

## **Smart Switches Datasheet**

MODELS: SG2005P-PD / SG2210XMP-M2 / SG2008 V4.20 / SG2008P V3.20 / SG2210P V5.20 / SG2210MP V4.20 / SG2016P V1.20 / SG2218 V1.20 / SG2218P V1.20 / SG2428P V5.20 / SL2428P V6.20



### Overview

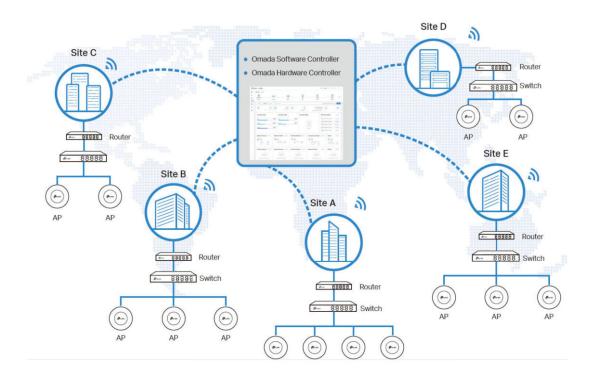
TP-Link's brand new Omada smart switches provide huge upgrade comparing with previous versions. The switches can be managed by Omada SDN Controller, which provides professional and reliable one-step solutions. Integrated L2 and L2+ features such as 802.1Q VLAN, QoS, IGMP Snooping and static routing provide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

# Omada Solution



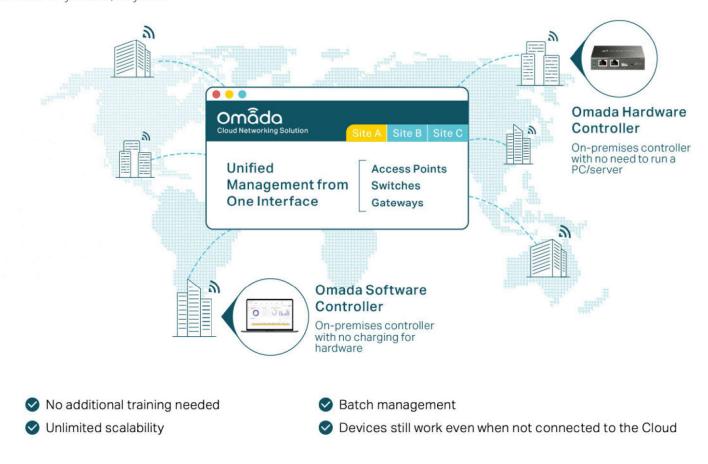
### Software Defined Networking (SDN) with Cloud Access

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.



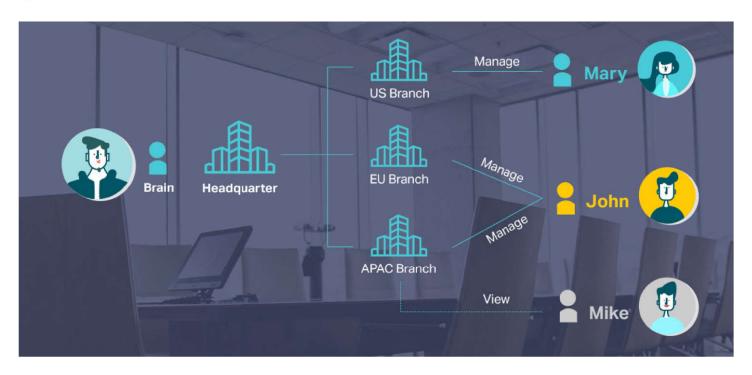
### Hassle-Free Centralized Cloud Management

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



### Assign Different Management Roles

Multi-user 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.

