

**JetStream**

# Smart Switches Datasheet

MODELS: TL-SG2008 V3 / TL-SG2008P / TL-SG2210P V3.20 /  
TL-SG2210MP / TL-SG2218 / TL-SG2428P /  
TL-SL2428P V4.20



## Overview

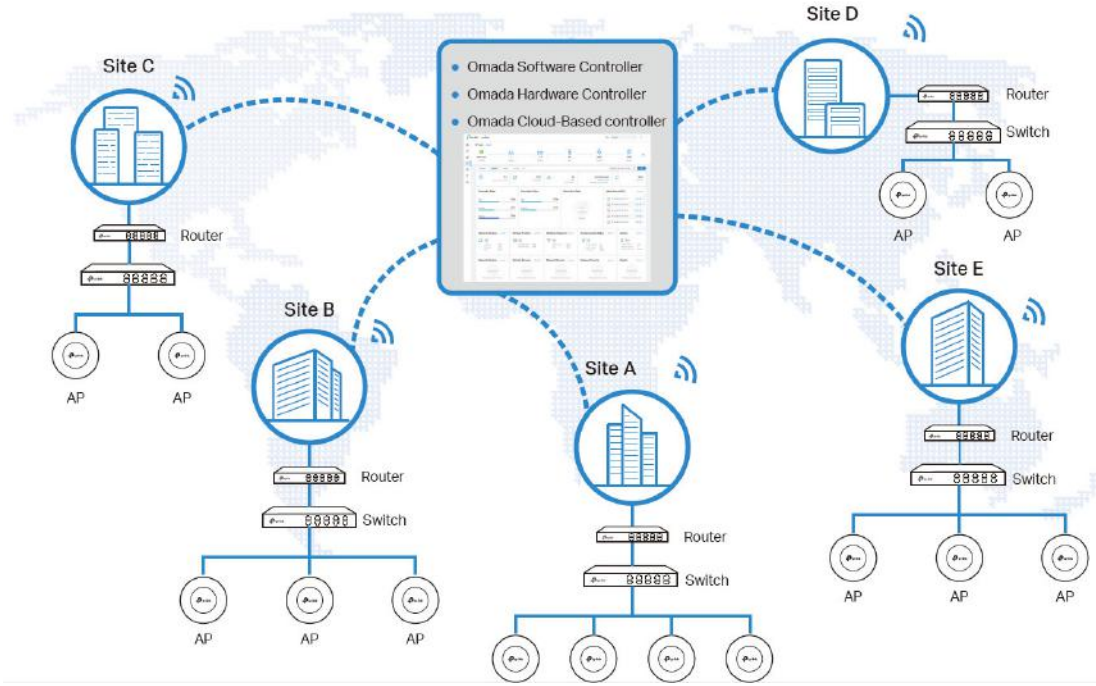
TP-Link's brand new JetStream gigabit smart switches provide huge upgrade comparing with previous versions. The switches can be managed by Omada SDN Controller, which provides professional and reliable one-step solutions. Integrated L2 and L2+ features such as 802.1Q VLAN, QoS, IGMP Snooping and static routing provide cost-effective networking solutions for small and medium-sized businesses without sacrificing enhanced usability and strong performance.

# Omada Solution

|                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| <b>Hospitality</b>                                                                | <b>Education</b>                                                                  | <b>Retail</b>                                                                     | <b>Office</b>                                                                      | <b>Catering</b>                                                                     |
| High Quality and Full Coverage Wi-Fi                                              | High-Density Wi-Fi                                                                | Social Marketing for O2O                                                          | Wireless and Wired Connections                                                     | Full Wi-Fi Coverage in High-Density Environment                                     |

## Software Defined Networking (SDN) with Cloud Access

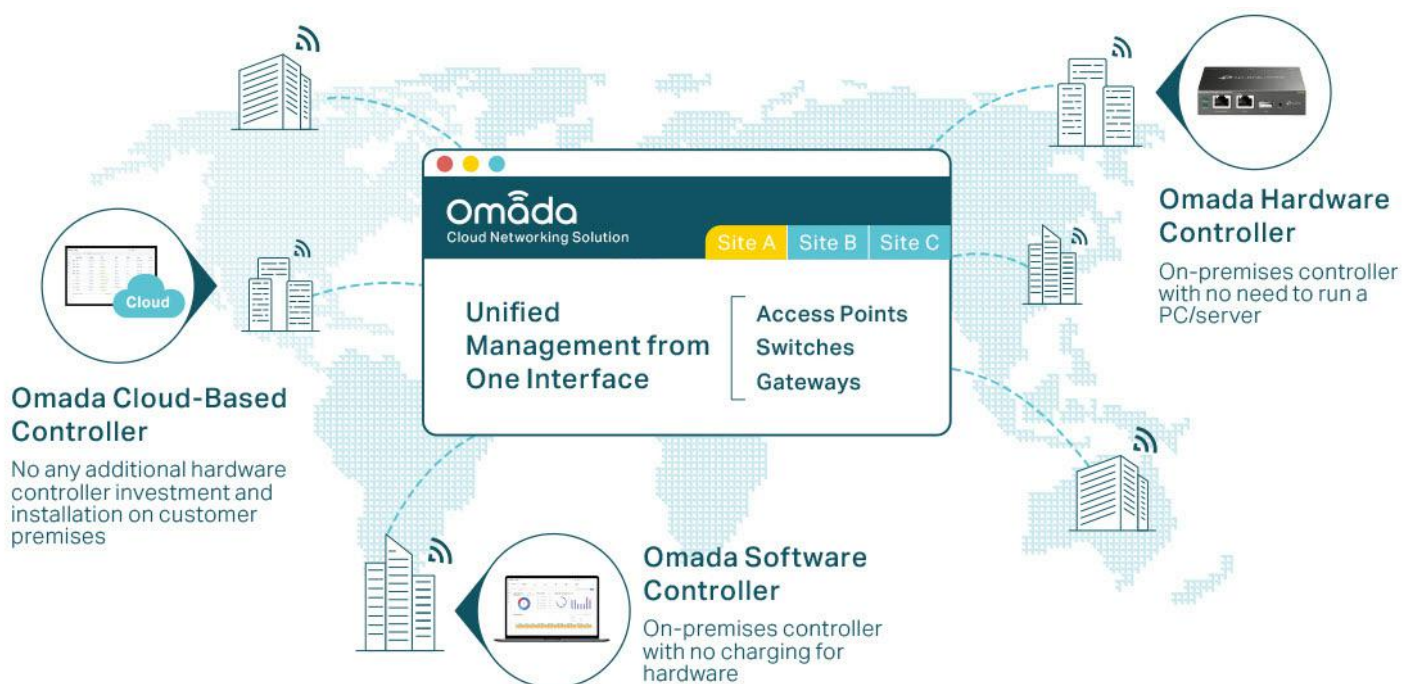
Omada Software Defined Networking (SDN) platform integrates network devices, including access points, switches and gateways, providing 100% centralized cloud management. Omada creates a highly scalable network—all controlled from a single interface. Seamless wireless and wired connections are provided, ideal for use in hospitality, education, retail, offices, and more.



