Omada Easy Managed Switch | Datasheet

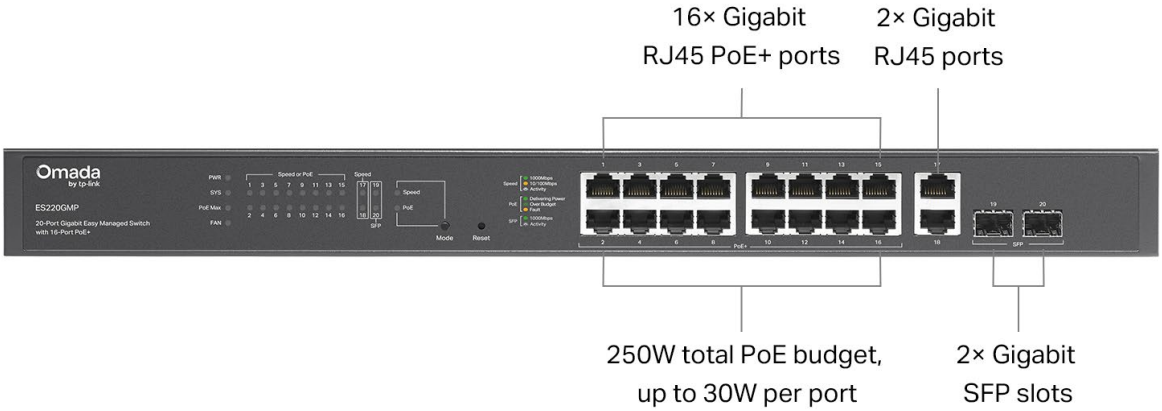
ES220GMP

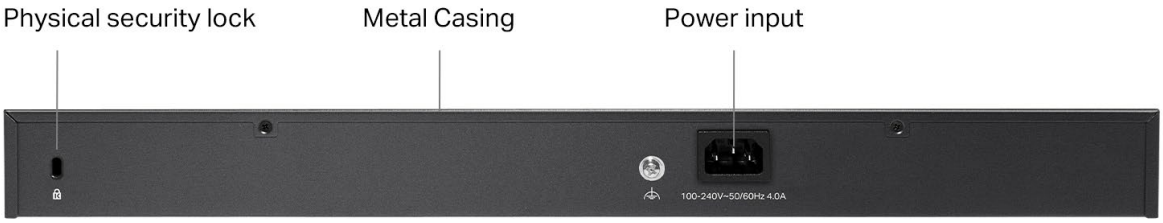
Omada 20-Port Gigabit Easy Managed Switch with 16-Port PoE+

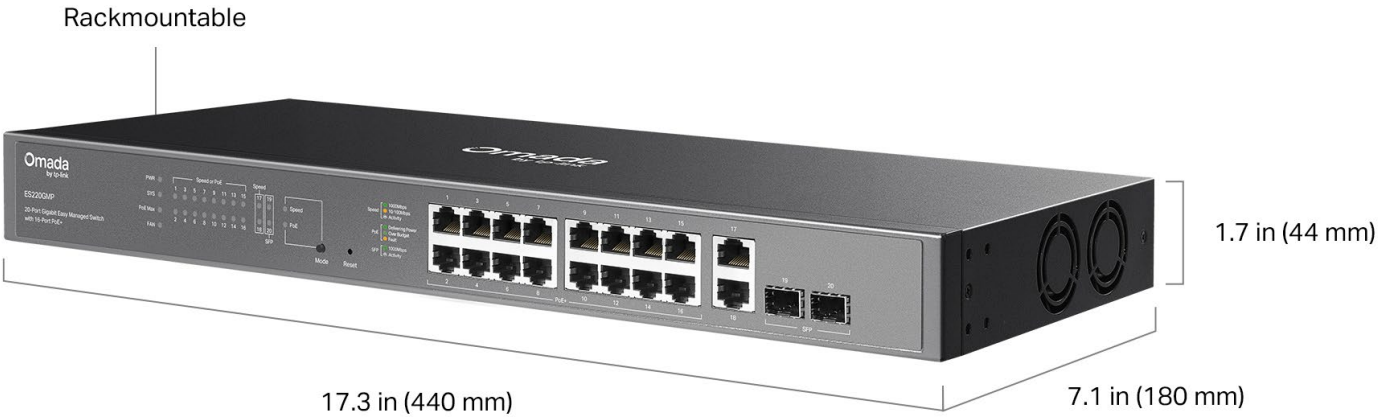
Highlights

- 18× 10/100/1000Mbps RJ45 ports (16× 802.3af/at-compliant PoE+)
- 2× Gigabit SFP slots
- 250W 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







Specifications

Hardware Features & Performance		
Model		ES220GMP
General	Interface	16× 10/100/1000 Mbps PoE+ RJ45 Ports 2× 10/100/1000 Mbps RJ45 Ports 2× Gigabit SFP Ports
	Flash	64 Mbit
	Port Standard	IEEE 802.3: 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 802.1p: 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	16, up to 30 W per port
	PoE Power Budget	250 W
	Fast PoE	YES
	Perpetual PoE	YES
Performance	Switching Capacity	40 Gbps
	Packet Forwarding Rate	29.76 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
	Standby Power Consumption	12.2 W (110V/60 Hz)
	Max Power Consumption	289.7 W (110V/60Hz) (with 250 W PD connected)
	Max Heat Dissipation	984.88 BTU/hr (110 V/60 Hz) (with 250 W PD connected)
	MTBF	310550.7h @ 25°C
	Dimensions (W x D x H)	17.3×7.1×1.7 in (440×180×44 mm)
	Net Weight	2.4 kg (5.29 lbs)
	Fan Quantity	2
	Noise	Min: 33.4 dBA @ 1m 25 °C Max: 48.5 dBA @ 1m 25 °C
	Installation	Desktop / Rack Mounting

Hardware Features & Performance		
Model		ES220GMP
Physical & Environment	Operating Temperature	-5 °C to 50 °C (23 °F to 122 °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 ±4 kV in differential mode, ±4 kV in common mode for AC power input port
	ESD Protection	Air: ±8 kV, Contact: ±4 kV
	Certification	CE, FCC, RoHS

Software Features	
Model	ES220GMP
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	• Port-based/802.1p/DSCP QoS • 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 Features	• Web-based GUI • DHCP Client • Cable Diagnostics

†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.

‡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.