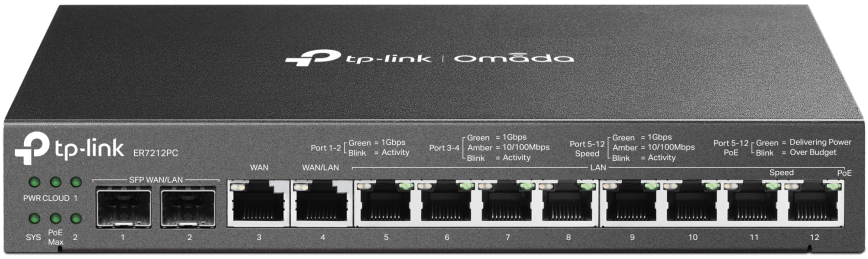
Omada 3-in-1 Gigabit VPN Router

(Router + PoE Switch + Controller)

MODEL: ER7212PC



Highlights

- Dual-Core 1.2 GHz CPU and 1GB DDR3 for outstanding performance
- Equipped with 2 Gigabit SFP WAN/LAN ports, 1 Gigabit RJ45 WAN port, 1 Gigabit RJ45 WAN/LAN port and 8 Gigabit LAN ports
- Supports 8 ports 802.3af/at PoE output, and PoE budget is 110W
- Supports multiple VPN protocols including OpenVPN/ IPSec/ PPTP/ L2TP/ L2TP over IPSec, helping users to establish VPN connections more flexibly
- Captive portal provides a convenient method for guest authentication
- Abundant features including load balance, bandwidth control and access control
- Professional 4 kV lightning protection keeps your investments as safe as possible
- Fanless and compact enclosure design for desktop and wall mounting

Omada Solution

Hospitality

High Quality and Full Coverage Wi-Fi

Education

High-Density Wi-Fi

Retail

Social Marketing for O2O

Office

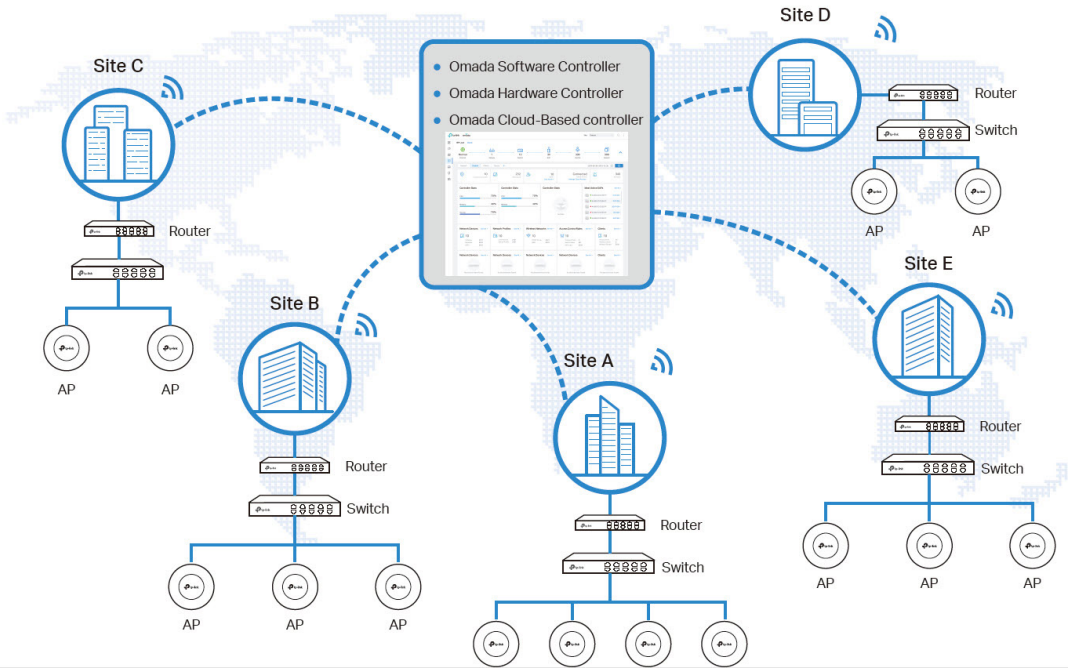
Wireless and Wired Connections

Catering

Full Wi-Fi Coverage in High-Density Environment

Software Defined Networking (SDN) with Cloud Access

Omada 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. Seamless wireless and wired connections are provided, ideal for use in hospitality, education, retail, offices, and more.