|                                                                                                                                        |                                                                                                                              |                                                                                                                            |                                                                                                                               |  |                                                                                                                                             |  |
|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------|--|
|  <p><b>Higher Efficiency</b></p>                    |                                                                                                                              |                                                                                                                            |  <p><b>Higher Security</b></p>            |  |  <p><b>Higher Reliability</b></p>                      |  |
|  <p>Centralized Cloud Management</p>                |  <p>Zero-Touch Provisioning</p>           |  <p>AI-Driven Technology</p>            |  <p>Separate Management and User Data</p> |  |  <p>99.99% SLA Availability</p>                        |  |
|  <p>Auto Channel Selection and Power Adjustment</p> |  <p>Multi-Tenant Privilege Assignment</p> |  <p>Easy and Intelligent Monitoring</p> |  <p>Abundant Security Functions</p>       |  |  <p>Reliable Connections with High-Density Clients</p> |  |

# Hassle-Free Centralized Cloud Management

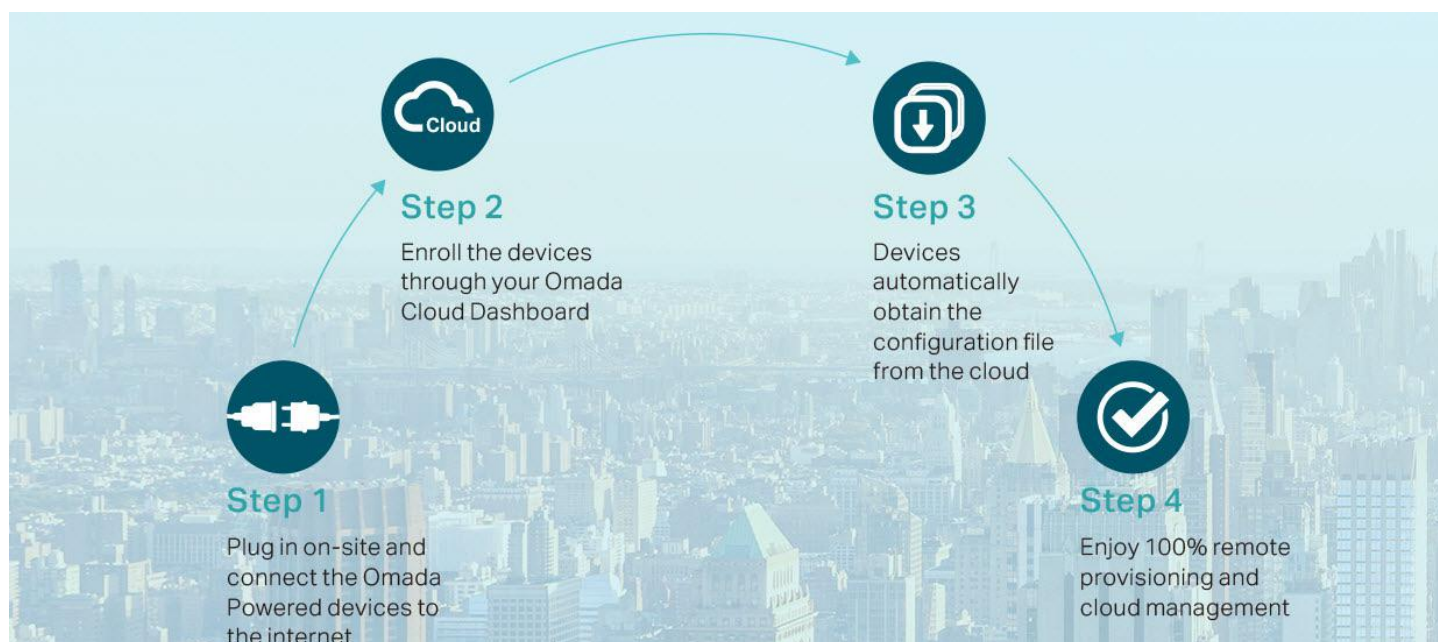
100% centralized cloud management of the whole network from different sites—all controlled from a single interface anywhere, anytime.



- ✓ No additional training needed
- ✓ Unlimited scalability
- ✓ Batch management
- ✓ Devices still work even when not connected to the Cloud

## Zero-Touch Provisioning for Efficient Deployment<sup>1</sup>

Omada zero-touch provisioning allows remotely deployment and configuration of multi-site networks, so there's no need to send out an engineer for on-site configuration. The Omada Cloud ensures efficient deployment with lower costs.



1. Zero-Touch Provisioning is supported when using Omada Cloud-Based Controller

# AI-Driven Technology for Stronger Performance and Easy Network Maintenance

## Intelligent Network Analysis, Warning, and Optimization\*

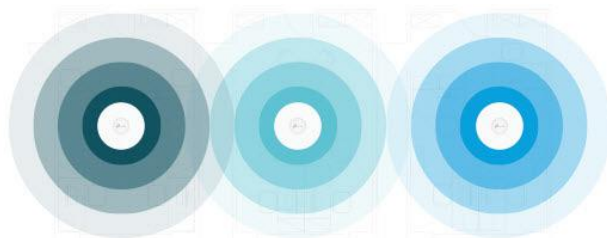
- ▶ Analyzes potential network problems and sends optimization suggestions for higher network efficiency
- ▶ Locates network faults, warns and notify users, and generates solutions to reduce network risk



\*Intelligent Network Analysis, Warning, and Optimization are being developed and are scheduled to be released in 2020

