE+ TL-SG1016PE

- 16 Gigabit RJ45 ports (Port 1~Port 8 support 802.3at/af)
- Switching capacity: 32Gbps
- Forwarding rate: 23.8Mpps
- About 110W PoE Power Budget
- 8K MAC Address Table and 10KB Jumbo Frame
- 13-inch desktop/rack-mountable steel case



TL-SG1218MPE

16-Port Gigabit Easy Smart PoE+ Switch with 2 SFP Slots

16 10/100/1000Mbps RJ45 (All support 802.3at/af PoE+), 192W PoE Power Budget, 19-inch rackmount



TL-SG108PE

8-Port Gigabit Easy Smart Switch with 4-Port PoE

8 Gigabit RJ45 (Port 1~Port 4 support 802.3af PoE), 55W PoE Power Budget, desktop design





TL-SG1005P / TL-SG1008P

5/8-Port Gigabit Desktop Switch with 4-Port PoE

5/8 Gigabit RJ45 (Port 1~Port 4 support 802.3af PoE), 56W/55W PoE Power Budget, desktop design



TL-SL1218MP

16-Port 10/100Mbps + 2-Port Gigabit Unmanaged PoE+ Switch

16 10/100Mbps RJ45 (All support 802.3at/af PoE+), 2 Gigabit RJ45, 192W PoE Power Budget, 19-inch rackmount, extend mode*



TL-SF1005P

5-Port 10/100Mbps Desktop Switch with 4-Port PoE

5 10/100Mbps RJ45 (Port 1~Port 4 support 802.3af PoE), 58W PoE Power Budget, desktop design



TL-SG1016PE

16-Port Gigabit Easy Smart Switch with 8-Port PoE+

16 Gigabit RJ45 (Port 1~Port 8 support 802.3at/af PoE+), 110W PoE Power Budget, 13-inch desktop/rackmount



TL-SG1008MP

8-Port Gigabit Desktop/Rackmount Switch with 8-Port PoE+

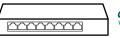
8 Gigabit RJ45 (All support 802.3at/af PoE+), 126W PoE Power Budget, 13-inch desktop/rackmount



TL-SL1226P*

24-Port 10/100Mbps + 2-Port Gigabit Unmanaged PoE+ Switch

24 10/100Mbps RJ45(All support 802.3at/af PoE+), 192W PoE Power Budget, 19-inch rackmount, extend mode*



TL-SF1009P*

9-Port 10/100Mbps Desktop Switch with 8-Port PoE+

9 10/100Mbps RJ45 (Port 1~Port 8 support 802.3af/at PoE+), 67W (TBD) PoE Power Budget, desktop design, extend mode*



TL-SF1008P

8-Port 10/100Mbps Desktop Switch with 4-Port PoE

8 10/100Mbps RJ45 (Port 1~Port 4 support 802.3af PoE), 57W PoE Power Budget, desktop design