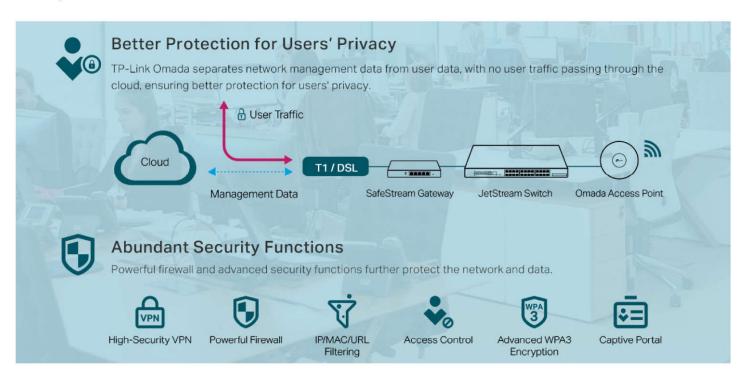


#### Easy and Intelligent Network Monitoring

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



## **Switch Product Features**

#### Highlights

- Gigabit/Multi-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 Omada 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 Omada 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 Omada 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 Fe   | eatures & Performance     |  |
|---------------|---------------------------|--|
|               | Product Picture           | Функтий () () () () () () () () () () () () ()   |
|               | Model                     | SG2005P-PD   |
|               | Interface                 | 5 10/100/1000Mbps RJ45 Ports   |
|               | Flash                     | 32 MB  |
| General       | DRAM                      | 256 MB   |
|               | Port Standard             | IEEE 802.3i:10BASE-T Ethernet; IEEE 802.3u:100BASE-X Fast Ethernet; IEEE 802.3ab:1000BASE-T Gigabit Ethernet;                                  |
|               | PoE Standard              | 802.3af/at/bt PoE in for port 5<br>802.3af/at PoE out for port 1-4   |
| PoE           | PoE Power Budget          | 64 W when powered by 802.3bt Type 4 (90 W) 44 W when powered by 802.3bt Type 3 (60 W) 19 W when powered by 802.3at 6 W when powered by 802.3at |
|               | Switching Capacity        | 10 Gbps  |
|               | Packet Forwarding Rate    | 7.44 Mpps  |
|               | MAC Address Table         | 8K   |
| Performance   | Packet Buffer             | 4.1 Mbit   |
| Performance – | Transmission Method       | Store and Forward  |
|               | Number of IP Interfaces   | 16   |
|               | Number of Static Routers  | 32 (IPv4, IPv6)  |
|               | Jumbo Frame               | 9 KB   |
|               | Power Supply              | Obtain Power from 802.3af/at/bt PoE Source   |
|               | Max Power Consumption     | 71.5 W (when powered by 802.3bt Type 4 (90 W))   |
|               | Max Heat Dissipation      | 243.99 BTU/hr (when powered by 802.3bt Type 4 (90 W))  |
|               | Standby Power Consumption | 6.7 W  |
|               | Dimensions<br>(W x D x H) | 6.7 × 3.9 × 1.5 in (170 × 100 × 38.5 mm)   |
|               | IP Rating                 | IP55   |
| Physical &    | Surge Protection          | 4 kV   |
| Environment - | Fan Quantity              | Fanless  |
|               | Installation              | Pole-Mounting/Wall-Mounting  |
|               | Operating Temperature     | -40 to 60 °C (-40 to 140 °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  |

|                           | Product Picture           |   |
|---------------------------|---------------------------|---|
|                           | Model                     | SG2210XMP-M2  |
|                           | Interface                 | 8 100/1000Mbps/2.5Gbps RJ45 Ports<br>2 10GE SFP+ Slots  |
|                           | Flash                     | 32 MB   |
|                           | DRAM                      | 256 MB  |
| General                   | Port Standard             | IEEE 802.3i:10BASE-T Ethernet; IEEE 802.3u:100BASE-X Fast Ethernet IEEE 802.3ab:1000BASE-T Gigabit Ethernet IEEE 802.3bz:2.5GBASE-T Ethernet IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber) IEEE 802.3ae: 10 Gigabit Ethernet over fiber |
|                           | PoE Standard              | 802.3af/at  |
| PoE                       | PoE Ports                 | 8, up to 30 W   |
|                           | PoE Power Budget          | 160 W   |
|                           | Switching Capacity        | 80 Gbps   |
|                           | Packet Forwarding Rate    | 59.52 Mpps  |
|                           | MAC Address Table         | 16K   |
|                           | Packet Buffer             | 12 Mbit   |
| Performance -             | Transmission Method       | Store and Forward   |
|                           | Number of IP Interfaces   | 32  |
|                           | Number of Static Routers  | 32 (IPv4, IPv6)   |
|                           | Jumbo Frame               | 9 KB  |
|                           | Power Supply              | 53.5VDC/3.37A Power Adapter   |
| _                         | Max Power Consumption     | 180.1 W (110V/60Hz) (with 160 W PD connected)   |
|                           | Max Heat Dissipation      | 614.58 BTU/hr (110V/60Hz) (with 160 W PD connected)   |
|                           | Standby Power Consumption | 13.3 W  |
| Physical &<br>Environment | Dimensions<br>(W x D x H) | 8.9 × 5.2 × 1.4 in (226 × 131 × 35 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   |