## Auto Channel Selection and Power Adjustment

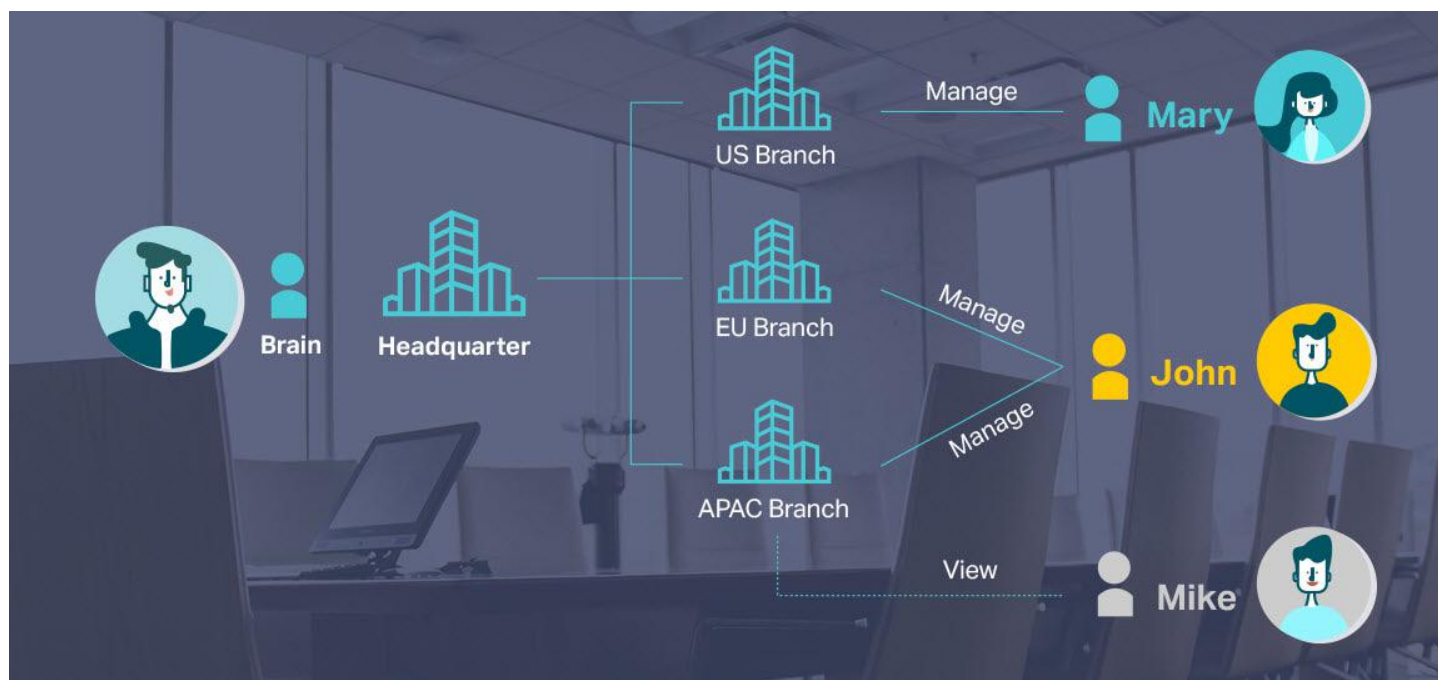
Provides powerful wireless performance while greatly reducing Wi-Fi interference by automatically adjusting the channel settings and transmission power levels of neighboring APs in the same network.



● Channel 1 ● Channel 11 ● Channel 6

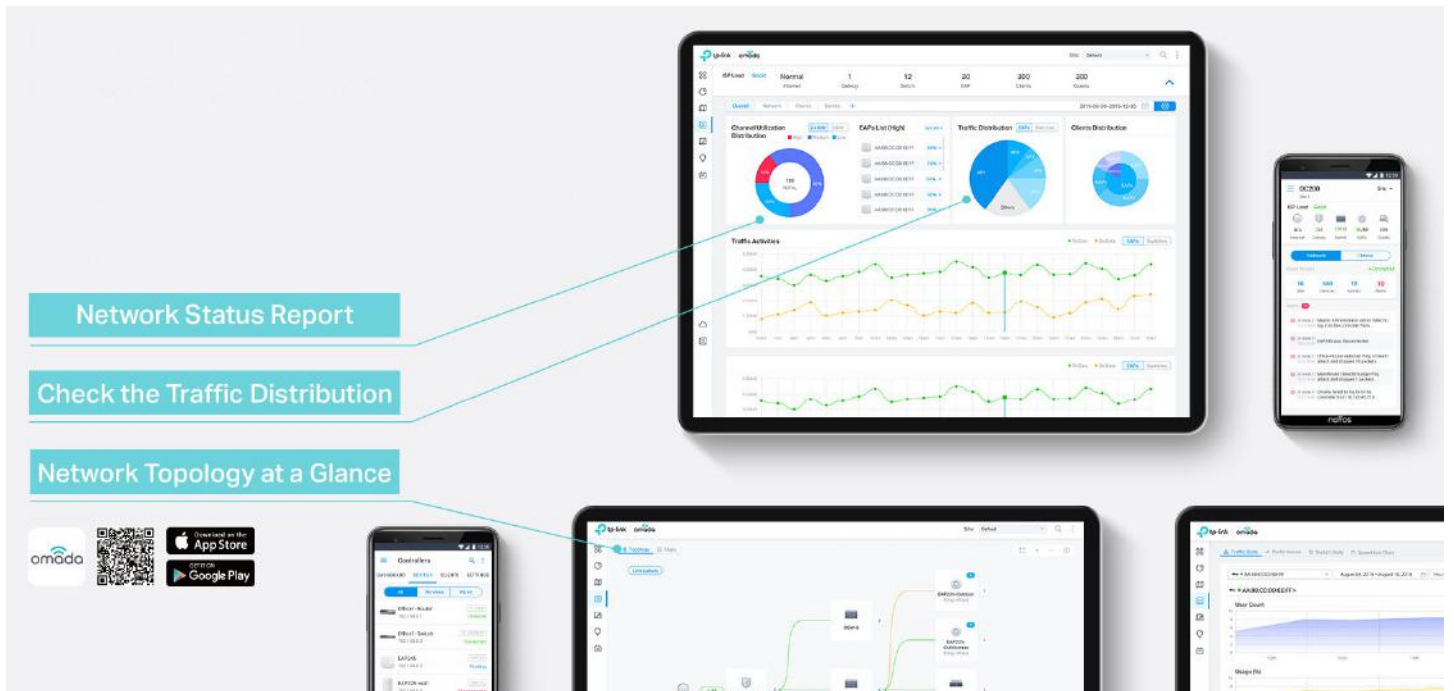
## Assign Different Management Roles

Multi-tenant privilege assignment is available to increase management efficiency and security. Multi-person management, multi-level permissions, and the ability to add admins as needed, enable flexible network operation and maintenance.

