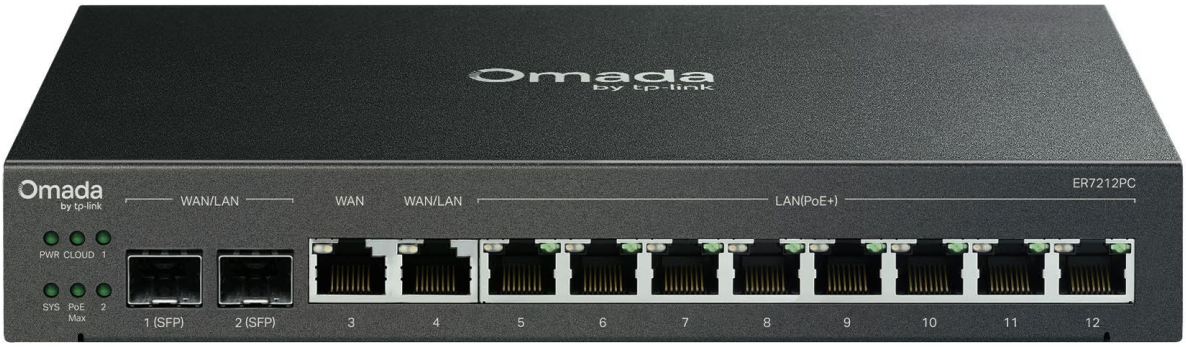
Omada Gateway | Datasheet

ER7212PC

Omada 3-in-1 Gigabit VPN Gateway

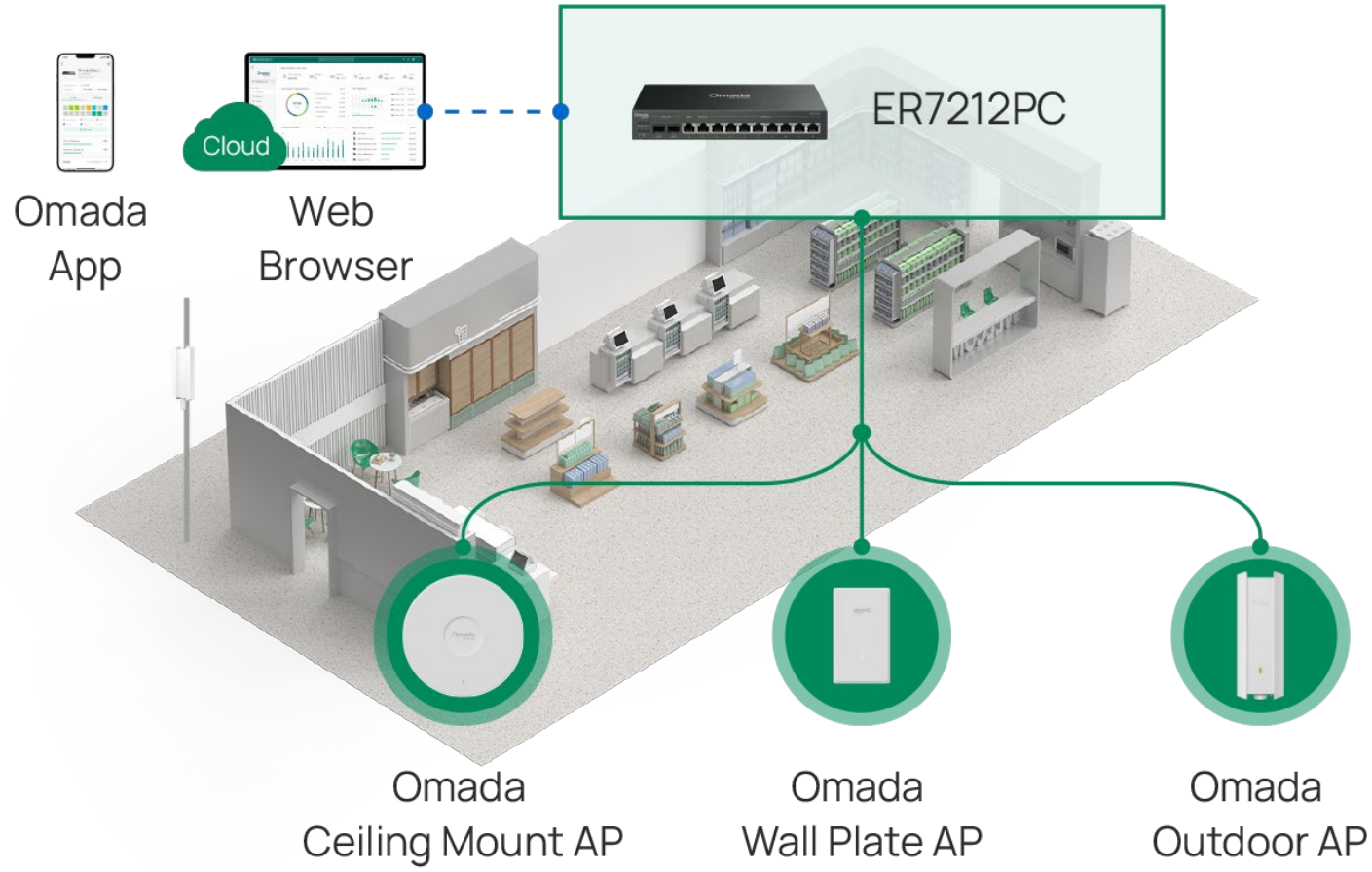


Highlights

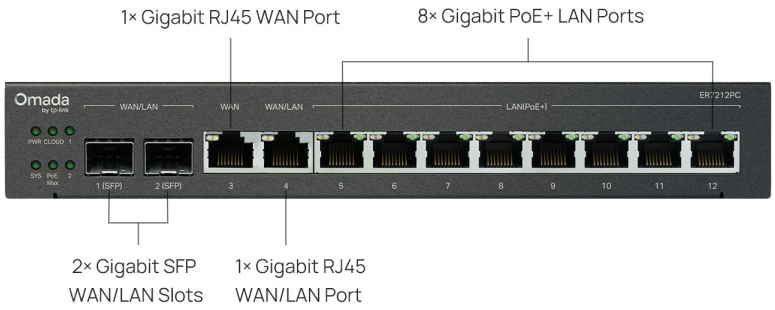
- 3-in-1 Gateway: Integrates 8× PoE+ ports and centralized management capability.
- Up to 24 Omada devices (2 gateways, 22 switches and EAPs in total) can be centrally managed.
- Up to 12× Gigabit ports bring high-speed network.
- Up to 4× WAN Ethernet ports for a stable network.
- Centralized Management: Cloud access and the Omada app for easy management.
