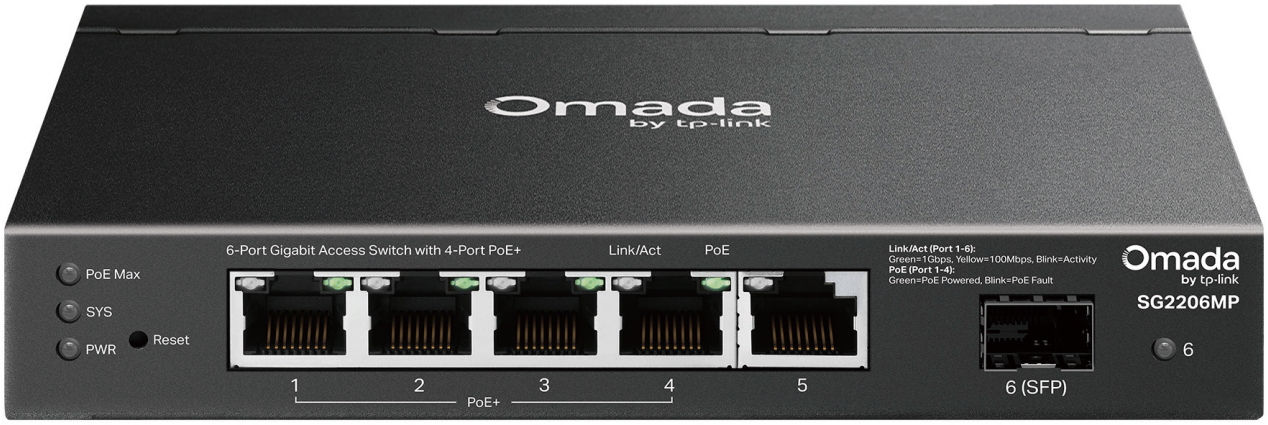
Omada Access Switch | Datasheet

SG2206MP

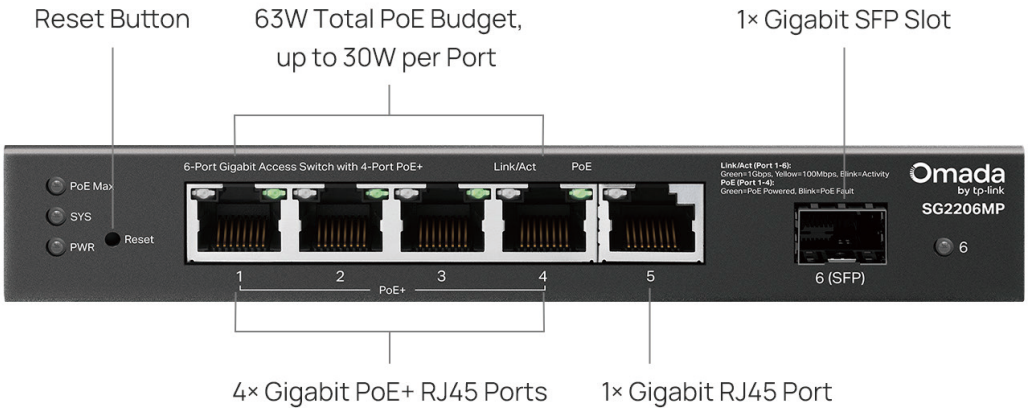
Omada 6-Port Gigabit Access Switch with 4-Port PoE+

