Omada Switch | Datasheet

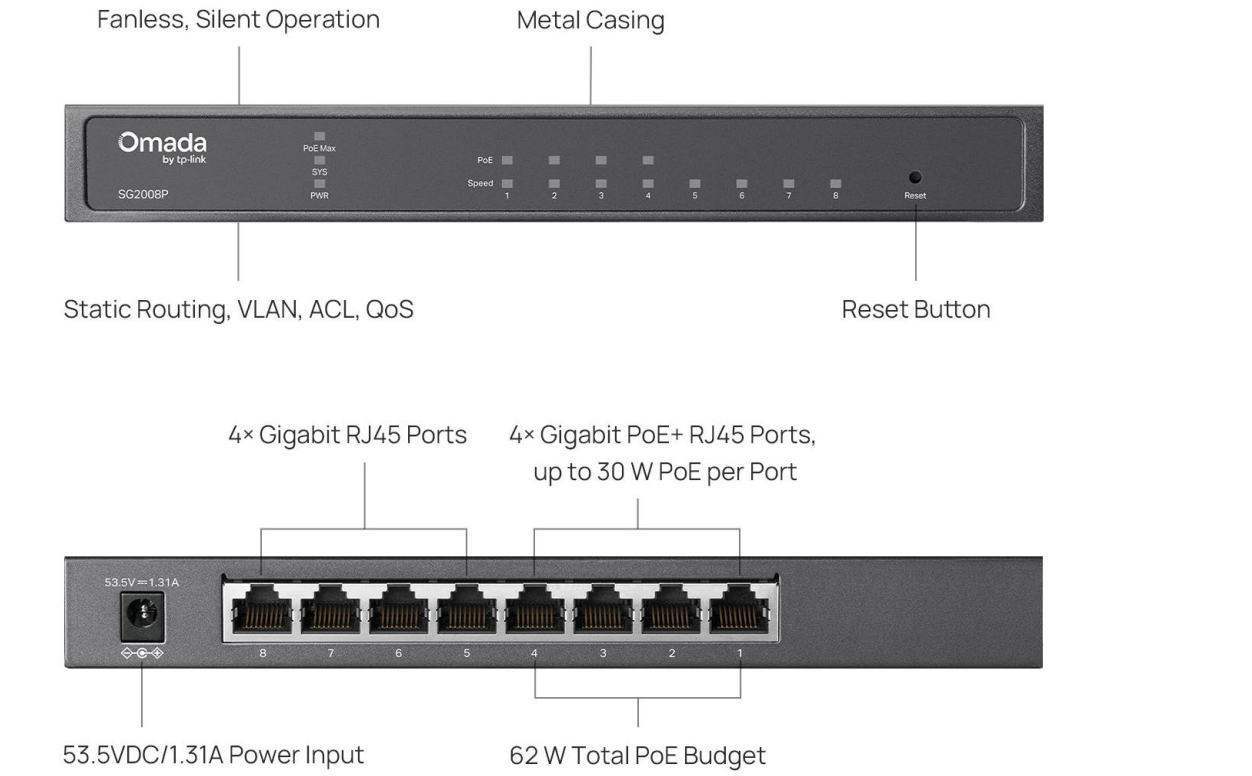
SG2008P

Omada Access 8-Port Gigabit Switch with 4-Port PoE+

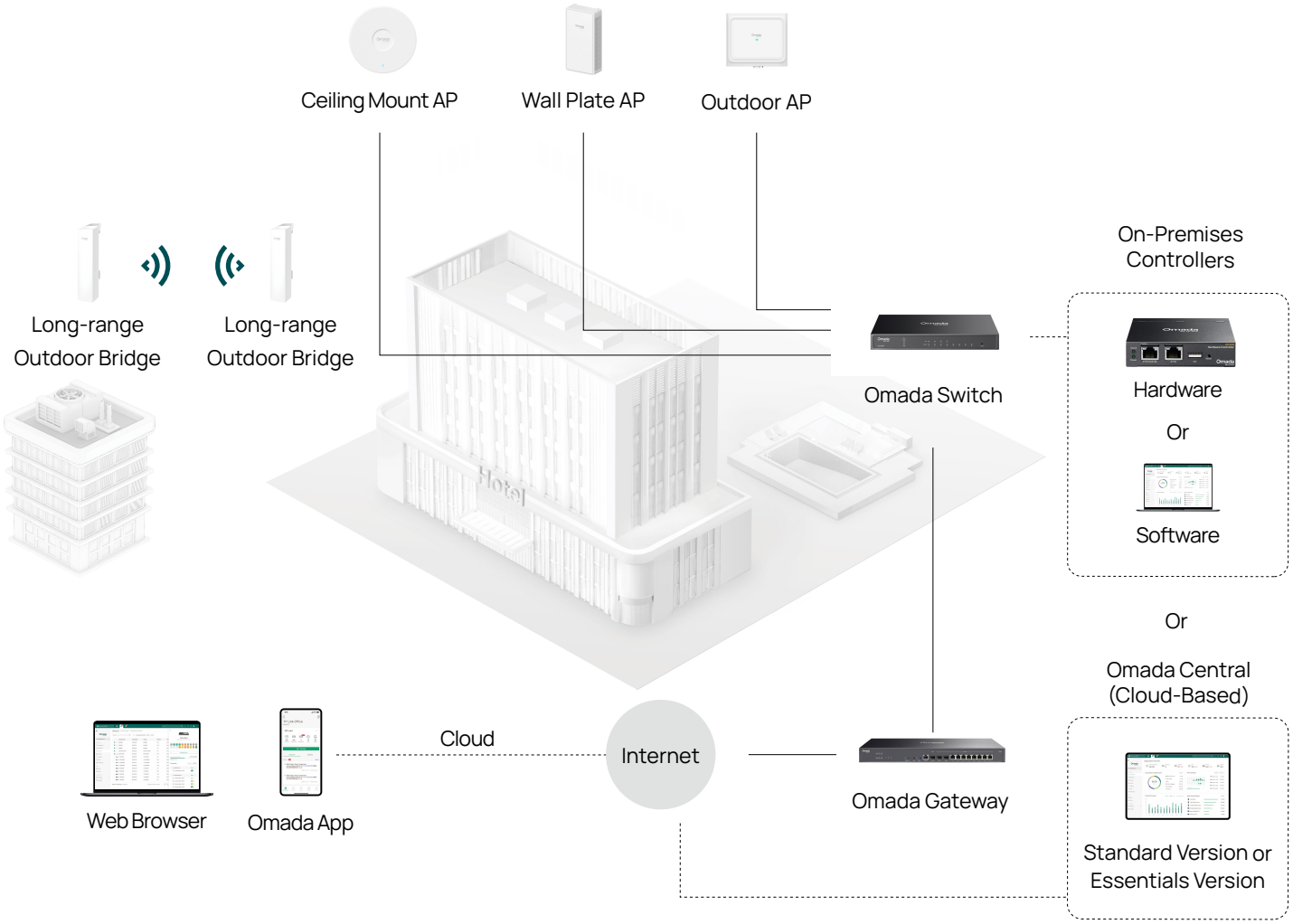
Highlights

- 8× Gigabit ports (4× 802.3at/af-compliant PoE+ ports)
- 62 W total PoE budget with up to 30 W PoE output per 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
- Fanless design for silent operation
- Durable metal casing and desktop/wall mounting design

Product Picture



Omada Solution



Hassle-Free Cloud or On-Premises Controllers

Zero-Touch Provisioning (ZTP)†

Multi-Site Cloud Management

Intelligent Monitoring

Specifications

Hardware Features & Performance		
Model		SG2008P
General	Interface	8 × 10/100/1000Mbps RJ45 Ports
	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
PoE	PoE Standard	802.3af/at
	PoE Ports	4, up to 30 W per port
	PoE Power Budget	62 W
	Fast PoE	YES
	Perpetual PoE	YES
Performance	Switching Capacity	16 Gbps