Hassle-Free Centralized Cloud Management

100% centralized cloud management of the whole network from different sites——all controlled from a single interface anywhere, anytime.

- No additional training needed
- Unlimited scalability
- Batch management
- Devices still work even when not connected to the Cloud

Zero-Touch Provisioning for Efficient Deplyment[1]

Omada zero-touch provisioning allows remotely deployment and configuration of multi-site networks, so there's no need to send out an engineer for on-site configuration. The Omada Cloud ensures efficient deployment with lower costs.

1. Zero-Touch Provisioning is supported when using Omada Cloud-Based Controller

AI-Driven Technology for Stronger Performance and Easy Network Maintenance

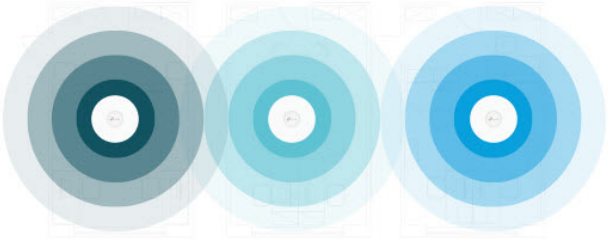
Intelligent Network Analysis, Warning, and Optimization*

- Analyzes potential network problems and sends optimization suggestions for higher network efficiency
- Locates network faults, warns and notify users, and generates solutions to reduce network risk

*Intelligent Network Analysis, Warning, and Optimization are being developed and are scheduled to be released in 2020

Auto Channel Selection and Power Adjustment

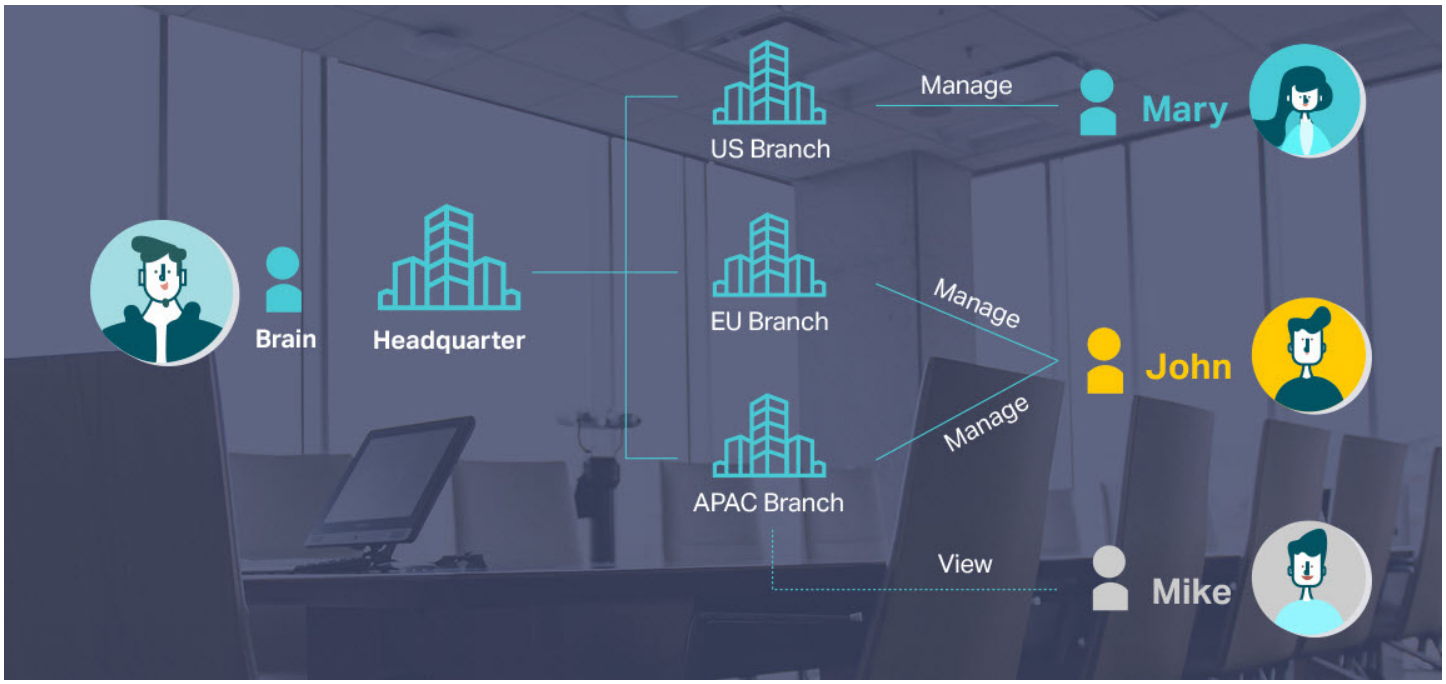
Provides powerful wireless performance while greatly reducing Wi-Fi interference by automatically adjusting the channel settings and transmission power levels of neighboring APs in the same network.