| Draw                   | luct Picture                 | · · · · · · · · · · · · · · · · · · ·   | € tiji tijik:  | P to motoring  |  |  |
|------------------------|------------------------------|---|--|--|--|--|
| Prod                   | luct Picture                 | E to allimine   |  | EXCELLIBRISHES DES                                     |  |  |
|                        | Model                        | SG2008 V4.20  | SG2008P V3.20  | SG2210P V5.20  |  |  |
|                        | Interface                    | 8 10/100/1000Mbps<br>RJ45 Ports   | 8 10/100/1000Mbps RJ45 ports                           | 8 10/100/1000Mbps RJ45 Ports<br>2 Gigabit SFP Slots    |  |  |
|                        | Flash                        | 32 MB   |  |  |  |  |
| General                | 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 SG2210P) |  |  |  |  |
|                        | PoE Standard                 |   | 802.3af/at   | 802.3af/at   |  |  |
| PoE                    | PoE Ports                    |   | 4, up to 30 W  | 8, up to 30 W  |  |  |
|                        | PoE Power Budget             |   | 62 W   | 61 W   |  |  |
|                        | Switching Capacity           | 16 Gbps   | 16 Gbps  | 20 Gbps  |  |  |
|                        | Packet Forwarding<br>Rate    | 11.90 Mpps  |  | 14.88 Mpps   |  |  |
|                        | MAC Address Table            | 8K  |  |  |  |  |
|                        | Packet Buffer                | 4.1 Mbit  |  |  |  |  |
| Performance            | Transmission<br>Method       | Store and Forward   |  |  |  |  |
|                        | Number of IP<br>Interfaces   | 16  |  |  |  |  |
|                        | Number of Static<br>Routers  | 32 (IPv4, IPv6)   |  |  |  |  |
|                        | Jumbo Frame                  | 9 KB  |  |  |  |  |
|                        | Power Supply                 | 12 VDC/1 A External Adapter or Obtain Power from PoE Source  53.5 VDC/1.31 A External Adapter   |  |  |  |  |
|                        | Max Power<br>Consumption     | 6.4 W (220 V/50 Hz)   | 77.3 W (110 V/60 Hz) (with 62 W PD connected)          | 77.8 W (110 V/60 Hz) (with 61 W<br>PD connected)       |  |  |
|                        | Max Heat<br>Dissipation      | 21.84 BTU/hr<br>(220 V/50 Hz)   | 263.6 BTU/hr (110 V/60 Hz)<br>(with 62 W PD connected) | 265.3 BTU/hr (110 V/60 Hz) (with<br>61 W PD connected) |  |  |
|                        | Standby Power<br>Consumption | 2.56 W (220 V/50 Hz)  | 2.8 W (110 V/60 Hz)                                    | 4.5 W (110 V/60 Hz)                                    |  |  |
| Physical & Environment | Dimensions<br>(W x D x H)    | 8.2 × 4.9 × 1.0 in (209 × 126 × 26 mm)  |  |  |  |  |
|                        | Fan Quantity                 | Fanless   |  |  |  |  |
|                        | Installation                 | Desktop/Wall-Mounting   |  |  |  |  |
|                        | Operating<br>Temperature     | 0 °C to 40 °C (32 °F to 104 °F)   |  |  |  |  |
|                        | Storage<br>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   |  |  |  |  |