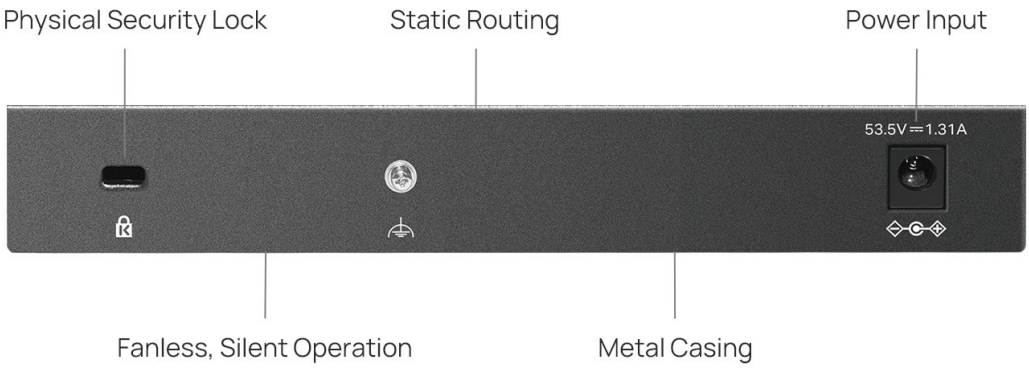


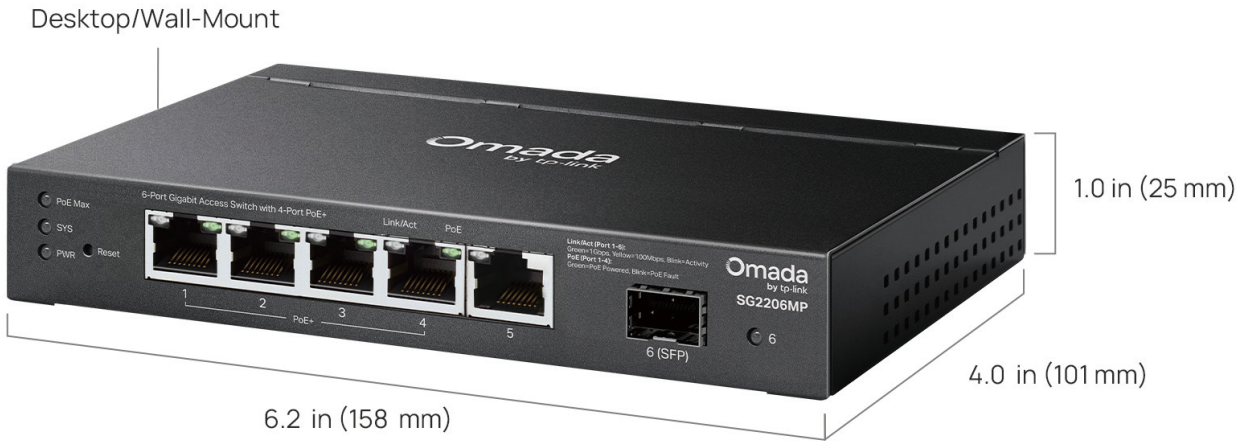
Highlights

- 5× Gigabit RJ45 ports (4× PoE+) and 1× Gigabit SFP slot
- 63W total PoE budget with up to 30W for each PoE+ port*
- Centralized cloud management via the web or the Omada app†
- Standalone management via web, CLI, SNMP, and RMON
- Static Routing helps route internal traffic for higher efficiency
- VLAN, ACL, QoS, and IGMP Snooping
- Durable metal casing and desktop/wall mounting design