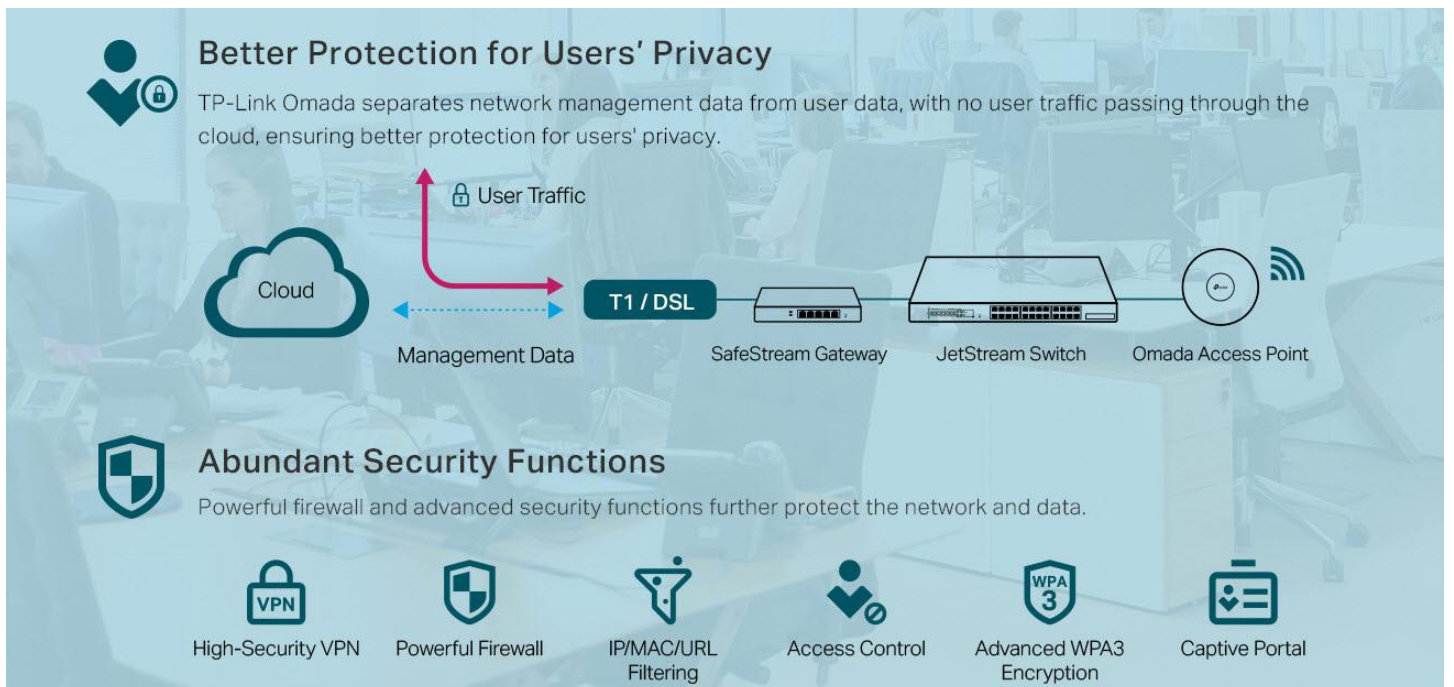


# Easy and Intelligent Network Monitoring

The easy-to-use dashboard makes it easy to see your real-time network status; check network usage and traffic distribution; receive network condition logs, abnormal event warnings, and notifications; or even track key data for better business results. Network topology helps IP admins quickly see and troubleshoot connection at a glance.



# Comprehensive Protection for the Whole Network



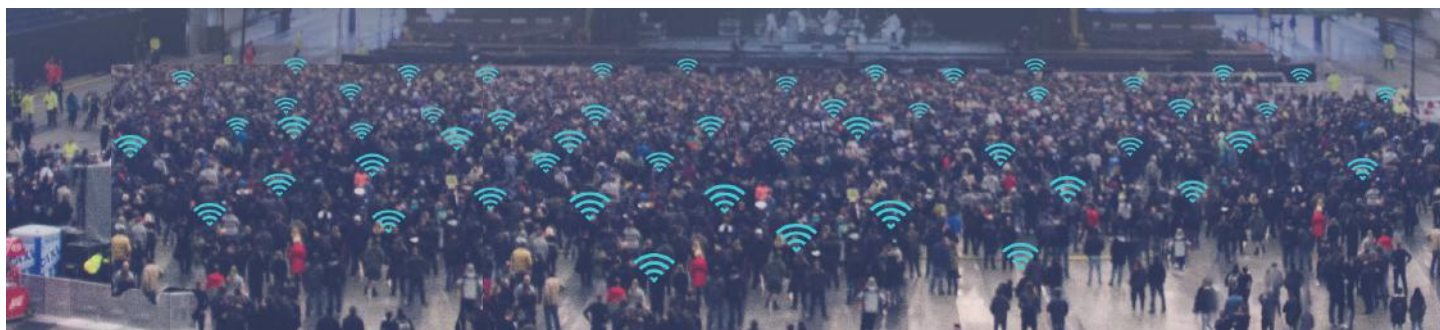
## Multiple Factors Guarantee Higher Reliability

Higher reliability of cloud service is guaranteed with 99.99% SLA availability, 24/7 automated fault detection, geographically isolated backup servers, and reliable product quality. Your network functions even if management traffic is interrupted.



## Reliable Connections Even with High-Density Clients

Equipped with enterprise chipsets, dedicated antennas, advanced RF functions, auto channel selection, and power adjustment, Omada Wi-Fi 6 and Wi-Fi 5 APs have high concurrency capacities for remarkable performance in high-density environments.



# Switch Product Features

## Highlights

- 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
- Advanced security features include IP-MAC-Port Binding, ACL, Port Security, DoS Defend, Storm Control, DHCP Snooping, 802.1X and Radius Authentication
- L2/L3/L4 QoS and IGMP Snooping optimize voice and video applications
- Comprehensive IPv6 support for management, QoS and ACL
- Web/CLI managed modes, SNMP, RMON and Dual Image bring abundant management features

## Advanced QoS features

To integrate voice, data and video service on one network, the switch applies rich QoS policies. Administrator can designate the priority of the traffic based on a variety of means including Port Priority, 802.1P Priority and DSCP Priority, to ensure that voice and video are always clear, smooth and jitter free. In conjunction with the Voice VLAN that the switches support, Voice Applications will perform better and smoother.

## Abundant L2 and L2+ features

TP-Link JetStream smart switches support a complete lineup of L2 features, including IGMP Snooping/MLD Snooping, 802.1Q/MAC/Protocol VLAN, STP/RSTP/MSTP, Link Aggregation Group (LAG), Port Isolation, Port Mirroring, and 802.3x Flow control function. IGMP Snooping ensures the multicast stream be forwarded intelligently to the appropriate subscribers by the switch, while IGMP Throttling & Filtering restricts each subscriber on a certain level to prevent unauthorized multicast access. Besides, these smart switches also support L2+ features like static routing. It is a simple way to provide segmentation of the network with internal routing through the switch and helps network traffic to be more efficient.

## Enterprise Level Management Features




TP-Link JetStream smart switches support multiple user-friendly standard management features such as intuitive web-based Graphical User Interface (GUI), industrially standard Command Line Interface (CLI) and SNMP (v1/v2c/v3). These switches support RMON (Remote Network Monitoring), which enables the switch to be polled for valuable status information and send traps when encountering abnormal events. Also, this series of switches support Dual Image function, which makes there be less 'down-time' when switches are being upgraded/downgraded.

## IPv6 Support

TP-Link JetStream smart switches support comprehensive IPv6 features including IPv6 management, ACL, QoS and MLD Snooping, all of these features help to ensure a smooth migration to IPv6-based network without changing switches in the future.