Model													
Product Discognition Service S	Product F	Picture			***************************************			****		· Indiana		*********	****
Product Description	Mode	el	TL- SG1218MPE	TL-SG1016PE	TL-SG108PE	TL-SG1008MP	TL-SG1008P	TL-SG1005P	TL-SL1226P	TL-SL1218MP	TL-SF1009P	TL-SF1008P	TL-SF1005P
Ruf Part	Product Description Easy Smart Easy Smart Easy Smart Switch with 2 SPP Switch with 2 SPP Switch with 2 SPP SPP SPP SPP SPP SPP SPP SPP SPP S		Easy Smart Switch with	Desktop/ Rackmount Switch with	Desktop Switch	Desktop Switch	10/100Mbps + 2-Port Gigabit Unmanaged	10/100Mbps + 2-Port Gigabit Unmanaged	10/100Mbps Desktop Switch	10/100Mbps Desktop Switch	10/100Mbps Desktop Switch		
Contraction						-				16 (all ports support PoE+)			
Standards									2 (combo)	2 (combo)		-	
Flave Centrol Flow Centrol Flo		Gigabit SFP Slot	2			-			2 (combo)	2 (combo)		-	
Positionary		Standards			802.3u, 802.3ab,	802.3u, 802.3ab, 802.3x, 802.3at,					802.3u, 802.3x, 802.3at,		
Pack Process Pack Process 1927W 1107W 150W 15		Flow Control						•					
Fartless 2 Fairs 1 Fair 1 Fair	Hardware		192W	110W	55W	126W	55W	56W	192W (TBD)	192W	67W (TBD)	57W	58W
Certifications Cert		PoE Standard	802.3	802.3af/at 802.3af		802.3af/at	802.3af	802.3af	802.3af/at		802.3af		.3af
Dimensions 17.3 × 7.1 × 17 18-7.7 × 17 × 10 128-7.1 × 17 18-7.7 × 17 × 10 128-7.1 × 17 18-7.7 × 17 × 10 128-7.1 × 17 18-7.7 × 17 × 10 128-7.1 × 17 18-7.7 × 17 × 10 128-7.1 × 17 128-7.7 × 17 × 17 × 10 100-98-25 140 × 180 × 44 128-101 × 20 128-101 × 20 128-101 × 20 100-98-25 140 × 180 × 44 128-101 × 20 128-1		Fanless	2 Fans	1 Fan	•	1 Fan		•	- (TBD)	2 Fans		•	
Dimensions 10 Act Color Colo		Certifications				ı	I	CE, FCC	I		I		
Performance Switch Capacity 36 Gbps 32 Gbps 16 Gbps 10 Gbps 8.8 Gbps 7.2 Gbps 1.8 Gbps 1.6 Gbps 1 Gbps 6.55 Mpps 5.36 Mpps 1.2 Mpps 0.7 Mpps 7.4 Mpps 6.55 Mpps 5.36 Mpps 1.2 Mpps 0.7 Mpps 7.4 Mpps 6.55 Mpps 5.36 Mpps 1.2 Mpps 0.7 Mpps 7.4 Mpps 6.55 Mpps 5.36 Mpps 1.2 Mpps 0.7 Mpps 7.4 Mpps 6.55 Mpps 5.36 Mpps 1.2 Mpps 0.7 Mpps 7.4 Mpps 7.4 Mpps 6.55 Mpps 5.36 Mpps 1.2 Mpps 0.7 Mpps 7.4 Mpps 7.4 Mpps 6.55 Mpps 5.36 Mpps 1.2 Mpps 0.7 Mpps 7.4 Mpps 1.2 Mpps			in. (440 × 180 × 44	(294×180×44	(158×101×25	(294×180×44	(171×98×27	(100×98×25	in. (440 × 180 × 44	(440×180×44	-	(171×98×27	(100×98×25
Capacity 36 90 pt 32 90 pt 32 90 pt 16 90 pt		Environment											
Performance Rate 26.5 mp.ps 25.6 mp.ps 25.6 mp.ps 11.5 mp.ps 12.5 mp.ps 1.5 mp.ps 1.			36 Gbps	32 Gbps		16 Gbps		10 Gbps	8.8 Gbps	7.2 Gbps	1.8 Gbps	1.6 Gbps	1 Gbps
MAC Address 10KB		Forwarding Rate	26.8 Mpps	23.8 Mpps		11.9 Mpps		7.4 Mpps	6.55 Mpps	5.36 Mpps	1.34 Mpps	1.2 Mpps	0.7 Mpps
IGMP Snooping	Performance		8	K		4K		2K	8K	8K		2K	
Link Aggregation (Static LAG)		Jumbo Frame	10	KB		16	SKB		10KB	10KB		2KB	
Aggregation (Static LAG)		IGMP Snooping			v1/v	/2/v3							
Cable Test		Aggregation		•			-						
Loop Prevention -		Port Mirroring		•			-						
Prevention		Cable Test		•			-						
VLAN				•			-				_		
Rate Limit Strom Control Firmware	Features	VLAN	МТ	U/Port/802.1Q VI	_AN		-						
Strom Control -		QoS	4 Que	ues, Port/802.1p.	/DSCP		802.1p/DSCP						
Firmware		Rate Limit		•			-						
		Strom Control		•			-						
				•			-						

^{**}Extend mode supports up to 250 meters' PoE power supply for surveillance cameras. Speeds of the ports under extend mode will be downgraded to 10 Mbps. Actual transmission distance may vary according to the quality of cables.

Power over Ethernet PoE Adapters



Highlights

TP-Link's Power over Ethernet (PoE) Adapters can help deliver your power and data through one Ethernet cable, allowing you to expand your network to those places where there are no power lines or outlets. Among TP-Link's family of PoE Adapters, TL-POE150S and TL-POE10R support 802.3af standard, making them highly compatible with all 802.3af compliant devices.

PoE Adapter

PoE Adapter for Simple Energy Supply

PoE Injector TL-POE150S

- Support IEEE 802.3af standard
- Support Gigabit speed
- Auto MDI/MDIX, Auto Negotiation
- LED indicator for PWR, Link/Act
- Desktop design for ultra convenience and flexibility
- Plug and play, no software configuration required

TL-POE10R PoE Splitter

• 802.3af compliant

• Selectable power output

Gigabit speed support



TL-POE150S PoE Injector

- 802.3af compliant
- Gigabit speed support
- Plug-and-Play



TL-POE200

- Carries power & data over a single Ethernet cable up to 100 meters
- Selectable power output
- Plug-and-Play