Product Pictures

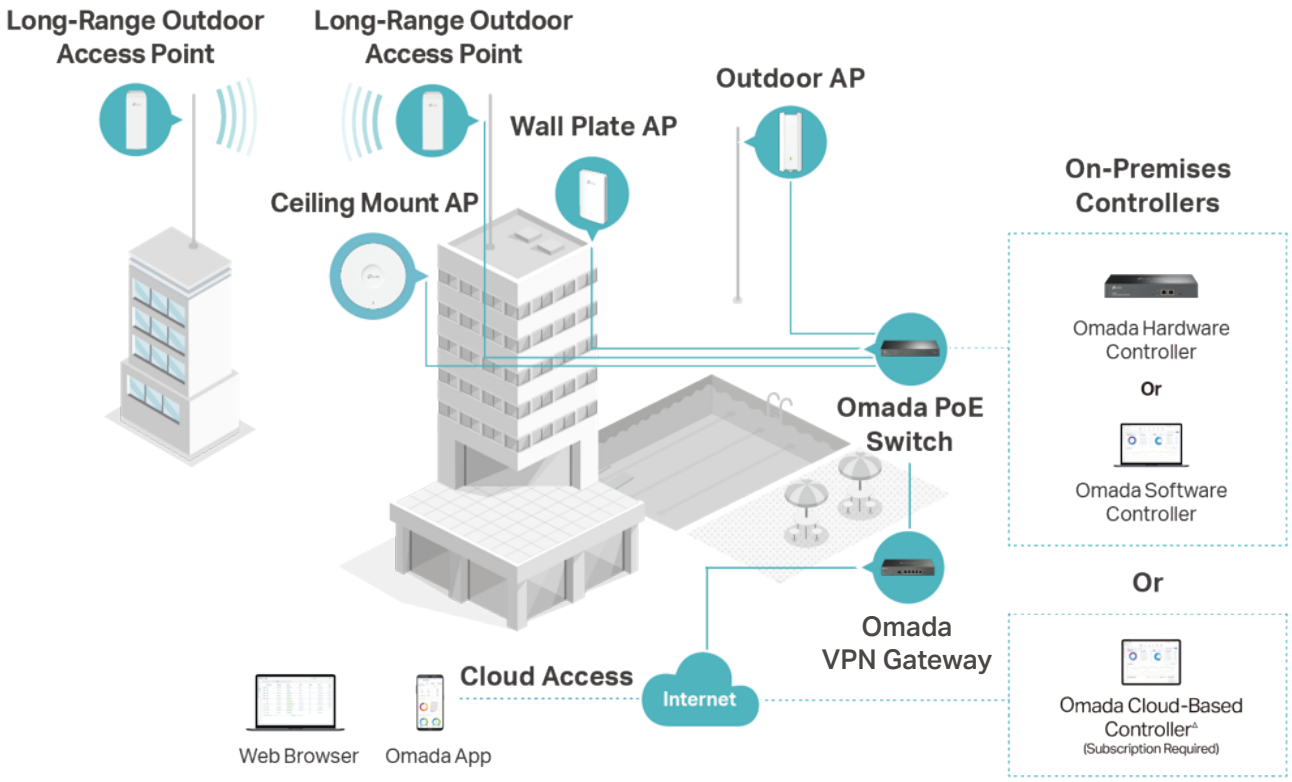






Omada Solution

Omada's 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.



Hassle-Free Cloud or On-Premises Controllers

Zero-Touch Provisioning (ZTP)†

Multi-Site Cloud Management

Intelligent Monitoring

Specifications

Hardware Features & Performance		
Model		SG2206MP
General	Interface	4× 10/100/1000 Mbps PoE+ RJ45 Ports 1× 10/100/1000 Mbps RJ45 Port 1× Gigabit SFP Port
	Flash	32 MB
	DRAM	256 MB
	Port Standard	IEEE 802.3: Ethernet Media Access Control (MAC) Protocol 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 802.3x: Flow Control IEEE 802.3az: Energy Efficient Ethernet IEEE 802.3ad: Link Aggregation and LACP Basics IEEE 802.1p: Traffic Class Expediting and Dynamic Multicast Filtering IEEE 802.1q: Virtual Bridged Local Area Networks IEEE 802.1ab: Station and Media Access Control Connectivity Discovery (LLDP) IEEE 802.1d: Spanning Tree Protocol IEEE 802.1s: Multiple Spanning Tree Protocol IEEE 802.1w: Rapid Spaning Tree Protocol IEEE 802.1x: Port Based Network Access Control
PoE	PoE Standard	802.3 af/at
	PoE Ports	Port 1-4, up to 30 W per port
	PoE Power Budget	63 W
	Fast PoE	Yes
	Perpetual PoE	Yes
Performance	Switching Capacity	12 Gbps
	Packet Forwarding Rate	8.93 Mpps
	MAC Address Table	8K
	Packet Buffer	4.1 Mbit
	Transmission Method	Store and Forward
	Jumbo Frame	9 KB

Hardware Features & Performance

Model		SG2206MP
Physical & Environment Physical & Environment	Power Supply	53.5 VDC / 1.31 A
	Standby Power Consumption	2.8 W (110V/60Hz)
	Max Power Consumption	73.7 W (110V/60Hz) (with 63 W PD connected)
	Max Heat Dissipation	250.4 BTU/hr (110V/60Hz) (with 63 W PD connected)
	MTBF	668365 h @ 25°C
	Dimensions (W x D x H)	6.2 × 4.0 × 1.0 in (158 × 100.7 × 25.4 mm)
	Fan Quantity	Fanless
	Installation	Desktop / Wall Mounting
	Operating Temperature	-5 °C to 40 °C (23 °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
	Surge Protection	±6 kV in common mode for Ethernet ports ±2 kV in common mode for DC power input ports
	ESD Protection	Air: ±8 kV, Contact: ±4 kV
	Certification	CE, FCC, RoHS

Software Features	
Model	SG2206MP
SDN Support	• Support Hardware Controller, Software Controller, Cloud-Based Controller • Automatic Device Discovery • Batch Configuration • Batch Firmware Upgrading • Intelligent Network Monitoring • Abnormal Event Warnings • Unified Configuration • Reboot Schedule
L2+ Features	• 32 IP Interfaces - Support IPv4/IPv6 Interface • Static Routing - 32 IPv4/IPv6 Static Routes • DHCP Server • DHCP Relay - DHCP Interface Relay - DHCP VLAN Relay • DHCP L2 Relay • Static ARP • Proxy ARP • Gratuitous ARP
L2 Features	• Link Aggregation - Static Link Aggregation - 802.3ad LACP - Up to 8 aggregation groups and up to 6 ports per group • Loopback Detection • Flow Control - 802.3x Flow Control • Mirroring - Port Mirroring - CPU Mirroring - One-to-One - Many-to-One - Flow-Based - Ingress/Egress/Both • Port Statistics - Port Mirror Status - Traffic Statistics • 802.1ab LLDP / LLDP-MED • Spanning Tree - STP (802.1d) - RSTP (802.1w) - MSTP (802.1s) - STP Security: TC Protect, BPDU Filter/Protect, Root Protect