# Specifications

## Hardware Features & Performance


|                       |                           |                                                                                                                                                                                                      |                                                                                                      |                                                                                                      |
|-----------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Product Picture       |                           |                                                                                                                     |                    |                   |
| Model                 |                           | TL-SG2008 V3                                                                                                                                                                                         | TL-SG2008P                                                                                           | TL-SG2210P V3.20                                                                                     |
| General               | Interface                 | 8 10/100/1000Mbps RJ45 Ports                                                                                                                                                                         | 8 10/100/1000Mbps RJ45 ports                                                                         | 8 10/100/1000Mbps RJ45 Ports<br>2 Gigabit SFP Slots                                                  |
|                       | Flash                     | 32 MB                                                                                                                                                                                                |                                                                                                      |                                                                                                      |
|                       | DRAM                      | 256 MB                                                                                                                                                                                               |                                                                                                      |                                                                                                      |
|                       | Port Standard             | IEEE 802.3i:10BASE-T Ethernet;<br>IEEE 802.3u:100BASE-X Fast Ethernet;<br>IEEE 802.3ab:1000BASE-T Gigabit Ethernet;<br>IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber) (only for TL-SG2210P) |                                                                                                      |                                                                                                      |
| PoE                   | PoE Standard              |                                                                                                                                                                                                      | 802.3af/at                                                                                           | 802.3af/at                                                                                           |
|                       | PoE Ports                 | --                                                                                                                                                                                                   | 4, up to 30 W                                                                                        | 8, up to 30 W                                                                                        |
|                       | PoE Power Budget          |                                                                                                                                                                                                      | 62 W                                                                                                 | 61 W                                                                                                 |
| Performance           | Switching Capacity        | 16 Gbps                                                                                                                                                                                              | 16 Gbps                                                                                              | 20 Gbps                                                                                              |
|                       | Packet Forwarding Rate    | 11.90 Mpps                                                                                                                                                                                           |                                                                                                      | 14.88 Mpps                                                                                           |
|                       | MAC Address Table         | 8K                                                                                                                                                                                                   |                                                                                                      |                                                                                                      |
|                       | Packet Buffer             | 4.1 Mbit                                                                                                                                                                                             |                                                                                                      |                                                                                                      |
|                       | Transmission Method       | Store and Forward                                                                                                                                                                                    |                                                                                                      |                                                                                                      |
|                       | Number of IP Interfaces   | 16                                                                                                                                                                                                   |                                                                                                      |                                                                                                      |
|                       | Number of Static Routers  | 32 (IPv4, IPv6)                                                                                                                                                                                      |                                                                                                      |                                                                                                      |
|                       | Jumbo Frame               | 9 KB                                                                                                                                                                                                 |                                                                                                      |                                                                                                      |
| Physical & Environmet | Power Supply              | 12 VDC/1 A External Adapter or Obtain Power from PoE Source                                                                                                                                          | 53.5 VDC/1.31 A External Adapter                                                                     |                                                                                                      |
|                       | Max Power Consumption     | 6.4 W (220 V/50 Hz)                                                                                                                                                                                  | 7.9 W (220 V/50 Hz) (no PD connected)<br>69.7 W (220 V/50 Hz) (with 62 W PD connected)               | 10.3 W (220 V/50 Hz) (no PD connected)<br>76.5 W (220 V/50 Hz) (with 61 W PD connected)              |
|                       | Max Heat Dissipation      | 21.84 BTU/hr (220 V/50 Hz)                                                                                                                                                                           | 26.95 BTU/hr (220 V/50 Hz) (no PD connected)<br>237.82 BTU/hr (220 V/50 Hz) (with 62 W PD connected) | 35.14 BTU/hr (220 V/50 Hz) (no PD connected)<br>261.02 BTU/hr (220 V/50 Hz) (with 61 W PD connected) |
|                       | Standby Power Consumption | 2.56 W (220 V/50 Hz)                                                                                                                                                                                 | 2.89 W (220 V/50 Hz)                                                                                 | 4.99 W (220 V/50 Hz)                                                                                 |
|                       | Dimensions (W x D x H)    | 8.2 × 4.9 × 1.0 in (209 × 126 × 26 mm)                                                                                                                                                               |                                                                                                      |                                                                                                      |
|                       | Fan Quantity              | Fanless                                                                                                                                                                                              |                                                                                                      |                                                                                                      |
|                       | Installation              | Desktop/Wall-Mounting                                                                                                                                                                                |                                                                                                      |                                                                                                      |
|                       | Operating Temperature     | 0 °C to 40 °C (32 °F to 104 °F)                                                                                                                                                                      |                                                                                                      |                                                                                                      |
|                       | Storage Temperature       | -40 °C to 70 °C (-40 °F to 158 °F)                                                                                                                                                                   |                                                                                                      |                                                                                                      |
|                       | Operation Humidity        | 10% to 90% RH, non-condensing                                                                                                                                                                        |                                                                                                      |                                                                                                      |
|                       | Storage Humidity          | 5% to 90% RH, non-condensing                                                                                                                                                                         |                                                                                                      |                                                                                                      |
|                       | Certification             | CE, FCC, RoHS                                                                                                                                                                                        |                                                                                                      |                                                                                                      |