Channel 1 Channel 11 Channel 6

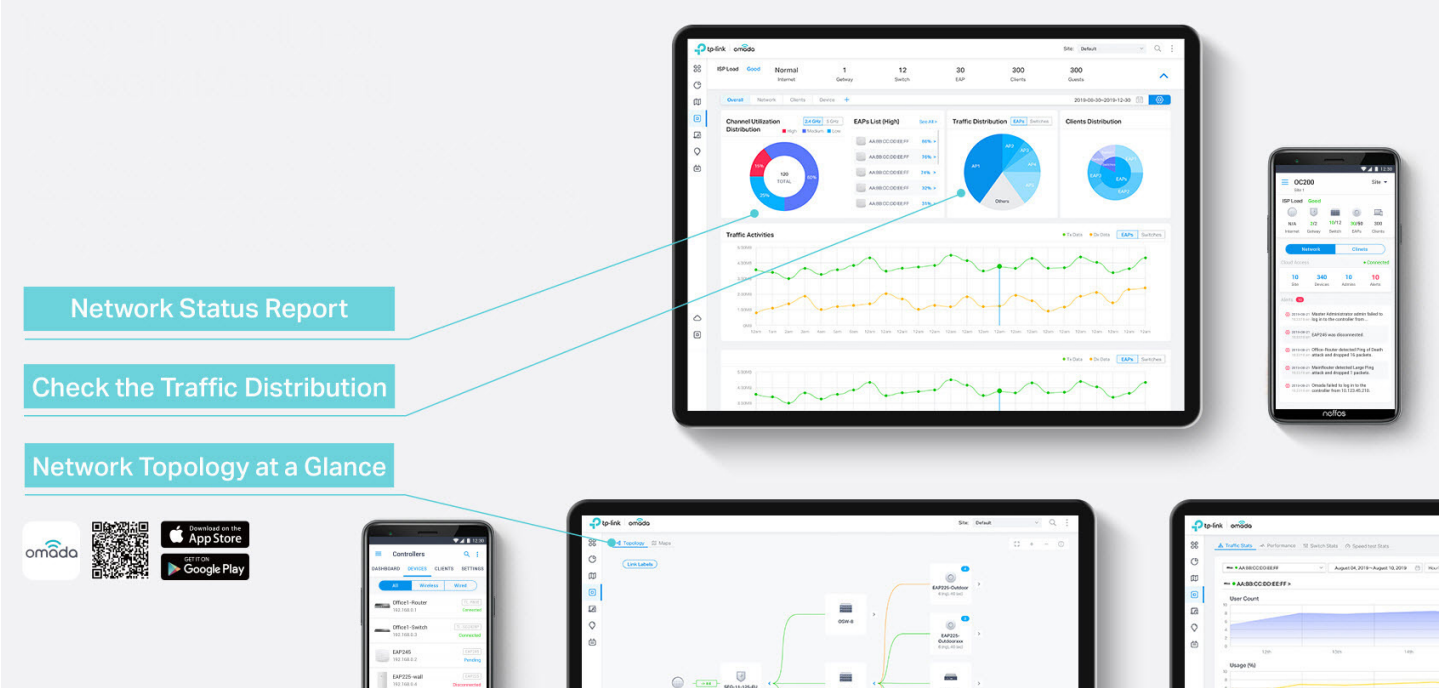
Assign Different Management Roles

Multi-user privilege assignment is available to increase management efficiency and security. Multi-person management, multi-level permissions, and the ability to add admins as needed, enable flexible network operation and maintenance.