| D  | duct Picture                 |   | A Committee of the Comm |   |  |  |
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| Model  |                              | SG2210MP V4.20  | SG2016P V1.20  | SG2218 V1.20  |  |  |
|  | Interface                    | 8 10/100/1000Mbps<br>RJ45 Ports<br>2 Gigabit SFP Slots  | 16 10/100/1000Mbps<br>RJ45 Ports   | 16 10/100/1000Mbps RJ45<br>Ports<br>2 Gigabit SFP Slots |  |  |
|  | Flash                        | 32 MB   |  |   |  |  |
|  | DRAM                         | 256 MB  |  |   |  |  |
| General  | Port Standard                | IEEE 802.3i:10BASE-T Ethernet; IEEE 802.3u:10CBASE-X Fast Ethernet; IEEE 802.3ab:1000BASE-T Gigabit Ethernet; IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber) For SG2016P: IEEE 802.3i:10BASE-T Ethernet; IEEE 802.3u:100BASE-X Fast Ethernet; IEEE 802.3ab:1000BASE-T Gigabit Ethernet |  |   |  |  |
|  | PoE Standard                 | 802.3af/at  |  |   |  |  |
| PoE  | PoE Ports                    | 8, up to 30 W   |  |   |  |  |
|  | PoE Power Budget             | 150 W   | 120 W  | -   |  |  |
|  | Switching Capacity           | 20 Gbps   | 32 Gbps  | 36 Gbps   |  |  |
|  | Packet Forwarding<br>Rate    | 14.88 Mpps  | 23.81 Mpps   | 26.78 Mpps  |  |  |
|  | MAC Address Table            | 8K  |  |   |  |  |
|  | Packet Buffer                | 4.1 Mbit  |  |   |  |  |
| Performance  | Transmission<br>Method       | Store and Forward   |  |   |  |  |
|  | Number of IP<br>Interfaces   | 16  |  |   |  |  |
|  | Number of Static<br>Routers  | 32 (IPv4, IPv6)   |  |   |  |  |
|  | Jumbo Frame                  | 9 KB  |  |   |  |  |
|  | Power Supply                 | 100-240V AC, 50/60Hz  | 53.5VDC/2.43A External<br>Adapter  | 100-240V AC, 50/60Hz                                    |  |  |
|  | Max Power<br>Consumption     | 174.2 W (110 V/60<br>Hz) (with 150 W PD<br>connected)   | 146.5 W (110V/60Hz) (with<br>120 W PD connected)   | 12.3 W (220 V/50 Hz)                                    |  |  |
|  | Max Heat Dissipation         | 594.46 BTU/hr (110<br>V/60 Hz) (with 150 W PD<br>connected)   | 499.98 BTU/hr<br>(110V/60Hz) (with 120 W<br>PD connected)  | 41.97 BTU/hr (220 V/50 Hz)                              |  |  |
|  | Standby Power<br>Consumption | 8.1 W (110 V/60 Hz)   | 9.0 W (110V/60Hz)  | 3.84 W (220 V/50 Hz)                                    |  |  |
| The state of the s | Dimensions                   | 11.6 x 7.1 x 1.7 in   | 11.3 × 4.4 × 1.0 in  | 17.3 × 7.1 × 1.7 in                                     |  |  |
| Physical &<br>Environment  | (W x D x H)                  | (294 x 180 x 44 mm)   | (286 × 111.7 × 25.4 mm)  | (440 × 180 × 44 mm)                                     |  |  |
|  | Fan Quantity                 | 1   | Fanless  |   |  |  |
|  | Installation                 | Rackmount/Desktop   | Desktop/Wall-Mounting  | Rackmount   |  |  |
|  | Operating<br>Temperature     | 0 °C to 50 °C (32 °F to<br>122 °F)  | 0 °C to 40 °C (32 °F to 104 °F)  | 0 °C to 50 °C (32 °F to 122 °I                          |  |  |
|  | Storage<br>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  |  |   |  |  |