- PoE Adapter • Passive PoE
- Gigabit speed support
- Plug-and-Play

TL-POE2412G



Product Picture

TL-POE4824G PoE Adapter

- Passive PoE
- Gigabit network ports
- Plug-and-Play



		_					
Model	TL-POE150S	TL-POE10R	TL-POE200	TL-POE2412G	TL-POE4824G		
Product Description	PoE Injector	PoE Splitter	PoE Kit (PoE Injector + PoE Splitter)	PoE Adapter	PoE Adapter		
RJ45 Ports		45 LAN port 145 PoE port	1 10/100Mbps RJ45 LAN port 1 10/100Mbps RJ45 PoE port	1 Gigabit RJ45 LAN port 1 Gigabit RJ45 PoE port	1 Gigabit RJ45 LAN Port 1 Gigabit RJ45 PoE Port		
Standards		, IEEE802.3ab, 802.3af; D, TCP/IP	IEEE802.3, IEEE802.3u; CSMA/CD, TCP/IP	IEEE802.3, IEEE802.3u			
Power	Input: 48VDC, 0.5A	Output: 5/9/12VDC	Input: 100-240VAC Output: 12/9/5VDC	Input: 100-240V 0.4A Output: 24V 0.5A	Input:100-240V 0.8A Output: 48V 0.5A		
Certifications			CE, FCC				
Dimensions (W × D x H)	3.2	2 x 2.1 x 0.9 in. (80.8 x 54 x 24 r	3.4 x 1.7 x 1.4 in. (85.8 x 43.9 x 35 mm)	4.3 × 2.3 × 1.5 in. (110×57×38.8 mm)			
Enviroment	Operating Temperature: 0°C~40°C (32°F~104°F); Storage Temperature: -40°C~70°C (-40°F~158°F); Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing						

Switches

Accessories

10 Gigabit SFP+ Module and SFP+ Cable

Product Picture	Egal Egal	\bigcirc	Ó			
Model	TX432	TXC432-CU1M	TXC432-CU3M			
Product Description	10-Gigabit 2-Port SFP+ Module	1M Direct Attach SFP+ Cable	3M Direct Attach SFP+ Cable			
Standard	IEEE 802.3ae, IEEE 802.3aq, SFF-8431	-				
Dimensions/Length	5.2 x 3.6 x 1.2 in. (131 x 92 x 31mm)	1m	3m			
Max Power Consumption	6.57W with Fiber		-			
Certifications		CE, FCC				
Data Rate	- 10Gbps					
Environment		erature: 0°C~40°C (32°F~104°F); Storage Temperature: -40°C~70 nidity: 10%~90% non-condensing; Storage Humidity: 5%~90% n				

SFP Modules

Product Picture			150					
Model	TL-SM311LM	TL-SM311LS	TL-SM321A	TL-SM321B	TXM431-SR	TXM431-LR		
Product Description	Multi-mode SFP Module	Single-mode SFP Module	1000Base-BX WDM Bi-Directional SFP module	1000Base-BX WDM Bi-Directional SFP module	10GBase-SR SFP+ LC Transceiver	10GBase-LR SFP+ LC Transceiver		
Cable	Multi-mode Fiber		Single-mode Fiber		Multi-mode Fiber	Single-mode Fiber Fiber		
Fiber Type	50/125μm or 62.5/ 125μm Multi-mode		9/125 µm Single-mode		50/125μm or 62.5/ 125μm Multi-mode	9/125 µm Single-mode		
MAX. Cable Length	550m		10km		300m	10km		
Standard		IEEE 802.3z IEEE 802.3ae, SFF-8431, SFF-8472						
Data Rate		1.25	Gbps		100	Sbps		
Port Type		LC/	UPC		LC/	UPC		
Wave Length	850nm	1310nm	TX: 1550nm RX: 1310nm	TX: 1310nm RX: 1550nm	850nm	1310nm		
Power Supply	3.3V							
Certifications	CE, FCC							
Environment				Storage Temperature: -40°C~70° ng; Storage Humidity: 5%~90% no				

Media Converters

Product Picture									
Model	MC200CM	MC210CS	MC220L	MC100CM	MC110CS	MC111CS	MC112CS		
Product Description	Gigabit Ethernet Media Converter	Gigabit Ethernet Media Converter	Gigabit Ethernet Media Converter	Fast Ethernet Media Converter	Fast Ethernet Media Converter	WDM Fast Ethernet Media Converter	WDM Fast Ethernet Media Converter		
Interface	1 Gigabi	t SC Port	1 SFP Port	1 100Mbps SC Port					
interrace	1 10/100/1000Mbps RJ45 Port (Auto MDI/MDIX)			1 10/100Mbps RJ45 Port (Auto MDI/MDIX)					
Standards	IEEE	802.3i, 802.3u, 802.3ab, 80)2.3z		IEEE 802	.3i, 802.3u			
Transmission Media	Multi-mode Fiber, Cat-5	Single-mode Fiber, Cat-5	Multi/Single-mode Fiber, Cat-5	Multi-mode Fiber, Cat-5		Single-mode Fiber, Cat-5			
Wave Length	850nm	1310nm	Depends on the SFP Modules used	1310nm	1310nm	TX:1550nm RX:1310nm	TX:1310nm RX:1550nm		
Transmission Distance	0.55km	15km	0.55km /10km	2km		20km			
Certifications				FCC, CE					
Dimensions (W × D × H)	3.7 × 2.9 × 1.1 in. (94.5 × 73.0 × 27.0 mm)								
Enviroment			ing Temperature: 0°C~40°C ating Humidity: 10%~90% n						