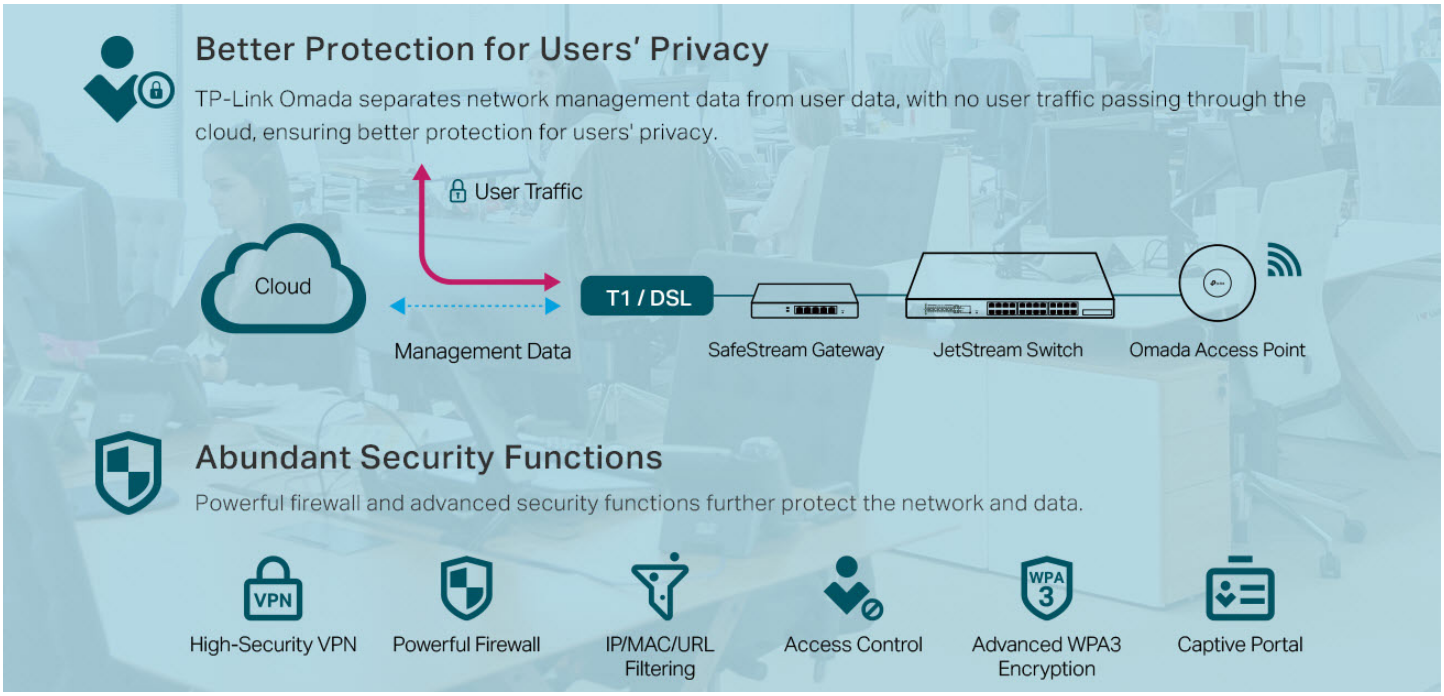


Easy and Intelligent Network Monitoring

The easy-to-use dashboard makes it easy to see your real-time network status; check network usage and traffic distribution; receive network condition logs, abnormal event warnings, and notifications; or even track key data for better business results. Network topology helps IP admins quickly see and troubleshoot connection at a glance.