| F                         | Product Picture              | HIII  |  | all to instance  |  |  |
|---------------------------|------------------------------|---|--|--|--|--|
|                           | Model                        | SG2218P V1.20   | SG2428P V5.20  | SL2428P V6.20  |  |  |
|                           | Interface                    | 16 10/100/1000Mbps<br>RJ45 ports<br>2 Gigabit SFP Slots   | 24 10/100/1000Mbps<br>RJ45 ports<br>4 Gigabit SFP Slots      | 24 10/100 Mbps RJ45<br>Ports<br>2 10/100/1000 Mbps<br>RJ45 Ports<br>2 Combo Gigabit RJ45/<br>SFP Ports   |  |  |
|                           | Flash                        | 32 MB   |  |  |  |  |
|                           | DRAM                         | 256 MB  |  |  |  |  |
| General -                 | Port Standard                | IEEE 802.3i:10BASE-T Ethernet; IEEE 802.3u:100BASE-X Fast Ethernet; IEEE 802.3ab:1000BASE-T Gigabit Ethernet; IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber) |  | IEEE 802.3i:10BASE-T<br>Ethernet;<br>IEEE 802.3u:100BASE-X<br>Fast Ethernet;<br>IEEE 802.3ab:1000BASE-<br>Gigabit Ethernet;<br>IEEE 802.3z:1000BASE-X<br>Gigabit Ethernet (Optical<br>fiber) |  |  |
|                           | PoE Standard                 | 802.3af/at  |  |  |  |  |
| PoE                       | PoE Ports                    | 16, up to 30 W  | 24, up to 30 W   |  |  |  |
|                           | PoE Power Budget             | 150 W   | 250 W  |  |  |  |
|                           | Switching Capacity           | 36 Gbps   | 56 Gbps  | 12.8 Gbps  |  |  |
|                           | Packet Forwarding Rate       | 26.78 Mpps  | 41.66 Mpps   | 9.52 Mpps  |  |  |
|                           | MAC Address Table            | 8K  |  |  |  |  |
|                           | Packet Buffer                | 4.1 Mbit  |  |  |  |  |
| Performance               | Transmission Method          | Store and Forward   |  |  |  |  |
|                           | Number of IP Interfaces      | 16  |  |  |  |  |
|                           | Number of Static Routers     | 32 (IPv4, IPv6)   |  |  |  |  |
|                           | Jumbo Frame                  | 9 KB  |  |  |  |  |
|                           | Power Supply                 | 100-240V AC, 50/60Hz  |  |  |  |  |
|                           | Max Power Consumption        | 181.4 W (110 V/60<br>Hz) (with 150 W PD<br>connected)<br>178.3 W (220 V/50<br>Hz) (with 150 W PD<br>connected)  | 301.1 W (110 V/60<br>Hz) (with 250 W PD<br>connected)        | 291.6 W (110 V/60 Hz) (wit<br>250 W PD connected)  |  |  |
|                           | Max Heat Dissipation         | 619.06 BTU/hr (110<br>V/60 Hz) (with 150 W<br>PD connected)<br>608.52 BTU/hr (220<br>V/50 Hz) (with 150 W<br>PD connected)  | 1027.40 BTU/hr (110<br>V/60 Hz) (with 250 W<br>PD connected) | 995.09 BTU/hr (110<br>V/60 Hz) (with 250 W PD<br>connected)  |  |  |
| Physical &<br>Environment | Standby Power<br>Consumption | 9.7 W (110V/60 Hz)<br>9.5 W (220V/50 Hz)  | 15.6 W (110V/60 Hz)  | 13.2 W (110V/60 Hz)  |  |  |
| _                         | Dimensions<br>(W x D x H)    | 17.3 × 7.1 × 1.7 in<br>(440 × 180 × 44 mm)  | 17.3 × 8.7 × 1.7 in<br>(440 × 220 × 44 mm)                   | 17.3 × 7.1 × 1.7 in<br>(440 × 180 × 44 mm)   |  |  |
|                           | Fan Quantity                 | 1   | 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-cor  | ndensing   |  |  |  |
|                           | Storage Humidity             | 5% to 90% RH, non-condensing  |  |  |  |  |
|                           | Certification                | CE, FCC, RoHS   |  |  |  |  |