Redundant Power Supply

Product Picture								
Model	PSM150-AC							
Product Description	150W AC Power Supply Module Maximum Power Output 150W							
AC Power Input	100-240V~ 50/60Hz 2.5A	LEDs	Power, PS OK, Fault					
DC Power Output	12V/12.5A Dimensions 4.7 x 8.4 x 1.6 in. (120 x 213 x 41.8 mm)							
Environment	Operating Temperature: 0°C~40°C (32°F~104°F); Storage Temperature: -40°C~70°C (-40°F~159°F) Operating Humidity: 10%-90% non-condensing; Storage Humidity: 5%-90% non-condensing							

PIAROS Wireless Broadband

Pharos is TP-Link's latest generation of products designed to provide high performance solutions for outdoor wireless networking applications. Included are CPEs and Base Stations, carrier class antennas, and a centralized management platform, all of which are ideal for point-to-point backhaul and point-to-multipoint outdoor applications.



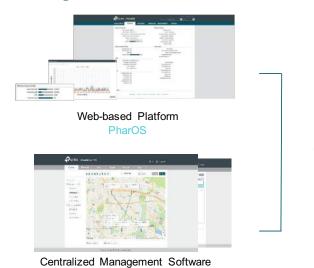
Pharos Wireless Broadband

PIAROS ■ Solution

Pharos Wireless Broadband Solution

Pharos is TP-Link's next-generation outdoor product series, providing long-range outdoor wireless networking solutions for applications such as WISP, Enterprise Bridge (PtP), and Wireless Surveillance (PtMP)

Management



Products



WISP Solution

Pharos Control

This solution allows WISPs to effectively transmit data from a remote service center to local markets and provide connections to customers who live in sparsely populated areas.

WISP Solution



Enterprise Bridge and Wireless Surveillance

Pharos Series devices can provide simple Point-to-Point (PtP) links and extensive Point-to-Multi-Point (PtMP) coverage that's designed to meet each customer's unique demands.

Enterprise Bridge



Pharos Wireless Broadband

PI+AROS≣ Outdoor Radio



Highlights

With 23 dBi high-gain directional Cassegrain antenna and dedicated metal reflector, the CPE710, CPE610, and CPE605 provide excellent beam directivity, improved latency, and noise cancellation. Professional performance, coupled with user-friendly design, makes the CPE an ideal choice and cost effective solution for long-distance outdoor wireless networking applications.

PI+AROS≣ Outdoor Radio

Directional Antenna for Long-distance Wi-Fi Transmission

- Easy assembly and flexible installation
- Wind-resistant construction
- 23dBi directional antenna
- MAXtream TDMA technology improves throughput, capacity and latency performance
- Free Centralized Management System Pharos Control
- PoE support for easy deployment
- IP65 weatherproof enclosure, 15KV ESD and 6KV lightning protection



CPE710*

5GHz 867Mbps 23dBi **Outdoor CPE**



CPE610

5GHz 300Mbps 23dBi Outdoor CPE



CPE605

5GHz 150Mbps 23dBi **Outdoor CPE**

CPE210/CPE220

Outdoor CPE

2.4GHz 300Mbps 9/12dBi



CPE510

5GHz 300Mbps 13dBi Outdoor CPE



WBS510/WBS210

5/2.4GHz 300Mbps Outdoor Wireless Base Station



Pharos MAXtream — **TP-Link's TDMA Technology**

- Eliminates hidden node collisions
- and improves channel efficiency
- Lower latency, higher throughput, larger network capacity & more stability

PharOS — Web-based management platform

- Optimized for outdoor applications with
- high performance
- User-friendly interface Versatile configurations for professionals
- Powerful system tools integrated

Pharos Control — Centralized **Network Management Application**

- Device discovery & monitoring
- Firmware upgrade & management
- Scheduled tasks for operations & maintenance • Event notification via E-mail