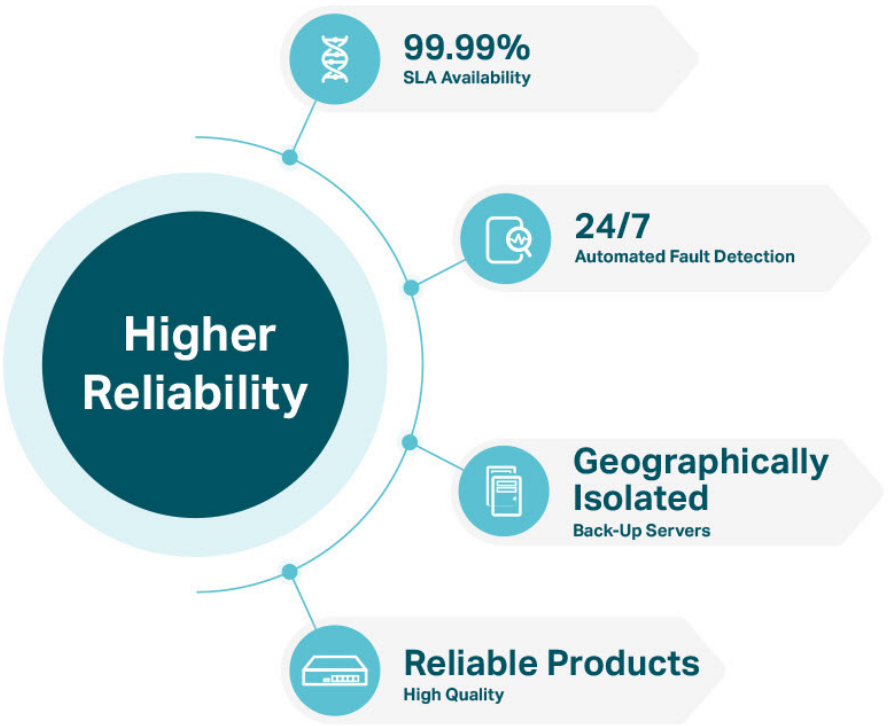


Comprehensive Protection for the Whole Network



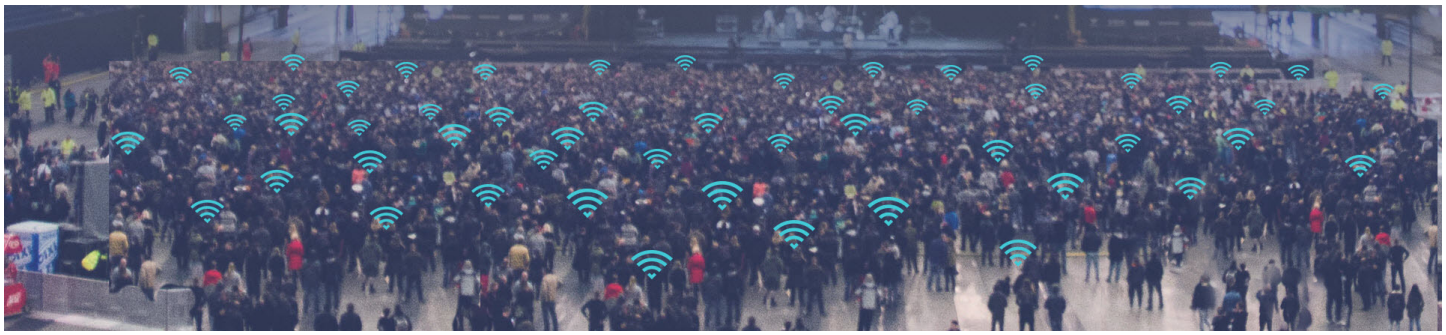
Multiple Factors Guarantee Higher Reliability

Higher reliability of cloud service is guaranteed with 99.99% SLA availability, 24/7 automated fault detection, geographically isolated backup servers, and reliable product quality. Your network functions even if management traffic is interrupted.



Reliable Connections Even with High-Density Clients

Equipped with enterprise chipsets, dedicated antennas, advanced RF functions, auto channel selection, and power adjustment, Omada Wi-Fi 6 and Wi-Fi 5 APs have high concurrency capacities for remarkable performance in high-density environments.



Specifications

Model		ER7212PC
Product Picture		
Product Description		Omada Gigabit VPN Router with PoE+ Ports and Controller Ability
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, SNMP
	Interface	2 Gigabit SFP WAN/LAN ports 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	8Mb Nor + 4 GB EMMC
	DRAM	1 GB DDR3
	PoE	8 ports PoE+ output, 110 W PoE Budget
	Surge Protection	4 kV surge protection
	Dimensions (W x D x H)	8.9 × 5.2 × 1.4 in (226 × 131 × 35 mm)
	Fan	Fanless
	Enclosure Materials	Steel
	Installation	Desktop/Wall-mount
SDN Support	Integrated Controller Software	Automatic Device Discovery Intelligent Network Monitoring Abnormal Event Warnings Unified Configuration Reboot Schedule Captive Portal Configuration Management up to 1 Router, 2 Switches and 10 EAPs
Performance	Concurrent Session	24,980
	New Sessions /Second	1,900
	Static IP NAT Throughput (Upload / Download)	935.5 Mbps / 942.1 Mbps
	DHCP NAT Throughput (Upload / Download)	940.2 Mbps / 941.7 Mbps
	PPPoE NAT Throughput (Upload / Download)	913.1 Mbps / 935.2 Mbps
	L2TP NAT Throughput (Upload / Download)	545.0 Mbps / 912.7 Mbps