| Software Features |  |   |
|-------------------|--|---|
| Model             | SG2005P-PD / SG2210XMP-M2 / SG2008 V4.20 / SG2016P V1.20 / SG2218 V1.20 / SG2218P V1.20  | SG2008P V3.20/ SG2210P V5.20 / SG2210MP V4.20<br>D / SG2428P V5.20/ SL2428P V6.20   |
| SDN Support       | <ul> <li>Support Omada Hardware Controller, Software<br/>Controller</li> <li>Automatic Device Discovery</li> <li>Batch Configuration</li> <li>Batch Firmware Upgrading</li> </ul>  | <ul><li>Intelligent Network Monitoring</li><li>Abnormal Event Warnings</li><li>Unified Configuration</li><li>Reboot Schedule</li></ul>  |
| L2+ Features      | <ul> <li>16 IP Interfaces (32 for SG2210XMP-M2)</li> <li>Support IPv4/IPv6 Interface</li> <li>Static Routing</li> <li>32 IPv4/IPv6 Static Routes</li> <li>DHCP Server</li> <li>DHCP Relay</li> <li>DHCP Interface Relay</li> <li>DHCP VLAN Relay</li> <li>DHCP L2 Relay</li> </ul>   | Static ARP     Proxy ARP     Gratuitous ARP   |
| L2 Features       | <ul> <li>Link Aggregation</li> <li>Static link aggregation</li> <li>802.3ad LACP</li> <li>Up to 8 aggregation groups and up to 8 ports per group</li> <li>Spanning Tree Protocol</li> <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> <li>Loopback Detection</li> </ul> | <ul> <li>Flow Control</li> <li>802.3x Flow Control</li> <li>Mirroring</li> <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> <li>Device Link Detect Protocol (DLDP)</li> <li>802.1ab LLDP/ LLDP-MED</li> </ul> |
| L2 Multicast      | <ul> <li>511 IPv4, IPv6 shared multicast groups</li> <li>IGMP Snooping</li> <li>IGMP v1/v2/v3 Snooping</li> <li>Fast Leave</li> <li>IGMP Snooping Querier</li> <li>Static Group Config</li> <li>Multicast VLAN Registration (MVR)</li> <li>Multicast Filtering</li> </ul>  | <ul> <li>MLD Snooping</li> <li>MLD v1/v2 Snooping</li> <li>Fast Leave</li> <li>MLD Snooping Querier</li> <li>Static Group Config</li> <li>Limited IP Multicast (256 profiles and 16 entries per profile)</li> </ul>   |
| VLAN              | <ul><li>VLAN Group</li><li>- Max. 4K VLAN Groups</li><li>802.1Q tag VLAN</li><li>MAC VLAN (12 entries)</li></ul>   | Protocol VLAN GVRP Voice VLAN   |
| QoS               | <ul> <li>802.1p CoS/DSCP priority</li> <li>8 priority queues</li> <li>Priority Schedule Mode</li> <li>SP (Strict Priority)</li> <li>WRR (Weighted Round Robin)</li> <li>Queue Weight Config</li> </ul>   | <ul> <li>Bandwidth Control</li> <li>Port/Flow based Rating Limit</li> <li>Smoother Performance</li> <li>Storm Control</li> <li>Multiple Control Modes(kbps/ratio)</li> <li>Broadcast/Multicast/Unknown-Unicast Control</li> </ul>   |