 $^{^{\}star}$ CPE710 is being developed and scheduled to be released in Q4, 2019

	Base S	Station			С	PE		
Product Picture						in I	h	. 1
Model	WBS510	WBS210	CPE710	CPE610	CPE605	CPE510	CPE210	CPE220
Description	5GHz 300Mbps Outdoor Wireless Base Station 2.4GHz 300Mbps Outdoor Wireless Base Station		5GHz 867Mbps 23dBi Outdoor CPE	5GHz 300Mbps 23dBi Outdoor CPE	5GHz 150Mbps 23dBi Outdoor CPE	5GHz 300Mbps 13dBi Outdoor CPE	2.4GHz 300Mbps 9dBi Outdoor CPE	2.4GHz 300Mbps 12dBi Outdoor CPE
Memory Information		64MB DDR2, 8MB Flash						
Compatibility	802.11a/n	802.11 b/g/n		802.1	1 a/n		802.11 b/g/n	802.11 b/g/n
Frequency	5.15~5.85GHz	2.4~2.483GHz		5.15~5	.85GHz		2.4~2.4	183GHz
Maximum Date Rate	300 M	Mbps	867 Mbps	300 Mbps	150 Mbps		300 Mbps	
Antenna	-	-		23dBi		13dBi	9dBi	12dBi
External Antenna Interface	2 RP-SMA connectors for MIMO antenna					-		
Transmission Power	27dBm		TBD	25dBm	23dBm	25dBm	25dBm	30dBm
Weatherproof Enclosure			IP65				IPX5	
ESD Protection				15	KV			
Lightning Protection				6h	(V			
MIMO			•		-		•	
Ethernet Ports	2× 10/10	00 Mbps	1× 10/100/1000 Mbps	1× 10/100/1000 Mbps 1× 10/100 Mbps				2× 10/100 Mbps
Grounding Protection Terminal		•		-			•	
Power Supply Method				24V Passive	PoE Adapter			
Operation Modes			AP / Clie	ent / Bridge / Repeater/ AF	PRouter / AP Client Route	er (WISP)		
Advanced Functions	MAXtream TDMA Technology (Time Division Multiple Access)							
Remote Management	Central Network Management Applications; Web-based GUI management; SNMP V2c							
Utilities	Spectrum Analyzer; Wireless Statistics; Antenna Adjustment; Distance Adjustment; Ping Watch Dog; Throughput Monitor, Wireless Speed Monitor							
Certifications	CE, FCC, RoHS, IP65 CE, FCC, RoHS, IP65				CE, FCC, RoHS, IPX5			
Dimensions (W × D × H)	7.8 × 3.0 × 1.6 in. (198 × 75 × 40 mm)		1 × 8.1 in. × 207 mm)	13.8 × 9.8 × 8.1 in. (350 × 255 × 207 mm)	8.8 × 3.1 × 2.4 in. (2:	24.3 × 79 × 60.3 mm)	10.9 × 3.1 × 2.4 in. (275.8 × 79 × 60.4 mm)
Environment		(Operating Temperature: Operating Humidity: 10	40°C~70°C (-40°F~158°F) 0%~90% non-condensin	I, Storage Temperature: - g, Storage Humidity: 5%	40°C~70°C (-40°F~158°F ~90% non-condensing	Ξ),	

51 Business Networking Product Guide

SafeStream Router

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 SafeStream VPN Routers provide an ideal VPN solution to protect your network against attacks and unauthorized access.



SafeStream VPN Routers



Highlights

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 SafeStream VPN Routers provide an ideal VPN solution to protect your network against attacks and unauthorized access. Among them, TL-ER6120 and TL-ER6020 are the ideal choices for small and medium-sized businesses, hotels and other communities with a high volume of users demanding an efficient and highly secure VPN network.

SafeStream Gigabit **VPN Routers**

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

- Supports multiple VPN protocols including IPsec/PPTP/L2TP, helping users to establish VPN connections more flexibly
- Supports IPsec VPN tunnels with a hardware-based VPN engine
- Captive portal provides a convenient method for guest authentication
- Abundant features including load balance, bandwidth control and access control
- Professional 4KV lightning protection keeps your investments as safe as possible



TL-ER6120 SafeStream Gigabit Multi-WAN VPN Router

Rackmount, 1 Gigabit WAN Port, 3 Gigabit WAN/LAN Ports, 1 Gigabit LAN Port



TL-ER6020

SafeStream Gigabit Multi-WAN VPN Router

Rackmount, 1 Gigabit WAN Port, 3 Gigabit WAN/LAN Ports, 1 Gigabit LAN Port



TL-R600VPN

SafeStream Gigabit Multi-WAN VPN Router

Desktop, 1 Gigabit WAN Port, 3 Gigabit WAN/LAN Ports, 1 Gigabit LAN Port



Features

VPN Features

- VPN Protocol: IPsec, PPTP, L2TP, L2TP over IPsec • DES, 3DES, AES128, AES192,
- AES256 Encryption • MD5, SHA1 Authentication

Security

- URL/Keywords Filtering Web Content Filtering (Java, ActiveX, Cookies)
 - IP-MAC Binding
 - DoS/DDoS Defense

Networking

- Static Routing / Policy Routing
- Intelligent Load Balance
- 802.1Q VLAN
- Port VLAN, Port Mirroring
- IPTV
- IPv6 • SNMP V1/V2C

