Omada Easy Managed Switch | Datasheet

ES228GMP

Omada 28-Port Gigabit Easy Managed Switch with 24-Port PoE+

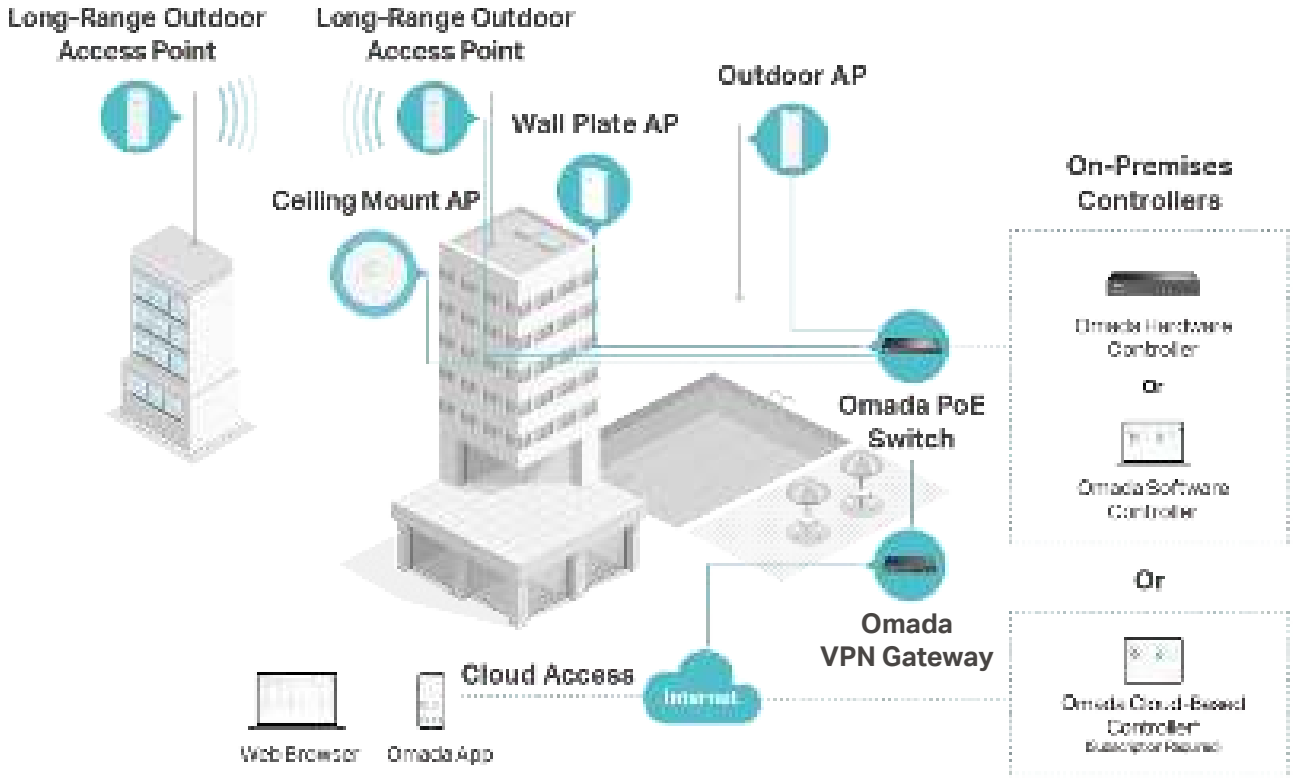
Highlights

- 26× 10/100/1000Mbps RJ45 ports (24× 802.3af/at-compliant PoE+)
- 2× Gigabit SFP port
- 384W 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△, PoE Auto Recovery‡, and Port Isolation for reliable surveillance networking
- Automatic Loop Prevention, VLAN, and IGMP Snooping
- Durable metal casing and rack-mountable 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		ES228GMP
General	Interface	24× 10/100/1000 Mbps PoE+ RJ45 Ports 2× 10/100/1000 Mbps RJ45 Ports 2× Gigabit SFP Ports
	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 802.3z:1000BASE-X Gigabit Ethernet (Optical Fiber) IEEE 802.3x: Flow Control 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)
PoE	PoE Standard	802.3af/at
	PoE Ports	24, up to 30 W per port
	PoE Power Budget	384 W
	Fast PoE	YES
	Perpetual PoE	YES
Performance	Switching Capacity	56 Gbps
	Packet Forwarding Rate	41.66 Mpps
	MAC Address Table	8K
	Packet Buffer	4 Mbit
	Transmission Method	Store and Forward
	Jumbo Frame	15 KB
Physical & Environment	Power Supply	100-240V ~ 50/60Hz
	Max Power Consumption	454.8 W (110V/60Hz) (with 384 W PD connected)
	Max Heat Dissipation	1546.15 BTU/hr (110 V/60 Hz) (with 384 W PD connected)
	Standby Power Consumption	17.2 W (110V/60 Hz)
	Surge Protection	±6 kV in common mode for Ethernet Ports
	ESD Protection	Air: ±8 kV, Contact: ±4 kV
	MTBF	224143h @ 25°C
	Dimensions (W x D x H)	17.3×13.0×1.7 in (440×330×44 mm)
	Fan Quantity	2
	Noise	Min: 36.9 dBA @ 1m 25 °C Max: 46.2 dBA @ 1m 25 °C
	Installation	Desktop/Rackmountable
	Operating Temperature	-5 °C to 45 °C (23 °F to 113 °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	ES228GMP
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 8 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
ES228GMP	Omada 28-Port Gigabit Easy Managed 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

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

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

†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.