Software Features	
Model	SG2206MP
L2 Multicast	• 511 IPv4, IPv6 shared multicast groups • IGMP Snooping - IGMP v1/v2/v3 Snooping - Fast Leave - IGMP Snooping Querier - Static Group Config • Multicast VLAN Registration (MVR) • Multicast Filtering • MLD Snooping - MLD v1/v2 Snooping - Fast Leave - MLD Snooping Querier - Static Group Config • Limited IP Multicast (256 profiles and 16 entries per profile)
VLAN	• VLAN Group - Max. 4K VLAN Groups • 802.1Q tag VLAN • MAC VLAN (16 entries) • Protocol VLAN • GVRP • Voice VLAN
QoS	• 802.1p DSCP Priority • 8 Priority Queues • Priority Schedule Mode - SP (Strict Priority) - WRR (Weighted Round Robin) • Queue Weight Config • Bandwidth Control - Port/Flow-Based Rate Limit • Storm Control - Multiple Control Modes (kbps/pps) - Broadcast/Multicast/Unknown-Unicast Control
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 - VLAN ID - 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

Software Features	
Model	SG2206MP
ACL	• IPv6 ACL • Combined ACL • Rule Operation - Permit/Deny • Policy Action - Mirror - Rate Limit - Redirect - QoS Remark • ACL Rules Binding - Port Binding - VLAN Binding • Actions for flows - Mirror (to supported interface) - Redirect (to supported interface) - Rate Limit - QoS Remark
Security	• AAA • 802.1X - Port based authentication - MAC (Host) based authentication - Authentication Method includes PAP/EAP-MD5 - MAB - Guest VLAN - Support Radius authentication and accountability • IP/IPv6-MAC Binding - 512 Binding Entries - DHCP Snooping - DHCPv6 Snooping - ARP Inspection - ND Detection - ND Snooping • IP Source Guard - 253 Entries - Source IP+Source MAC • IPv6 Source Guard - 183 Entries - Source IPv6 Address+Source MAC • DoS Defend • DHCP Filter • Static/Dynamic/Permanent Port Security - Up to 64 MAC addresses per port • Broadcast/Multicast/Unicast Storm Control - kbps/ratio control mode • Port Isolation • Secure web management through HTTPS with SSLv3/TLS 1.2 • Secure Command Line Interface (CLI) management with SSHv1/SSHv2 • IP/Port/MAC based access control

Software Features	
Model	SG2206MP
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 6 • 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 • Dual Image, Dual Configuration • CPU Monitoring • Cable Diagnostics • IEEE 802.1az Energy Efficient Ethernet (EEE) • SNTP • System Log • Digital Diagnostic Monitoring (DDM) • Operation Administration and Maintenance (OAM)
MIBs	• MIB II (RFC1213) • Bridge MIB (RFC1493) • P/Q-Bridge MIB (RFC2674) • Radius Accounting Client MIB (RFC2620) • Radius Authentication Client MIB (RFC2618) • Remote Ping, Traceroute MIB (RFC2925) • Support TP-Link private MIBs • RMON MIB(RFC1757, rmon 1,2,3,9)

Ordering Information

Host Switch	
Model	Description
SG2206MP	Omada 6-Port Gigabit Access Switch with 4-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

RJ45 SFP Modules	
Model	Description
SM331T	1000BASE-T RJ45 SFP Module

MC Series Media Converter	
Model	Description
MC210CS	Gigabit Single-Mode Media Converter, up to 20 km, chassis mountable
MC200CM	Gigabit Multi-Mode Media Converter, up to 550 m, chassis mountable
MC220L	Gigabit SFP Media Converter, chassis mountable

*PoE budget calculations are based on laboratory testing. The actual PoE power budget is not guaranteed and will vary due to client limitations and environmental factors.

†These functions require the use of the Omada Controller. Zero-Touch Provisioning requires the use of the Omada Cloud-Based Controller (Omada Cloud Standard or Omada Cloud Essentials). Go to the Omada Cloud-Based Controller (Omada Cloud Standard) Product List or Omada Cloud Essentials Product List to find all the supported models.