Bandwidth Management

- IP-based Bandwidth Control
- Guarantee/Limited Bandwidth Management
- Port-based Rate Limit
- IP-based Session Limit

	Product Picture								
		1000		MINISTRA ARRAY					
	Model	TL-ER6120	TL-ER6020	TL-R600VPN					
Pı	roduct Description	SafeStream Gigabit Multi-WAN VPN Router	SafeStream Gigabit Multi-WAN VPN Router	SafeStream Gigabit Multi-WAN VPN Router					
	Interface	1 Gig	abit WAN port, 3 Gigabit WAN/LAN ports, 1 Gigabit LA	AN port					
	VPN Encryption Accelerator		•	-					
	Power Supply	100-240VA	AC, 50/60Hz	100-240VAC, 50/60Hz					
Hardware	Certifications		CE, FCC						
	Dimensions (W x D x H)	17.3 × 7.1 × 1.7 in. (440 × 180 × 44 mm)	8.2 × 4.9 × 1.0 in. (209 × 126 × 26 mm)						
	Environment	Operating Temperature: 0°C~40°C (32°F~104°F); Storage Temperature: -40°C~70°C (-40°F~158°F); Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing							
	Concurrent Sessions	150,000	40,000	20,000					
	NAT Throughput	950Mbps	940Mbps	680Mbps					
Performance	IPsec VPN Throughput	373Mbps	99Mbps	13Mbps					
	WAN Connection Type	Dynamic/Static IP, PPPoE, PP1	Dynamic/Static IP, PPPoE, PPTP, L2TP, Dual Access, BigPond						
	IPsec VPN Tunnel	100	64	20					
	Authentication		MD5/SHA1						
IPsec VPN	Encryption		DES, 3DES, AES128, AES192, AES256						
IPSEC VPN	IPsec NAT Traversal (NAT-T)		•						
	Dead Peer Detection (DPD)		•						
	Perfect Forward Secrecy (PFS)	DH1/DH2/DH5							
	PPTP VPN Tunnels	50		16					
DDTD VDN	PPTP VPN Server		•						
PPTP VPN	PPTP VPN Client		•						
	PPTP With MPPE Encryption		•						
	L2TP VPN Tunnels	50		16					
LOTELIE	L2TP VPN Server		•						
L2TP VPN	L2TP VPN Client		•						
	L2TP Over IPsec	•							
	Access Control List		•						
	URL/Keyword Filter		•						
0 "	Domain Filter		•						
Security	DoS Defense		•						
	ARP Inspection	•							
	MAC Filter		•						
	Line Backup	•							
Load Balance	Online Detection		•						
	Smart Load Balance		•						
	One-to-One NAT		•						
	Multiple-nets NAT		•						
NAT	Virtual Server		•						
	Port Triggering		•						
	ALG		•						
	Static Routing		•						
Routing	Policy Routing		•						
	Guarantee Max & Min Bandwidth		•						
QoS	Bandwidth Control By IP/Port		•						
	Session Limit By IP		•						
Local User Authentication •									
Web	Radius Sever Authentication		•						
Authentication	Onekey Online		•						
	Dynamic DNS		Dyndns, No-IP, Peanuthull, Comexe						
Service	UPnP		Dynans, No-IP, Peanutriuli, Comexe						
	Or III		· ·						

Load Balance Broadband Routers



Load Balance Broadband Router

Suitable for demanding enterprise environment with large volumes of users

Highlights

A load balance broadband router from TP-Link, TL-ER5120 possesses 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.

- Load Balancing automatically selects the best route to the destination according to the load
- Captive portal provides convenient guest authentication while promoting your business
- Abundant security features including ARP Inspection, DoS Defense, URL/Keyword Domain Filter and Access Control
- Professional 4KV lightning protection keeps your investment safe



TL-ER5120 Gigabit Load Balance Broadband Router

Rackmount, 1 Gigabit WAN Port, 3 Gigabit WAN/LAN Ports, 1 Gigabit LAN Port



TL-R480T+

Load Balance Broadband Router

Rackmount, 1 10/100Mbps WAN Port, 3 10/100Mbps WAN/LAN Ports, 1 10/100Mbps LAN Port



TL-R470T+

Load Balance Broadband Router

Desktop, 1 10/100Mbps WAN Port, 3 10/100Mbps WAN/LAN Ports, 1 10/100Mbps LAN Port



Features

Networking

- Static Routing / Policy Routing
- Captive Portal
- Intelligent Load Balance • 802.1Q VLAN, Port Mirror*
- IPTV
- IPv6

Security

- One-to-One NAT, Multi-Nets NAT
- FTP/H.323/SIP/PPTP ALG
- URL/Keywords Filtering
- Web Content Filtering
- ARP Inspection • DoS/DDoS Defense

Bandwidth Management

- IP-based Bandwidth Control
- Limited Bandwidth
- Management
- IP-based Session Limit