	Packet Forwarding Rate	11.90 Mpps
	MAC Address Table	8K
	Packet Buffer	4.1 Mbit
	Transmission Method	Store and Forward
	Number of IP Interfaces	32
	Number of Static Routers	32 (IPv4, IPv6)
	Jumbo Frame	9 KB
Physical & Environment	Power Supply	53.5 VDC/1.31 A External Adapter
	Max Power Consumption	73.4 W (220 V/50 Hz @ 25 °C) (with 62 W PD connected) 74.7 W (110 V/60 Hz @ 25 °C) (with 62 W PD connected)
	Standby Power Consumption	3.0 W (220 V/50 Hz) 2.9 W (110 V/60 Hz)
	Max Heat Dissipation	249.39 BTU/hr (220 V/50 Hz @ 25 °C) (with 62 W PD connected) 254.12 BTU/hr (110 V/60 Hz @ 25 °C) (with 62 W PD connected)
	Fan Quantity	Fanless
	Surge Protection	Service port: ±6 kV in common mode
	ESD Protection	Air: ±8.5 kV, Contact: ±4.5 kV
	MTBF	1371318 h @ 25 °C
	Dimensions (W x D x H)	8.2 × 4.9 × 1.0 in (209 × 126 × 26 mm)
	Net Weight	0.6 kg (1.32 lbs)
	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
	Certification	CE, FCC, RoHS

