

## Router ER7212PC

TP-LINK ER7212PC Omada Gigabit VPN Router with PoE+ Ports and Controller Ability

3 in 1 : combines router functions, outgoing PoE+ connection and centralized network management capabilities of Omada  
 Powerful hardware: Dual-core processor with 1GB DDR3 memory provides excellent performance for each of the 12 ports  
 Up to four WAN ports: 2 x Gigabit WAN/LAN SFP ports, 1 x Gigabit WAN RJ45 port, 1 x Gigabit WAN/LAN RJ45 port  
 PoE support : eight RJ45 LAN ports with PoE+ (802.3af/at) support and a total budget of 110 W  
 Centralized Management: Easy and convenient device management via the cloud and the Omada app  
 VPN connection: Supports IPsec, PPTP, L2TP and OpenVPN VPN tunnels  
 Easy installation: on a table or on a wall



## Detailed

Hardware specifications	
Standards and protocols	<ul style="list-style-type: none"> <li>• IEEE 802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE 802.3x, IEEE 802.1q</li> <li>• TCP/IP, DHCP, ICMP, NAT, PPPoE, NTP, HTTP, HTTPS, DNS, IPSec, PPTP, L2TP, SNMP</li> </ul>
Interfaces	<ul style="list-style-type: none"> <li>• Gigabit WAN/LAN SFP port (2 pcs.)</li> <li>• Gigabit WAN port</li> <li>• Gigabit LAN/WAN port</li> <li>• Gigabit LAN port (8 pcs.)</li> </ul>
Data transmission medium	<ul style="list-style-type: none"> <li>• 10BASE-T: Category 3, 4, or 5 unshielded twisted pair (100 m or less)</li> <li>• TIA/EIA-568-compliant 100 ohm shielded twisted pair (100 m or less)</li> <li>• 100BASE-TX: Category 5 or 5e unshielded twisted pair (100 m or less)</li> <li>• TIA/EIA-568-compliant 100 ohm shielded twisted pair (100 m or less)</li> </ul>

	<ul style="list-style-type: none"> <li>• 1000BASE-T: Category 5, 5e, or 6 unshielded twisted pair (100 m or less)</li> </ul>
Fans	No
Buttons	Reset (reset settings)
Power supply	Adapter 53.5VDC/2.43A
PoE Budget	110W on eight ports
Flash memory	8 Mbit Nor + 4 GB EMMC
DRAM	1GB DDR3
LED indicators	PWR, SYS, CLOUD, PoE Max, SFP 1, SFP 2, WAN (Speed, Link/Act), LAN (Speed, Link/Act)
Dimensions (W x D x H)	226 x 131 x 35 mm
Protection	Surge protection 4 kV
Frame	Steel
Accommodation	On the table or on the wall
Maximum power consumption	<ul style="list-style-type: none"> <li>• 133.2W with PoE Max</li> <li>• 13.88W without PoE</li> </ul>

Performance	
Maximum number of simultaneous sessions	24 980
Number of new sessions per second	1900
NAT (static IP address)	935.5 Mbps / 942.1 Mbps
NAT (DHCP)	940.2 Mbps / 941.7 Mbps
NAT (PPPoE)	913.1 Mbps / 935.2 Mbps
NAT (L2TP)	545 Mbps / 912.7 Mbps
NAT (PPTP)	523 Mbps / 912.8 Mbps
IPsec VPN Throughput (AES256)	168.5 Mbps
IPsec VPN Traffic Throughput	AES256: 168.5 Mbps
OpenVPN	34 Mbps
VPN L2TP Traffic Throughput	<ul style="list-style-type: none"> <li>• Without encryption: 845.3 Mbps</li> <li>• With encryption: 333.2 Mbps</li> </ul>
VPN PPTP Traffic Throughput	<ul style="list-style-type: none"> <li>• Without encryption: 1012.6 Mbps</li> <li>• With encryption: 401.4 Mbps</li> </ul>
66-byte packet transfer rate	154,069 packets per second / 156,977 packets per second
1518-byte packet transfer rate	81,193 packets per second / 81,193 packets per second

Basic functions	
WAN connection type	<ul style="list-style-type: none"> <li>• Static IP address</li> <li>• Dynamic IP address</li> <li>• PPPoE</li> <li>• PPTP</li> <li>• L2TP</li> </ul>
MAC address cloning	Modify WAN MAC Address
DHCP	<ul style="list-style-type: none"> <li>• DHCP Server/Client</li> <li>• DHCP Address Reservation</li> </ul>