*Only supported by TL-ER5120

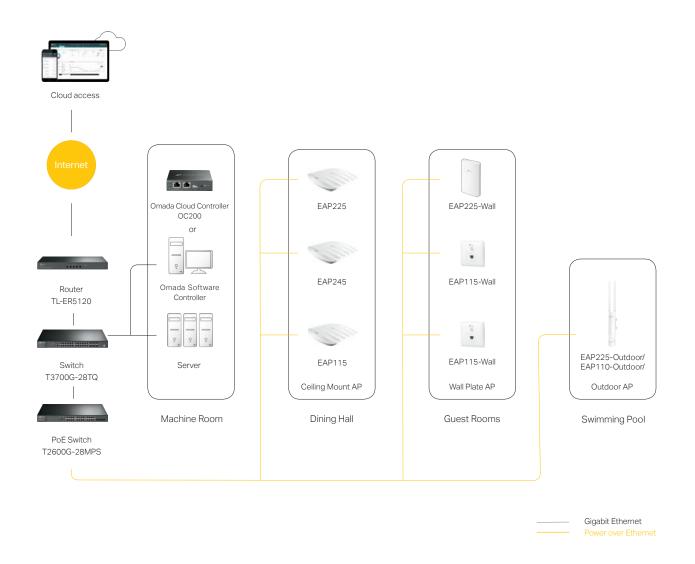
Product Picture		Port NAAA	P						
Model		TL-ER5120	TL-R480T+	TL-R470T+					
Produc	t Description	Gigabit Load Balance Broadband Router	Load Balance Broadband Router	Load Balance Broadband Router					
Hardware	Interface	1 Gigabit WAN Port, 3 Gigabit WAN/LAN Ports, 1 Gigabit LAN Port	3 10/100Mbps V	110/100Mbps WAN Port, 310/100Mbps WAN/LAN Ports, 110/100Mbps LAN Port					
	Power Supply	100-240VAC, 50/60Hz	100-240VAC, 50/60Hz	9VDC/0.6A					
	Certifications		CE, FCC						
	Dimensions (W × D × H)	17.3 × 7.1 × 1.7 in. (440 × 180 × 44 mm)	11.6 × 7.1 × 1.7 in. (294 × 180 × 44 mm)	8.2 × 4.9 × 1.0 in. (209 × 126 × 26 mm)					
	Environment	Operating Temperature: 0°C~40°C (32°F~104°F); Storage Temperature: -40°C~70°C (-40°F~158°F); Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing							
Denfermen	Cocurrent Sessions	150,000	30,000	10,000					
Performance	NAT Throughput	800Mbps	100M	Mbps					
	WAN Connection Type	Dynamic/Static IP, PPPoE, PPTP, L2TP, Dual Access, BigPond PPPoE, Dynamic, Static IP, PPTP, L2TP, BigPond Cable							
	Rate Limit	•							
	Port Mirroring	•							
Network	Port VLAN	•							
	SNMP	V1/V2c							
	802.1Q VLAN	•							
	IPTV	•							
	IPv6	•							
	Access Control	•							
	URL/Keyword Filter Domain Filter	•							
Security	DoS Defense	•							
	ARP Inspection	•							
	MAC Filter	•							
	Line Backup	•							
Load Balance	Online Detection	•							
	Smart Load Balance	•							
NAT	One-to-One NAT								
	Multiple-nets NAT	•							
	Virtual Server	•							
	Port Triggering	•							
	ALG	•							
Routing	Static Routing		•						
	Policy Routing	•							
QoS	Guarantee Max & Min Bandwidth		•						
	Bandwidth Control By IP/Port	•							
	Session Limit By IP	•							
Web Authentication	Local User Authentication								
	Radius Sever		•						
	Authentication Onekey Online		•						
	Dynamic DNS	Dyndns, No-IP, Peanuthull, Comexe							
Service	UPnP	Dynuis, Norr, Peanunii, Contexe							

Business Solution for Education Networks

Ethernet Stack

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. That's why whenever we leave town, one of the first things we look for in choosing a hotel is not location or a pool, but Wi-Fi. In fact, the ability to offer convenient connections makes a significant impact on overall customer satisfaction and ratings. Now, TP-Link Business Wi-Fi Solutions allow hotels to build the reliable, cost-effective wireless networks that drive progress and keep guests happy and coming back for another stay.