Software Features[Δ]

Model	SG2008P	
SDN Support	• Support Omada Hardware Controller, Software Controller • Automatic Device Discovery • Batch Configuration • Batch Firmware Upgrading	• Intelligent Network Monitoring • Abnormal Event Warnings • Unified Configuration • Reboot Schedule
L3 Features	• 32 IPv4/IPv6 Interfaces • 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 8 ports per group • Spanning Tree Protocol - 802.1d STP - 802.1w RSTP - 802.1s MSTP - STP Security: TC Protect, BPDU Filter, BPDU Protect, Root Protect • Loopback Detection - Port based - VLAN based	• Flow Control - 802.3x Flow Control • Mirroring - Port Mirroring - CPU Mirroring - One-to-One - Many-to-One - Flow-Based - Ingress/Egress/Both • Device Link Detect Protocol (DLDP) • 802.1ab LLDP/ LLDP-MED
L2 Multicast	• Supports 511 (IPv4, IPv6) IGMP groups • IGMP Snooping - IGMP v1/v2/v3 Snooping - Fast Leave - IGMP Snooping Querier - Static Group Config • Multicast VLAN Registration (MVR) • Multicast Filtering	• Multicast Listener Discovery (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 Tagged VLAN • MAC VLAN (12 entries)	• Protocol VLAN (IEEE 802.1v) • GVRP • Voice VLAN
QoS	• 802.1p CoS/DSCP priority • 8 priority queues • Priority Schedule Mode - Strict Priority (SP) - Weighted Round Robin (WRR) • Queue Weight Config	• Bandwidth Control - Port/Flow based Rating Limit • Smoother Performance • Storm Control - Multiple Control Modes (kbps/ratio) - Broadcast/Multicast/Unknown-Unicast Control

Software Features[△]

Model	SG2008P	
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	• 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	• Authentication, Authorization, Accounting (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 - Dynamic ARP Inspection (DAI) - 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
IPv6 Support	• IPv6 Static Routing and ACL • IPv4/IPv6 Dual Stack • IPv6 Interface • 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

Software Features[△]

Model	SG2008P	
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 • Dying Gasp • ONVIF
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)

Others

Package Content	• SG2008P Switch • Power Adapter • Power Cord • Rubber Feet • Installation Guide
System Requirements	Microsoft® Windows® 98SE, NT, 2000, XP, Vista™ or Windows 7/8/10/11, MAC® OS, NetWare®, UNIX® or Linux.

Ordering Information

Host Switch	
Model	Description
SG2008P	Omada Access 8-Port Gigabit Switch with 4-Port PoE+

MC Series Media Converter	
Model	Description
MC220L	Gigabit SFP Media Converter, up to 100 m, chassis mountable
MC210CS	Gigabit Single-Mode Media Converter, up to 20 km, chassis mountable
MC211CS-20	Gigabit WDM Media Converter, up to 20 km, chassis mountable
MC212CS-20	Gigabit WDM Media Converter, up to 20 km, chassis mountable
MC211CS-2	Gigabit WDM Media Converter, up to 2 km, chassis mountable
MC212CS-2	Gigabit WDM Media Converter, up to 2 km, chassis mountable
MC200CM	Gigabit Multi-Mode Media Converter, up to 550 m, chassis mountable

†These functions require the use of the Omada SDN Controller. Zero-Touch Provisioning requires the use of the Omada Cloud-Based Controller. Go to the Omada Cloud-Based Controller Product List to find all the models supported by the Omada Cloud-Based Controller.

*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.

△Some features are available only after upgrading to the latest software version.