## Hardware Features & Performance

| Product Picture       |                           |                                                                                               |  |                      |
|-----------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Model                 |                           | TL-SG2210MP                                                                                                                                                                    | TL-SG2218                                                                          | TL-SG2428P                                                                                              |
| General               | Interface                 | 8 10/100/1000Mbps RJ45 Ports<br>2 Gigabit SFP Slots                                                                                                                            | 16 10/100/1000Mbps RJ45 Ports<br>2 Gigabit SFP Slots                               | 24 10/100/1000Mbps RJ45 ports<br>4 Gigabit SFP Slots                                                    |
|                       | Flash                     | 32 MB                                                                                                                                                                          |                                                                                    |                                                                                                         |
|                       | DRAM                      | 256 MB                                                                                                                                                                         |                                                                                    |                                                                                                         |
|                       | Port Standard             | IEEE 802.3i:10BASE-T Ethernet;<br>IEEE 802.3u:100BASE-X Fast Ethernet;<br>IEEE 802.3ab:1000BASE-T Gigabit Ethernet;<br>IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber) |                                                                                    |                                                                                                         |
| PoE                   | PoE Standard              | 802.3af/at                                                                                                                                                                     | -                                                                                  | 802.3af/at                                                                                              |
|                       | PoE Ports                 | 8, up to 30 W                                                                                                                                                                  | -                                                                                  | 24, up to 30 W                                                                                          |
|                       | PoE Power Budget          | 150 W                                                                                                                                                                          | -                                                                                  | 250 W                                                                                                   |
| Performance           | Switching Capacity        | 20 Gbps                                                                                                                                                                        | 36 Gbps                                                                            | 56 Gbps                                                                                                 |
|                       | Packet Forwarding Rate    | 14.88 Mpps                                                                                                                                                                     | 26.78 Mpps                                                                         | 41.66 Mpps                                                                                              |
|                       | MAC Address Table         | 8K                                                                                                                                                                             |                                                                                    |                                                                                                         |
|                       | Packet Buffer             | 4.1 Mbit                                                                                                                                                                       |                                                                                    |                                                                                                         |
|                       | Transmission Method       | Store and Forward                                                                                                                                                              |                                                                                    |                                                                                                         |
|                       | Number of IP Interfaces   | 16                                                                                                                                                                             |                                                                                    |                                                                                                         |
|                       | Number of Static Routers  | 32 (IPv4, IPv6)                                                                                                                                                                |                                                                                    |                                                                                                         |
|                       | Jumbo Frame               | 9 KB                                                                                                                                                                           |                                                                                    |                                                                                                         |
| Physical & Environmet | Power Supply              | 100-240V AC, 50/60Hz                                                                                                                                                           |                                                                                    |                                                                                                         |
|                       | Max Power Consumption     | 12.2 W (110 V/60 Hz) (no PD connected)<br>173.9 W (110 V/60 Hz) (with 150 W PD connected)                                                                                      | 12.3 W (220 V/50 Hz)                                                               | 32.1 W (110 V/60 Hz) (no PD connected)<br>308.6 W (110 V/60 Hz) (with 250 W PD connected)               |
|                       | Max Heat Dissipation      | 41.63 BTU/hr (110 V/60 Hz) (no PD connected)<br>539.35 BTU/hr (110 V/60 Hz) (with 150 W PD connected)                                                                          | 41.97 BTU/hr                                                                       | 109.53 BTU/hr (110 V/60 Hz) (no PD connected)<br>1052.94 BTU/hr (110 V/60 Hz) (with 250 W PD connected) |
|                       | Standby Power Consumption | 8.56 W (110 V/60 Hz)                                                                                                                                                           | 3.84 W (220 V/50 Hz)                                                               | 21.96 W (110 V/60 Hz)                                                                                   |
|                       | Dimensions (W x D x H)    | 11.6 x 7.1 x 1.7 in<br>(294 x 180 x 44 mm)                                                                                                                                     | 17.3 x 7.1 x 1.7 in<br>(440 x 180 x 44 mm)                                         | 17.3 x 8.7 x 1.7 in<br>(440 x 220 x 44 mm)                                                              |
|                       | Fan Quantity              | 1                                                                                                                                                                              | Fanless                                                                            | 2                                                                                                       |
|                       | Installation              | Rackmount/Desktop                                                                                                                                                              | Rackmount                                                                          | Rackmount                                                                                               |
|                       | Operating Temperature     | 0 °C to 50 °C (32 °F to 122 °F)                                                                                                                                                |                                                                                    |                                                                                                         |
|                       | Storage Temperature       | -40 °C to 70 °C (-40 °F to 158 °F)                                                                                                                                             |                                                                                    |                                                                                                         |
|                       | Operation Humidity        | 10% to 90% RH, non-condensing                                                                                                                                                  |                                                                                    |                                                                                                         |
|                       | Storage Humidity          | 5% to 90% RH, non-condensing                                                                                                                                                   |                                                                                    |                                                                                                         |
|                       | Certification             | CE, FCC, RoHS                                                                                                                                                                  |                                                                                    |                                                                                                         |

## Hardware Features & Performance

|                       |                           |                                                                                                                                                                                |
|-----------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Picture       |                           |                                                                                               |
| Model                 |                           | TL-SL2428P V4.20                                                                                                                                                               |
| General               | Interface                 | 24 10/100 Mbps RJ45 Ports<br>2 10/100/1000 Mbps RJ45 Ports<br>2 Combo Gigabit RJ45/SFP Ports                                                                                   |
|                       | Flash                     | 32 MB                                                                                                                                                                          |
|                       | DRAM                      | 256 MB                                                                                                                                                                         |
|                       | Port Standard             | IEEE 802.3i:10BASE-T Ethernet;<br>IEEE 802.3u:100BASE-X Fast Ethernet;<br>IEEE 802.3ab:1000BASE-T Gigabit Ethernet;<br>IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber) |
| PoE                   | PoE Standard              | 802.3af/at                                                                                                                                                                     |
|                       | PoE Ports                 | 24, up to 30 W                                                                                                                                                                 |
|                       | PoE Power Budget          | 250 W                                                                                                                                                                          |
| Performance           | Switching Capacity        | 12.8 Gbps                                                                                                                                                                      |
|                       | Packet Forwarding Rate    | 9.52 Mpps                                                                                                                                                                      |
|                       | MAC Address Table         | Store and Forward                                                                                                                                                              |
|                       | Packet Buffer             | 8K                                                                                                                                                                             |
|                       | Transmission Method       | 4.1 Mbit                                                                                                                                                                       |
|                       | Number of IP Interfaces   | 16                                                                                                                                                                             |
|                       | Number of Static Routers  | 32 (IPv4, IPv6)                                                                                                                                                                |
|                       | Jumbo Frame               | 9 KB                                                                                                                                                                           |
| Physical & Environmet | Power Supply              | 100-240V AC, 50/60Hz                                                                                                                                                           |
|                       | Max Power Consumption     | 18.8 W (220 V/50 Hz) (with no PD connected)<br>286.7 W (220 V/50 Hz) (with 250 W PD connected)                                                                                 |
|                       | Max Heat Dissipation      | 64.1 BTU/hr (220 V/50Hz) (with no PD connected)<br>977.6 BTU/hr (220 V/50 Hz) (with 250 W PD connected)                                                                        |
|                       | Standby Power Consumption | 15.9 W (220 V/50 Hz)                                                                                                                                                           |
|                       | Dimensions (W x D x H)    | 17.3 × 7.1 × 1.7 in (440 × 180 × 44 mm)                                                                                                                                        |
|                       | Fan Quantity              | 2                                                                                                                                                                              |
|                       | Installation              | Rackmount                                                                                                                                                                      |
|                       | Operating Temperature     | 0 °C to 50 °C (32 °F to 122 °F)                                                                                                                                                |
|                       | Storage Temperature       | -40 °C to 70 °C (-40 °F to 158 °F)                                                                                                                                             |
|                       | Operation Humidity        | 10% to 90% RH, non-condensing                                                                                                                                                  |
|                       | Storage Humidity          | 5% to 90% RH, non-condensing                                                                                                                                                   |
| Certification         | CE, FCC, RoHS             |                                                                                                                                                                                |