- Highly Secure VPN: Supports multiple VPN protocols including OpenVPN/IPSec/ SSL/ WireGuard/ L2TP/PPTP VPN.
- Easy Installation: Fanless and compact design for desktop and wall mounting.

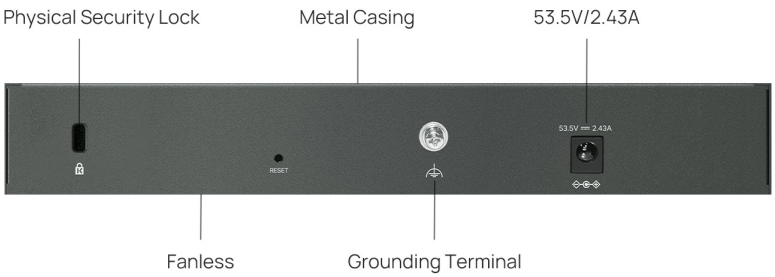
Omada Solution

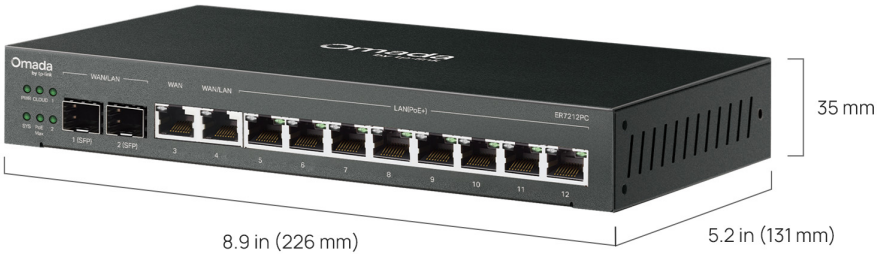
The ER7212PC is a VPN Gateway that integrates 8× PoE+ ports and centralized management capability. It supports hybrid cloud technology to remotely control the whole network anywhere, anytime. It is designed for Home and Small Business Networking.