	<ul style="list-style-type: none"> <li>• Multi-IP Interfaces</li> <li>• Multi-net DHCP</li> </ul>
IPv6	Yes
VLAN	802.1Q VLAN
IPTV	IGMP v2/v3 Proxy

Advanced Features	
Access Control List	IP/Port/Protocol/Domain Name Filtering
Advanced Routing Settings	<ul style="list-style-type: none"> <li>• Static Routing</li> <li>• Policy Routing</li> </ul>
Bandwidth control	Bandwidth control by IP address/port
Load balancing	<ul style="list-style-type: none"> <li>• Smart load balancing</li> <li>• Optimized routing for applications</li> <li>• Channel redundancy</li> <li>• Device discovery on the network</li> </ul>
NAT	<ul style="list-style-type: none"> <li>• Multi-Net NAT</li> <li>• Virtual Server</li> <li>• NAT-DMZ</li> <li>• FTP/H.323/SIP/IPsec/PPTP ALG</li> <li>• UPnP</li> </ul>
Session limit	Limiting sessions by IP address

VPN	
SSL VPN	-
IPsec VPN	<ul style="list-style-type: none"> <li>• 20 IPsec VPN tunnels</li> <li>• LAN-to-LAN, client-to-LAN</li> <li>• Negotiation modes: Main, Aggressive</li> <li>• Encryption algorithms: AES-128, AES-192, AES-256</li> <li>• IKE v1/v2</li> <li>• Authentication algorithms: SHA1, SHA2</li> <li>• NAT traversal (NAT-T)</li> <li>• Dead peer detection (DPD)</li> <li>• Perfect forward secrecy (PFS)</li> </ul>
PPTP VPN	<ul style="list-style-type: none"> <li>• PPTP VPN Server</li> <li>• PPTP VPN Client (10)</li> <li>• 16 Tunnels</li> <li>• PPTP with MPPE Encryption</li> </ul>
L2TP VPN	<ul style="list-style-type: none"> <li>• L2TP VPN Server</li> <li>• L2TP VPN Client (10)</li> <li>• 16 Tunnels</li> <li>• L2TP over IPsec</li> </ul>
OpenVPN	<ul style="list-style-type: none"> <li>• OpenVPN Server</li> <li>• OpenVPN Client (10)</li> <li>• 16 OpenVPN Tunnels</li> </ul>

AUTHENTICATION	
Web authentication	<ul style="list-style-type: none"> <li>• No authentication</li> <li>• Simple password</li> <li>• Hotspot (local user, voucher, SMS, RADIUS)</li> <li>• External RADIUS server</li> <li>• External portal server</li> </ul>

Control
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Omada App	Yes
Centralized management	<ul style="list-style-type: none"> <li>• Omada Hardware Controller (OC300)</li> <li>• Omada Hardware Controller (OC200)</li> <li>• Omada Software Controller</li> <li>• Omada Cloud-Based Controller</li> </ul>
Cloud access	Yes
Service	Dynamic DNS (Dyndns, No-IP)
Support	<ul style="list-style-type: none"> <li>• Web management interface</li> <li>• Remote management</li> <li>• Export and import settings</li> <li>• SNMP v1/v2c/v3</li> <li>• System log</li> </ul>
Automatic parameter adjustment	Yes. Requiring the use of Omada Cloud-Based Controller.
Control	<ul style="list-style-type: none"> <li>• Automatic device discovery</li> <li>• Smart network monitoring</li> <li>• Anomaly alerts</li> <li>• Single provisioning</li> <li>• Scheduled reboot</li> <li>• Captive portal setup</li> <li>• Ability to manage 1 router, 2 switches and 10 EAP access points</li> </ul>

Other	
Certification	CE, FCC, RoHS
Delivery set	<ul style="list-style-type: none"> <li>• Router</li> <li>• Power adapter</li> <li>• Power cable</li> <li>• Quick setup guide</li> </ul>
System requirements	Microsoft Windows (98SE, NT, 2000, XP, Vista, 7, 8, 10), macOS, NetWare, UNIX or Linux
Environmental parameters	<ul style="list-style-type: none"> <li>• Operating temperature: 0...+45 °C</li> <li>• Storage temperature: -40...+70 °C</li> <li>• Operating humidity: 10-90% non-condensing</li> <li>• Storage humidity: 5-90% non-condensing</li> </ul>