## Software Features

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model        | TL-SG2008 V3 / TL-SG2008P / TL-SG2210P V3.20 / TL-SG2210MP / TL-SG2218 / TL-SG2428P / TL-SL2428P V4.20                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| SDN Support  | <ul style="list-style-type: none"> <li>• Support Omada Hardware Controller (OC200/OC300), Software Controller, Cloud-Based Controller</li> <li>• Automatic Device Discovery</li> <li>• Batch Configuration</li> <li>• Batch Firmware Upgrading</li> </ul>                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• Intelligent Network Monitoring</li> <li>• Abnormal Event Warnings</li> <li>• Unified Configuration</li> <li>• Reboot Schedule</li> <li>• ZTP (Zero-Touch Provisioning)*</li> </ul>                                                                                                                                                                                                                  |
| L2+ Features | <ul style="list-style-type: none"> <li>• 16 IP Interfaces <ul style="list-style-type: none"> <li>- Support IPv4/IPv6 Interface</li> </ul> </li> <li>• Static Routing <ul style="list-style-type: none"> <li>- 32 IPv4/IPv6 Static Routes</li> </ul> </li> <li>• DHCP Server</li> <li>• DHCP Relay <ul style="list-style-type: none"> <li>- DHCP Interface Relay</li> <li>- DHCP VLAN Relay</li> </ul> </li> <li>• DHCP L2 Relay</li> </ul>                                                       | <ul style="list-style-type: none"> <li>• Static ARP</li> <li>• Proxy ARP</li> <li>• Gratuitous ARP</li> </ul>                                                                                                                                                                                                                                                                                                                                |
| L2 Features  | <ul style="list-style-type: none"> <li>• Link Aggregation <ul style="list-style-type: none"> <li>- Static link aggregation</li> <li>- 802.3ad LACP</li> <li>- Up to 8 aggregation groups and up to 8 ports per group</li> </ul> </li> <li>• Spanning Tree Protocol <ul style="list-style-type: none"> <li>- 802.1D STP</li> <li>- 802.1w RSTP</li> <li>- 802.1s MSTP</li> <li>- STP Security: TC Protect, BPDU Filter/Protect, Root Protect</li> </ul> </li> <li>• Loopback Detection</li> </ul> | <ul style="list-style-type: none"> <li>• Flow Control <ul style="list-style-type: none"> <li>- 802.3x Flow Control</li> </ul> </li> <li>• Mirroring <ul style="list-style-type: none"> <li>- Port Mirroring</li> <li>- CPU Mirroring</li> <li>- One-to-One</li> <li>- Many-to-One</li> <li>- Flow-Based</li> <li>- Ingress/Egress/Both</li> </ul> </li> <li>• Device Link Detect Protocol (DLDP)</li> <li>• 802.1ab LLDP/LLDP-MED</li> </ul> |
| L2 Multicast | <ul style="list-style-type: none"> <li>• 511 IPv4, IPv6 shared multicast groups</li> <li>• IGMP Snooping <ul style="list-style-type: none"> <li>- IGMP v1/v2/v3 Snooping</li> <li>- Fast Leave</li> <li>- IGMP Snooping Querier</li> <li>- Static Group Config</li> </ul> </li> <li>• Multicast VLAN Registration (MVR)</li> <li>• Multicast Filtering</li> </ul>                                                                                                                                | <ul style="list-style-type: none"> <li>• MLD Snooping <ul style="list-style-type: none"> <li>- MLD v1/v2 Snooping</li> <li>- Fast Leave</li> <li>- MLD Snooping Querier</li> <li>- Static Group Config</li> </ul> </li> <li>• Limited IP Multicast (256 profiles and 16 entries per profile)</li> </ul>                                                                                                                                      |
| VLAN         | <ul style="list-style-type: none"> <li>• VLAN Group <ul style="list-style-type: none"> <li>- Max. 4K VLAN Groups</li> </ul> </li> <li>• 802.1Q tag VLAN</li> <li>• MAC VLAN</li> </ul>                                                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• Protocol VLAN</li> <li>• GVRP</li> <li>• Voice VLAN</li> </ul>                                                                                                                                                                                                                                                                                                                                      |
| QoS          | <ul style="list-style-type: none"> <li>• 802.1p CoS/DSCP priority</li> <li>• 8 priority queues</li> <li>• Priority Schedule Mode <ul style="list-style-type: none"> <li>- SP (Strict Priority)</li> <li>- WRR (Weighted Round Robin)</li> </ul> </li> <li>• Queue Weight Config</li> </ul>                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>• Bandwidth Control <ul style="list-style-type: none"> <li>- Port/Flow based Rating Limit</li> </ul> </li> <li>• Smoother Performance</li> <li>• Storm Control <ul style="list-style-type: none"> <li>- Multiple Control Modes(kbps/ratio)</li> <li>- Broadcast/Multicast/Unknown-Unicast Control</li> </ul> </li> </ul>                                                                              |

\* Zero-Touch Provisioning is supported when using Omada Cloud-Based Controller

## Software Features

| Model    | TL-SG2008 V3 / TL-SG2008P / TL-SG2210P V3.20 / TL-SG2210MP / TL-SG2218 / TL-SG2428P / TL-SL2428P V4.20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACL      | <ul style="list-style-type: none"> <li>• Support up to 230 entries</li> <li>• Time-Range               <ul style="list-style-type: none"> <li>- Time Slice</li> <li>- Week Time-Range</li> <li>- Absolute Time-Range</li> <li>- Holiday</li> </ul> </li> <li>• Time-based ACL</li> <li>• MAC ACL               <ul style="list-style-type: none"> <li>- Source MAC</li> <li>- Destination MAC</li> <li>- VLAN ID</li> <li>- User Priority</li> <li>- Ether Type</li> </ul> </li> <li>• IP ACL               <ul style="list-style-type: none"> <li>- Source IP</li> <li>- Destination IP</li> <li>- IP Protocol</li> <li>- TCP Flag</li> <li>- TCP/UDP Source Port</li> <li>- TCP/UDP Destination Port</li> <li>- DSCP/IP TOS</li> </ul> </li> </ul>                  | <ul style="list-style-type: none"> <li>• IPv6 ACL</li> <li>• Combined ACL</li> <li>• Rule Operation               <ul style="list-style-type: none"> <li>- Permit/Deny</li> </ul> </li> <li>• Policy Action               <ul style="list-style-type: none"> <li>- Mirror</li> <li>- Rate Limit</li> <li>- Redirect</li> <li>- QoS Remark</li> </ul> </li> <li>• ACL Rules Binding               <ul style="list-style-type: none"> <li>- Port Binding</li> <li>- VLAN Binding</li> </ul> </li> <li>• Actions for flows               <ul style="list-style-type: none"> <li>- Mirror (to supported interface)</li> <li>- Redirect (to supported interface)</li> <li>- Rate Limit</li> <li>- QoS Remark</li> </ul> </li> </ul>                                      |
| Security | <ul style="list-style-type: none"> <li>• AAA</li> <li>• 802.1X               <ul style="list-style-type: none"> <li>- Port based authentication</li> <li>- MAC (Host) based authentication</li> <li>- Authentication Method includes PAP/EAP-MD5</li> <li>- MAB</li> <li>- Guest VLAN</li> <li>- Support Radius authentication and accountability</li> </ul> </li> <li>• IP/IPv6-MAC Binding               <ul style="list-style-type: none"> <li>- 512 Binding Entries</li> <li>- DHCP Snooping</li> <li>- DHCPv6 Snooping</li> <li>- ARP Inspection</li> <li>- ND Detection</li> <li>- ND Snooping</li> </ul> </li> <li>• IP Source Guard               <ul style="list-style-type: none"> <li>- 253 Entries</li> <li>- Source IP+Source MAC</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• IPv6 Source Guard               <ul style="list-style-type: none"> <li>- 183 Entries</li> <li>- Source IPv6 Address+Source MAC</li> </ul> </li> <li>• DoS Defend</li> <li>• DHCP Filter</li> <li>• Static/Dynamic/Permanent Port Security               <ul style="list-style-type: none"> <li>- Up to 64 MAC addresses per port</li> </ul> </li> <li>• Broadcast/Multicast/Unicast Storm Control               <ul style="list-style-type: none"> <li>- kbps/ratio control mode</li> </ul> </li> <li>• Port Isolation</li> <li>• Secure web management through HTTPS with SSLv3/TLS 1.2</li> <li>• Secure Command Line Interface (CLI) management with SSHv1/SSHv2</li> <li>• IP/Port/MAC based access control</li> </ul> |