Product Pictures







Specifications

Model		ER7212PC
Hardware	Standards and Protocols	IEEE 802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE 802.3x, IEEE 802.1q, TCP/IP, DHCP, ICMP, NAT, PPPoE, NTP, HTTP, HTTPS, DNS, IPSec, PPTP, L2TP, OpenVPN, WireGuard VPN, SNMP, LLDP
	Interface	2 Gigabit SFP WAN/LAN ports[1] 1 Gigabit WAN port 1 Gigabit LAN/WAN port 8 Gigabit LAN ports
	Network Media	10BASE-T: UTP category 3, 4, 5 cable (Max 100 m) EIA/TIA-568 100Ω STP (Max 100 m) 100BASE-TX: UTP category 5, 5e cable (Max 100 m) EIA/TIA-568 100Ω STP (Max 100 m) 1000BASE-T: UTP category 5, 5e, 6 cable (Max 100 m)
	Button	Reset button
	Power Supply	53.5VDC/2.43A Adapter
	Flash	32Mbit Nor+8GB eMMC
	DRAM	2 GB DDR4
	PoE	8 ports PoE+ output, 110 W PoE Budget
	Surge Protection	6kV
	ESD Protection	±8kV air discharge ±4kV contact discharge
	Dimensions (W x D x H)	8.9 × 5.2 × 1.4 in (226 × 131 × 35 mm)
	Net Weight	1 Kg
	Fan	Fanless
	Enclosure Materials	Steel
	Installation	Desktop/Wall-mount/Rack-mount (rackmount kit sold separately)
	MTBF	1034487h@25℃
	Max Power Consumption	131 W (110 V/60 Hz) (With 110 W PD connected)
SDN Support	Integrated Controller Software	Automatic Device Discovery Intelligent Network Monitoring Abnormal Event Warnings Unified Configuration Reboot Schedule Captive Portal Configuration Management up to 24 Omada devices (2 gateways, 22 switches and EAPs in total) OpenAPI
Performance[2]	Concurrent Session	50,000
	New Sessions /Second	3,800
	Static IP NAT Throughput (Upload / Download)	940.2 Mbps / 947.5 Mbps
	DHCP NAT Throughput (Upload / Download)	947.8 Mbps / 948.6 Mbps
	PPPoE NAT Throughput (Upload / Download)	943.1 Mbps / 942.6 Mbps
	L2TP NAT Throughput (Upload / Download)	898.4 Mbps / 915.8 Mbps

1. The SFP port of ER7212PC does not support direct-attach cable connection, including SM5220-1M, SM5220-3M, etc.
2. Rated specifications are based on test results using specifi software version. Device performance may vary as a result of the actual scenario.

Model		ER7212PC
Performance	PPTP NAT Throughput (Upload / Download)	909.7 Mbps / 912.8 Mbps
	66 Byte Packet forwarding rate (Upload / Download)	1,453,459 pps / 1,453,459 pps
	1,518 Byte Packet forwarding rate (Upload / Download)	81,272 pps / 81,272 pps
	IPSec VPN Throughput	ESP-SHA1-AES256: 984.7 Mbps, ESP-SHA2-AES256: 990.5 Mbps, ESP-SHA384-AES256: 983.9 Mbps, ESP-SHA512-AES256: 985.8 Mbps
	OpenVPN Throughput	233.1 Mbps
	L2TP VPN Throughput	Unencrypted: 1,273.9 Mbps Encrypted: 851.8 Mbps
	PPTP VPN Throughput	Unencrypted: 1293.5 Mbps Encrypted: 297.1 Mbps
	SSL VPN Throughput	243.1 Mbps
	WireGuard VPN Throughput	576.2 Mbps
	IPS Throughput	TCP: 939 Mbps; UDP: 936 Mbps
	DPI Throughput	TCP: 942 Mbps; UDP: 940 Mbps
Basic Functions	WAN Connection Type	Static IP Dynamic IP PPPoE PPTP L2TP
	DHCP	DHCP Server DHCP Options Customization DHCP Address Reservation Multi-IP Interfaces Multi-Net DHCP WAN DHCP 60
	IPTV	IGMP v2/v3 Proxy, Custom Mode, Bridge Mode
	IPv6	StaticIP / SLAAC / DHCPv6 / PPPoE / 6to4Tunnel / PassThrough / Non-Address mode
	VLAN	802.1Q VLAN
	MAC Clone	Modify WAN Address
	mDNS Repeater	√
	Quality of Service	√
	Bridge VLAN	√
Transmission	Load Balance	Intelligent Load Balance Application Optimized Routing Link Backup Online Detection
	NAT	Multi-Net NAT One-to-One NAT Port Forwarding NAT-DMZ FTP/H.323/SIP/IPSec/PPTP ALG UPnP Disable NAT
	Routing	Static Routing Policy Routing
	Session Limit	IP-based Session Limit
	Bandwidth Control	IP-based Bandwidth Control