Model		ER7212PC
Performance	PPTP NAT Throughput (Upload / Download)	523.0 Mbps / 912.8 Mbps
	66 Byte Packet forwarding rate (Upload / Download)	154,069 pps / 156,977 pps
	1,518 Byte Packet forwarding rate (Upload / Download)	81,193 pps / 81,193 pps
	IPSec VPN Throughput (AES256)	168.5 Mbps
	OpenVPN	34 Mbps
	L2TP VPN Throughput	Unencrypted: 845.3 Mbps Encrypted: 333.2 Mbps
	PPTP VPN Throughput	Unencrypted: 1012.6 Mbps Encrypted: 401.4 Mbps
Basic Functions	WAN Connection Type	Static IP Dynamic IP PPPoE PPTP L2TP
	DHCP	DHCP Server DHCP Address Reservation Multi-IP Interfaces Multi-Net DHCP
	IPTV	IGMP v2/v3 Proxy
	IPv6	√
	VLAN	802.1Q VLAN
Transmission	Load Balance	Intelligent Load Balance Application Optimized Routing Link Backup Online Detection
	NAT	Multi-Net NAT Port Forwarding NAT-DMZ FTP/H.323/SIP/IPSec/PPTP ALG UPnP
	Routing	Static Routing Policy Routing
	Session Limit	IP-based Session Limit
	Bandwidth Control	IP-based Bandwidth Control
VPN	IPSec VPN	20 IPSec VPN Tunnels LAN-to-LAN, Client-to-LAN Main, Aggressive Negotiation Mode AES128, AES192, AES256 Encryption Algorithm IKE v1/v2 SHA1, SHA2 Authentication Algorithm NAT Traversal (NAT-T) Dead Peer Detection (DPD) Perfect Forward Secrecy (PFS)
	PPTP VPN	PPTP VPN Server PPTP VPN Client (10)[1] 16 Tunnels PPTP with MPPE Encryption

Model		ER7212PC
VPN	L2TP VPN	L2TP VPN Server L2TP VPN Client (10)[1] 16 Tunnels L2TP over IPSec
	OpenVPN	OpenVPN Server OpenVPN Client (10)[1] 16 OpenVPN Tunnels
Security	Attack Defense	TCP/UDP/ICMP Flood Defense Block TCP Scan (Stealth FIN/Xmas/Null) Block Ping from WAN
	Filtering	URL Filtering
	Access Control	Source/Destination IP Based Access Control
Authentication	Web Authentication	No Authentication Simple Password Hotspot (Local User / Voucher / SMS / Radius) External Radius Server External Portal Server Facebook
Management	Service	Dynamic DNS (Dyndns, No-IP)
	Maintenance	Web Management Interface Remote Management Export & Import Configuration SNMP v1/v2c/v3 Syslog Support
Others	Certification	CE, FCC, RoHS
	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 MAC OS, NetWare, UNIX or Linux
	Environment	Operating Temperature: 0 °C to 45 °C (32 °F to 113 °F) Storage Temperature: -40 °C to 70 °C (-40 °F to 158 °F) Operating Humidity: 10% to 90% non-condensing Storage Humidity: 5% to 90% non-condensing

1. ER7212PC can work as a VPN client and can connect with up to 10 VPN servers.

Ordering Information

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

SFP Modules	
Model	Description
TL-SM311LS	Gigabit SFP module, Single-mode, LC interface, Up to 20km distance
TL-SM311LM	Gigabit SFP module, Multi-mode, LC interface, Up to 550m distance
TL-SM321A	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 20 km
TL-SM321A-2	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 2 km
TL-SM321B	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 20 km
TL-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
TL-SM331T	1000BASE-T RJ45 SFP Module