

Omada Easy Managed Switch | Datasheet

ES210GMP

Omada 10-Port Gigabit Easy Managed Switch with 8-Port PoE+



Highlights

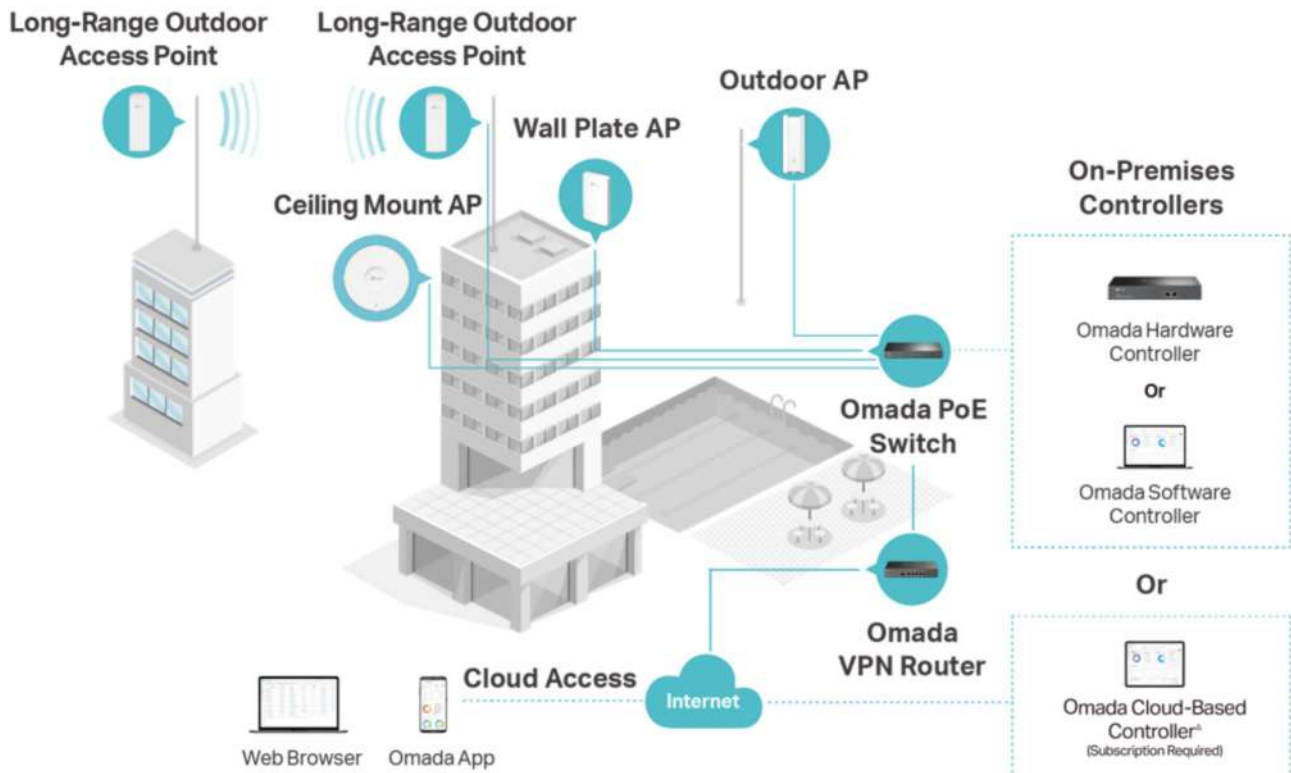
- 8× Gigabit 802.3at/af-compliant PoE+ RJ45 ports
- 1× Gigabit RJ45 port, 1× Gigabit SFP/RJ45 Combo port
- 123W Power Budget, with up to 30W for each PoE port*
- Easy to Use: Supports plug-and-play for instant connectivity and simple configuration for additional features
- Centralized Cloud Management via the web or the Omada app[†]
- Up to 250m PoE^{**}, QoS^Δ, PoE Auto Recovery[‡], and Port Isolation for reliable surveillance networking
- Automatic Loop Prevention, VLAN, and IGMP Snooping
- Fanless design for silent operation
- 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



Multi-Site Cloud Management



Zero-Touch Provisioning (ZTP)[†]



Intelligent Monitoring

Specifications

Hardware Features & Performance

Model		ES210GMP
General	Interface	8× 10/100/1000 Mbps PoE+ RJ45 Ports 1× 10/100/1000 Mbps RJ45 Port 1× Gigabit SFP/RJ45 Combo Port
	Flash	64 Mbit
	Port Standard	IEEE 802.3i:10BASE-T Ethernet; IEEE 802.3u:100BASE-X Fast Ethernet; IEEE 802.3ab:1000BASE-T Gigabit Ethernet; IEEE 802.3x: Flow Control IEEE 802.1p: Traffic Class Expediting and Dynamic Multicast Filtering IEEE 802.1q: Virtual Bridged Local Area Networks
PoE	PoE Standard	802.3af/at
	PoE Ports	8, up to 30 W /per port
	PoE Power Budget	123 W
Performance	Switching Capacity	20 Gbps
	Packet Forwarding Rate	14.88 Mpps
	MAC Address Table	8K
	Packet Buffer	4 Mbit
	Transmission Method	Store and Forward
	Jumbo Frame	15 KB
Physical & Environment	Power Supply	53.5 VDC / 2.43A
	Surge Protection	±6 kV in common mode for Ethernet Ports
	ESD Protection	Air: ±8 kV, Contact: ±4 kV
	MTBF	411681h @ 25°C
	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

Software Features

Model	ES210GMP
SDN Support	• Support Hardware Controller, Software Controller, Cloud-Based Controller • Automatic Device Discovery • Batch Configuration • Batch Firmware Upgrading • Unified Configuration
L2 Features	• Link Aggregation - Static Link Aggregation - Up to 4 aggregation groups and up to 6 ports per group • Loopback Detection • Flow Control - 802.3x Flow Control • Mirroring - Port Mirroring - One-to-One - Many-to-One - Ingress/Egress/Both • Port Statistics - Port Mirror Status - Traffic Statistics • 802.1ab LLDP
L2 Multicast	• IGMP Snooping - IGMP v1/v2/v3 Snooping - Fast Leave
VLAN	• MTU VLAN • Port-Based VLAN • 802.1Q Tag VLAN - Max 32 VLAN Groups - 4K VID
QoS	• 802.1p DSCP Priority • 8 Priority Queues • Priority Schedule Mode - WRR (Weighted Round Robin) • Queue Weight Config • Bandwidth Control - Port-Based Rating Limit • Storm Control - Multiple Control Modes (kbps/pps) - Broadcast/Multicast/Unknown-Unicast Control
Management	• Web-based GUI • DHCP Client • Cable Diagnostics

Ordering Information

Host Switch

Model	Description
ES210GMP	Omada 10-Port Gigabit Easy Managed Switch with 8-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
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

[†]Centralized cloud management 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.

[‡]This switch supports PoE Auto Recovery under Standalone Mode (managed separately without a controller) and supports manual PoE Recovery under Controller Mode (centrally managed with a controller).

[^]QoS and Priority Mode are supported under Standalone Mode.

*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.

**The speed of the ports that support 250m PoE transmission will be downgraded to 10 Mbps. Actual transmission distance may vary depending on the quality of the cables.

Specifications are subject to change without notice. All brands and product names are trademarks or registered trademarks of their respective holders. © 2024 TP-Link