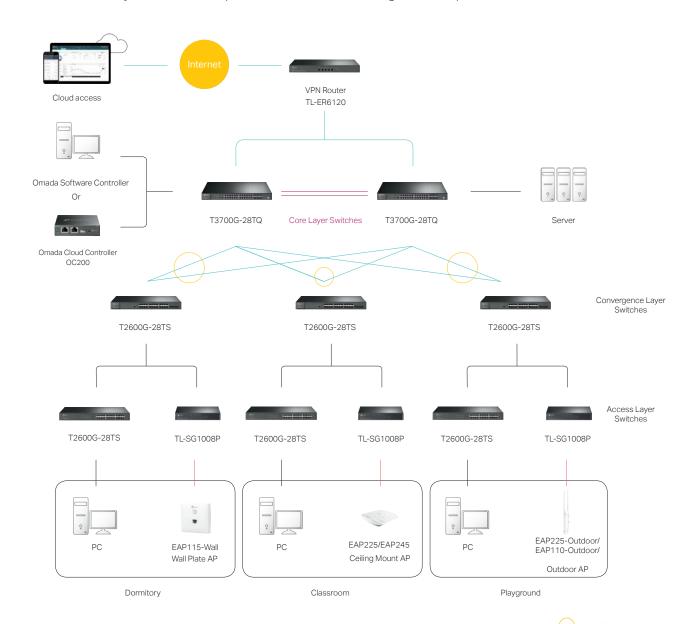


Solution Benefits

- Wide-ranging indoor and outdoor options deliver comprehensive wireless coverage.
- With the centralized management platform, muliple access points can share the same SSID and wireless configuration to present customers a consistent and fluid Wi-Fi experience.
- To establish a unique Wi-Fi authentication page, the Captive Portal function allows administrators to display discount information, promotional images and other marketing content while securing network access for guests.
- Business-class routers and switches provide abundant access control and load balance features that ensure a safe, reliable experience within a stable network.
- TP-Link business access points blend inconspicuously into any suite, common area to complement a modern decor.

Overview

In the modern educational institution, wireless connectivity is as essential as good professors and books. Reliable, secure and convenient Wi-Fi provides students with unlimited access to information to enrich their education. It also allows teachers to access a wider variety of resources that promote more effective learning and development.



Solution Benefits

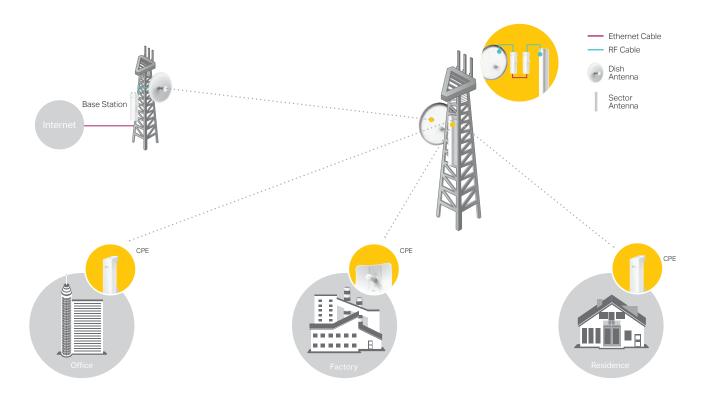
- Wide-ranging indoor and outdoor options deliver comprehensive wireless coverage.
- VPN routers allow off-campus students and teachers to access the intranet anytime, anywhere through the VPN router.
- Abundant security features safeguard a campus network's various files and sensitive information with consistent stability and security.
- $\bullet \ \ Centralized \ management \ allows \ network \ administrators \ to \ easily \ configure \ and \ monitor \ all \ access \ points.$

Business Solution for

Wireless Broadband

Overview

TP-Link's Pharos series are ideal for point-to-point and point-to-multipoint applications. Exceptional performance, coupled with user-friendly design, makes it an ideal choice for both businesses and home users.



Pharos Products

	Base Stations		CPEs		MIMO Antennas					
Product Picture	ij	7	13	1	+					
Model	WBS510	WBS210	CPE710/ CPE610/ CPE605	CPE510	CPE210/ CPE220	TL-ANT 2424MD	TL-ANT 5830MD	TL-ANT 2415MS	TL-ANT 5819MS	TL-ANT 2410MO
Frequency (GHz)	5.15~5.85	2.4~2.483	5.15~5.85	5.15~5.85	2.4~2.483	2.3~2.7	5.0~6.0	2.3~2.7	5.0~6.0	2.4~2.48

Features and Benefits

- Point-to-point long-distance wireless data transmission of up to 50+ km.
- Enterprise hardware design for stable and maximized performance.
- PharOS Web-based management system provides advanced configuration options.
- MAXtream TDMA technology guarantees throughput as your network grows.
- Pharos Control Centralized Management System for large-scale network management.
- Supports AP Router, AP Client Router, AP, AP Client, Multi-Bridge and Repeater Operation modes.



Ptp-link SMB Community

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





Technical support, Case sharing, Your direct dialogue with TP-link About SMB, we know that you still want to know more...



Forums

Here, not only are you able to learn more about TP-Link products, but also your question can be answered professionally.



Stories

Find out how people all around the world are using TP-Link products. Hear about real usage scenarios and find new, imaginative ways to use your products.



Knowledge Base

Having trouble? Don't worry, all your questions can be answered here. This is a database that provides users with quick information guides.