| Software Features | 5   |   |  |
|-------------------|---|---|--|
| Model             | SG2005P-PD / SG2210XMP-M2 / SG2008 V4.20 / SG2008P V3.20 / SG2210P V5.20 / SG2210MP V4.20 / SG2016P V1.20 / SG2218 V1.20 / SG2218P V1.20 / SG2428P V5.20 / SL2428P V6.20  |   |  |
| ACL               | Support up to 230 entries  Time-Range Time Slice Week Time-Range Absolute Time-Range Holiday  Time-based ACL  MAC ACL Source MAC Destination MAC User Priority Ether Type  IP ACL Source IP Destination IP IP Protocol TCP Flag TCP/UDP Source Port TCP/UDP Destination Port DSCP/IP TOS  | <ul> <li>IPv6 ACL</li> <li>Combined ACL</li> <li>Rule Operation <ul> <li>Permit/Deny</li> </ul> </li> <li>Policy Action <ul> <li>Mirror</li> <li>Rate Limit</li> <li>Redirect</li> <li>QoS Remark</li> </ul> </li> <li>ACL Rules Binding <ul> <li>Port Binding</li> <li>VLAN Binding</li> </ul> </li> <li>Actions for flows <ul> <li>Mirror (to supported interface)</li> <li>Redirect (to supported interface)</li> </ul> </li> <li>Rate Limit</li> <li>QoS Remark</li> </ul>  |  |
| Security          | <ul> <li>AAA</li> <li>802.1X <ul> <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> <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> <li>253 Entries</li> <li>Source IP+Source MAC</li> </ul> </li> </ul> | <ul> <li>IPv6 Source Guard</li> <li>183 Entries</li> <li>Source IPv6 Address+Source MAC</li> <li>DoS Defend</li> <li>DHCP Filter</li> <li>Static/Dynamic/Permanent Port Security</li> <li>Up to 64 MAC addresses per port</li> <li>Broadcast/Multicast/Unicast Storm Control</li> <li>kbps/ratio control mode</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 | 3   |  |
|-------------------|---|--|
| Model             | SG2005P-PD / SG2210XMP-M2 / SG2008 V4.20 /<br>/ SG2016P V1.20 / SG2218 V1.20 / SG2218P V1.2   | SG2008P V3.20/ SG2210P V5.20 / SG2210MP V4.20<br>20 / SG2428P V5.20/ SL2428P V6.20   |
| IPv6 Support      | IPv6 Static Routing and ACL  IPv6 Dual IPv4/IPv6  IPv6 Interface  Multicast Listener Discovery (MLD) Snooping  IPv6 neighbor discovery (ND)  Path maximum transmission unit (MTU) discovery  Internet Control Message Protocol (ICMP) version  TCPv6/UDPv6  IPv6 applications  DHCPv6 Client  Ping6  Tracert6  Telnet(v6)  IPv6 SNMP  IPv6 SSH  IPv6 SSL  Http/Https  IPv6 TFTP |  |
| Management        | Web-based GUI Command Line Interface (CLI) through telnet SNMPv1/v2c/v3 SNMP Trap/Inform RMON (1,2,3,9 groups) SDM Template DHCP/BOOTP Client   | <ul> <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> <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> <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  |
| SG2005P-PD     | Omada 5-Port Gigabit Smart Switch with 1-Port PoE++ in and 4-Port PoE+ out |
| SG2210XMP-M2   | Omada 8-Port 2.5GBASE-T and 2-Port 10GE SFP+ Smart Switch with 8-Port PoE+ |
| SG2008 V4.20   | Omada 8-Port Gigabit Smart Switch  |
| SG2008P V3.20  | Omada 8-Port Gigabit Smart Switch with 4-Port PoE+                         |
| SG2210P V5.20  | Omada 10-Port Gigabit Smart Switch with 8-Port PoE+                        |
| SG2210MP V4.20 | Omada 10-Port Gigabit Smart Switch with 8-Port PoE+                        |
| SG2016P V1.20  | Omada 16-Port Gigabit Smart Switch with 8-Port PoE+                        |
| SG2218 V1.20   | Omada 16-Port Gigabit Smart Switch with 2 SFP Slots                        |
| SG2218P V1.20  | Omada 18-Port Gigabit Smart Switch with 16-Port PoE+                       |
| SG2428P V5.20  | Omada 28-Port Gigabit Smart Switch with 24-Port PoE+                       |
| SL2428P V6.20  | Omada 24-Port 10/100Mbps + 4-Port Gigabit Smart Switch with 24-Port PoE+   |

| SFP Modules |  |
|-------------|--|
| Model       | Description  |
| SM311LS     | Gigabit SFP module, Single-mode, LC interface, Up to 20km distance                               |
| SM311LM     | Gigabit SFP module, Multi-mode, LC interface, Up to 550m distance                                |
| SM321A      | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 20 km |
| SM321A-2    | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 2 km  |
| SM321B      | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 20 km |
| SM321B-2    | Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 2 km  |
| SM5110-LR   | 10GBase-LR SFP+ LC Transceiver, single-mode, LC connector, 1310nm, 10 km                         |
| SM5110-SR   | 10GBase-SR SFP+ LC Transceiver, multi-mode, LC connector, 850nm, 300 m                           |

| RJ45 SFP/SFP+ Modules |                            |  |
|-----------------------|----------------------------|--|
| Model                 | Description                |  |
| SM331T                | 1000BASE-T RJ45 SFP Module |  |
| SM5310-T              | 10GBASE-T RJ45 SFP+ Module |  |

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

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

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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