## Software Features

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                    |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model        | TL-SG2008 V3 / TL-SG2008P / TL-SG2210P V3.20 / TL-SG2210MP / TL-SG2218 / TL-SG2428P / TL-SL2428P V4.20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                    |
| IPv6 Support | <ul style="list-style-type: none"> <li>• IPv6 Static Routing and ACL</li> <li>• IPv6 Dual IPv4/IPv6</li> <li>• IPv6 Interface</li> <li>• Multicast Listener Discovery (MLD) Snooping</li> <li>• IPv6 neighbor discovery (ND)</li> <li>• Path maximum transmission unit (MTU) discovery</li> <li>• Internet Control Message Protocol (ICMP) version 6</li> <li>• TCPv6/UDPv6</li> <li>• IPv6 applications               <ul style="list-style-type: none"> <li>- DHCPv6 Client</li> <li>- Ping6</li> <li>- Tracert6</li> <li>- Telnet(v6)</li> <li>- IPv6 SNMP</li> <li>- IPv6 SSH</li> <li>- IPv6 SSL</li> <li>- Http/Https</li> <li>- IPv6 TFTP</li> </ul> </li> </ul> |                                                                                                                                                                                                                                    |
| Management   | <ul style="list-style-type: none"> <li>• Web-based GUI</li> <li>• Command Line Interface (CLI) through telnet</li> <li>• SNMPv1/v2c/v3</li> <li>• SNMP Trap/Inform</li> <li>• RMON (1,2,3,9 groups)</li> <li>• SDM Template</li> <li>• DHCP/BOOTP Client</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>• Dual Image, Dual Configuration</li> <li>• CPU Monitoring</li> <li>• Cable Diagnostics</li> <li>• EEE</li> <li>• SNTP</li> <li>• System Log</li> </ul>                                     |
| MIBs         | <ul style="list-style-type: none"> <li>• MIB II (RFC1213)</li> <li>• Bridge MIB (RFC1493)</li> <li>• P/Q-Bridge MIB (RFC2674)</li> <li>• Radius Accounting Client MIB (RFC2620)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>• Radius Authentication Client MIB (RFC2618)</li> <li>• Remote Ping, Traceroute MIB (RFC2925)</li> <li>• Support TP-Link private MIBs</li> <li>• RMON MIB(RFC1757, rmon 1,2,3,9)</li> </ul> |

# Ordering Information

| Host Switch      |                                                                              |
|------------------|------------------------------------------------------------------------------|
| Model            | Description                                                                  |
| TL-SG2008 V3     | JetStream 8-Port Gigabit Smart Switch                                        |
| TL-SG2008P       | JetStream 8-Port Gigabit Smart Switch with 4-Port PoE+                       |
| TL-SG2210P V3.20 | JetStream 10-Port Gigabit Smart Switch with 8-Port PoE+                      |
| TL-SG2210MP      | JetStream 10-Port Gigabit Smart Switch with 8-Port PoE+                      |
| TL-SG2218        | JetStream 16-Port Gigabit Smart Switch with 2 SFP Slots                      |
| TL-SG2428P       | JetStream 28-Port Gigabit Smart Switch with 24-Port PoE+                     |
| TL-SL2428P V4.20 | JetStream 24-Port 10/100Mbps + 4-Port Gigabit Smart Switch with 24-Port PoE+ |

| SFP Modules |                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------|
| Model       | Description                                                                                      |
| TL-SM311LS  | Gigabit SFP module, Single-mode, LC interface, Up to 20km distance                               |
| TL-SM311LM  | Gigabit SFP module, Multi-mode, LC interface, Up to 550m distance                                |
| TL-SM321A   | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 20 km |
| TL-SM321A-2 | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 2 km  |
| TL-SM321B   | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 20 km |
| TL-SM321B-2 | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 2 km  |

| MC Series Media Converter |                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------|
| Model                     | Description                                                                                |
| MC210CS                   | Gigabit Single-Mode Media Converter, up to 20 km, chassis mountable                        |
| MC200CM                   | Gigabit multi-mode SC SFP Transceiver, up to 550 m, chassis mountable                      |
| MC200L                    | Gigabit SFP slot supporting mini-GBIC modules, chassis mountable                           |
| TL-MC1400                 | 14-slot power supply chassis for TP-LINK MC Series Media Converter, 19-inch rack-mountable |

| FC Series Media Converter |                                                                                               |
|---------------------------|-----------------------------------------------------------------------------------------------|
| Model                     | Description                                                                                   |
| TL-FC111A-20              | 100Mbps Single-Mode WDM Media Converter, up to 20 km, TX:1550nm, RX:1310nm, chassis mountable |
| TL-FC111B-20              | 100Mbps Single-Mode WDM Media Converter, up to 20 km, TX:1310nm, RX:1550nm, chassis mountable |
| TL-FC311A-2               | Gigabit Single-Mode WDM Media Converter, up to 2 km, TX:1550nm, RX:1310nm, chassis mountable  |
| TL-FC311B-2               | Gigabit Single-Mode WDM Media Converter, up to 2 km, TX:1310nm, RX:1550nm, chassis mountable  |
| TL-FC311A-20              | Gigabit Single-Mode WDM Media Converter, up to 20 km, TX:1550nm, RX:1310nm, chassis mountable |
| TL-FC311B-20              | Gigabit Single-Mode WDM Media Converter, up to 20 km, TX:1310nm, RX:1550nm, chassis mountable |
| TL-FC1400                 | 14-slot power supply chassis for TP-LINK FC Series Media Converter, 19-inch rack-mountable    |

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

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

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