Model		ER7212PC
VPN	IPSec VPN	20 IPSec VPN Tunnels LAN-to-LAN, Client-to-LAN Main, Aggressive Negotiation Mode DES, 3DES, AES128, AES192, AES256 Encryption Algorithm IPsec Failover IKE v1/v2 MD5, SHA1, SHA2-384 and SHA2-512 Authentication Algorithm NAT Traversal (NAT-T) Dead Peer Detection (DPD) Perfect Forward Secrecy (PFS)
	PPTP VPN	PPTP VPN Server PPTP VPN Client (10) 16 Tunnels PPTP with MPPE Encryption
	L2TP VPN	L2TP VPN Server L2TP VPN Client (10) 16 Tunnels L2TP over IPSec
	OpenVPN	OpenVPN Server OpenVPN Client (10) 16 OpenVPN Tunnels "Certificate + Account" Mode Full Mode
	WireGuard VPN	√
	SSL VPN	80 Tunnels
Security	Attack Defense	TCP/UDP/ICMP Flood Defense Block TCP Scan (Stealth FIN/Xmas/Null) Block Ping from WAN
	Filtering	URL Categories and URLs Filtering
	ACL	Source/Destination IP Based ACL Stateful ACL IPv4/IPv6 ACL National Based ACL FQDN
	DNS Proxy	DNSSEC, DoH, DoT, DNS Override
	DPI	Deep Packet Inspection Support 2788 type Applications[1]
	IDS/IPS	Signature-based IPS/IDS threat detection
	ARP Inspection	Sending GARP Packets IP-MAC Binding ARP Detection
Authentication	Web Authentication	No Authentication Simple Password Hotspot (Local User / Voucher / SMS / Radius) External Radius Sever External Portal Sever

1. The number of applications that can be identified may vary by the model/firmware version or the DPI signature database. Refer to the management page for the actual count.

Model		ER7212PC
Management	Service	Dynamic DNS (Dyndns, No-IP, Peanuthull, Comexe, DDNS Customization)
	Maintenance	Web Management Interface Remote Management Export & Import Configuration SNMP v1/v2c/v3 Diagnostics (Ping & Traceroute) NTP Synchronize Port Mirroring Syslog Support
Others	Certification	CE, FCC
	Package Contents	ER7212PC, Power Adapter, Power Cord, Quick Installation Guide
	System Requirements	Microsoft Windows 98SE, NT, 2000, XP, Vista™ or Windows 7/8/8.1/10/11 MAC OS, NetWare, UNIX or Linux
	Environment	Operating Temperature: -5 °C to 45 °C Storage Temperature: -40 °C to 70 °C Operating Humidity: 10% to 90% non-condensing Storage Humidity: 5% to 90% non-condensing

Ordering Information

Host Gateway	
Model	Description
ER7212PC	Omada Gigabit VPN Gateway with PoE+ Ports and Controller Ability

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

*PoE budget calculations are based on laboratory testing. Actual PoE power budget is not guaranteed and will vary as a result of client limitations and environmental factors.

* Some models featured in this guide may be unavailable in your country or region. Visit the website for local sales information: www.omadanetworks.com.

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