

SECURITY

Access Control

- Source/Destination IP-Based ACL
- Stateful ACL
- IPv4/IPv6 ACL
- Location Based ACL

Filtering

- WEB Group Filtering[§]
- URL Filtering
- Web Security[§]

ARP Inspection

- Sending GARP Packets[§]
- ARP Scanning[§]
- IP-MAC Binding[§]

Attack Defense

- TCP/UDP/ICMP Flood Defense
- Block TCP Scan (Stealth FIN/Xmas/Null)
- Block Ping from WAN

HARDWARE FEATURES

Standards and Protocols

- IEEE 802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE 802.3x, IEEE802.1q
- TCP/IP, DHCP, ICMP, NAT, PPPoE, NTP, HTTP, HTTPS, DNS, IPSec, PPTP, L2TP, OpenVPN, WireGuard VPN, GRE VPN, SNMP

Interface

- 1× 2.5G RJ45 WAN/LAN Port
- 1× 2.5G RJ45 WAN/LAN Port
- 2× Gigabit SFP WAN/LAN Ports
- 8× Gigabit RJ45 WAN/LAN Ports

- 1× RJ45 Console Port
- 1× USB 3.0 Port (Supports USB storage, and LTE backup with LTE dongle)

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)
- 2500BASE-T: UTP category 5e, 6 cable (Max 100 m)

Button

Reset Button

Power Supply

100–240 VAC, 50/60 Hz

Flash

128MB NAND

DRAM

1 GB DDR4

Dimensions (W x D x H)

11.6×7.1×1.7 in (294×180×44 mm)

Protection

4 kV surge protection

Enclosure

Steel

Mounting

- Desktop
- Rackmountable

Max Power Consumption

18.5W (With USB 3.0 connected)

PERFORMANCE

DPI Throughput

2.2Gbps

PERFORMANCE

GRE	<ul style="list-style-type: none">• Unencrypted: 1153.0 Mbps• Encrypted: 559.2 Mbps
WireGuard VPN	771.6 Mbps
Concurrent Session	1,000,000
New Sessions /Second	7,000
NAT (Static IP)	2345.71 Mbps / 2351.22 Mbps
NAT(DHCP)	2353.41 Mbps / 2353.40 Mbps
NAT(PPPoE)	2336.52 Mbps / 2336.08 Mbps
NAT (L2TP)	1937.53 Mbps / 1761.82 Mbps
NAT (PPTP)	1757.54 Mbps / 2011.33 Mbps
IPsec VPN Throughput	<ul style="list-style-type: none">• ESP-SHA1-AES256: 1125.60 Mbps• ESP-SHA256-AES256: 1133.1 Mbps• ESP-SHA384-AES256: 1126.6 Mbps• ESP-SHA512-AES256: 1132.8 Mbps
OpenVPN	UDP: 266.2 Mbps
L2TP VPN Throughput	<ul style="list-style-type: none">• Unencrypted: 2724.5 Mbps• Encrypted: 1018.4Mbps
PPTP VPN Throughput	<ul style="list-style-type: none">• Unencrypted: 3035 Mbps• Encrypted: 534.6 Mbps
SSL VPN Throughput	263.1 Mbps
66 Byte Packet forwarding rate	1833 Mbps / 1835 Mbps
1,518 Byte Packet forwarding rate	2461 Mbps / 2461 Mbps

BASIC FUNCTIONS

WAN Connection Type	<ul style="list-style-type: none">• Static IP/Dynamic IP• PPPoE (supports MRU Configuration)• PPTP• L2TP• Mobile Broadband: 4G/3G modem for backup via USB port
MAC Clone	Modify WAN/LAN MAC Address [†]
DHCP	<ul style="list-style-type: none">• DHCP Server• DHCPv6 PD Server (only in Standalone Mode)• DHCP Options Customization• DHCP Address Reservation• Multi-IP Interfaces• Multi-Net DHCP
IPv6	StaticIP / SLAAC / DHCPv6 / PPPoE / 6to4Tunnel / PassThrough / Non-Address mode
VLAN	802.1Q VLAN

BASIC FUNCTIONS

IPTV	IGMP v2/v3 Proxy, Custom Mode, Bridge Mode
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ADVANCED FUNCTIONS

Advanced Routing	<ul style="list-style-type: none">• Static Routing• Policy Routing• RIP (available in Standalone Mode)• OSPF (available in Standalone Mode)
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Bandwidth Control	IP/Port-based Bandwidth Control
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Load Balance	<ul style="list-style-type: none">• Intelligent Load Balance• Application Optimized Routing• Link Backup (Timing[§], Failover)• Online Detection
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NAT	<ul style="list-style-type: none">• One-to-One NAT[§]• Multi-Net NAT• Virtual Server• Port Triggering[§]• NAT-DMZ• FTP/H.323/SIP/IPSec/PPTP ALG• UPnP
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Session Limit	IP-based Session Limit
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VPN

GRE	Only in Standalone Mode
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SSL VPN	80 Tunnels
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IPsec VPN	<ul style="list-style-type: none">• 150 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)
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PPTP VPN	<ul style="list-style-type: none">• PPTP VPN Server• PPTP VPN Client (15)**• 150 Tunnels• PPTP with MPPE Encryption
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L2TP VPN	<ul style="list-style-type: none">• L2TP VPN Server• L2TP VPN Client (15)**• 150 Tunnels• L2TP over IPsec
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OpenVPN	<ul style="list-style-type: none">• OpenVPN Server• OpenVPN Client (11)**• 121 OpenVPN Tunnels• "Certificate + Account" Mode• Full Mode
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WireGuard VPN	<ul style="list-style-type: none">• 20 Tunnels
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AUTHENTICATION

Web Authentication

- No Authentication
- Simple Password*
- Hotspot (Local User/Voucher*/SMS*/Radius*)
- External Radius Server
- External Portal Server*
- LDAP

MANAGEMENT

Omada App

Yes. Requiring the use of Omada Hardware Controller, Omada Cloud-Based Controller, or Omada Software Controller.

Centralized Management

- Omada Cloud-Based Controller
- Omada Hardware Controller
- Omada Software Controller

Cloud Access

Yes. Requiring the use of Omada Hardware Controller, Omada Cloud-Based Controller, or Omada Software Controller.

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
- CLI (only in Standalone Mode)
- Syslog Support

Zero-Touch Provisioning

Yes. Requiring the use of Omada Cloud-Based Controller.

Management Features

- Automatic Device Discovery*
- Batch Configuration*
- Batch Firmware Upgrading*
- Intelligent Network Monitoring*
- Abnormal Event Warnings*
- Unified Configuration*
- Reboot Schedule*

OTHERS

Certification

CE, FCC

Package Contents

- ER7412-M2
- Power Cord
- Quick Installation Guide
- Rackmount Kit
- RJ45 Console Cord

System Requirements

- Microsoft Windows 98SE, NT, 2000, XP, Vista™ or Windows 7/8.1/10/11
- MAC OS, NetWare, UNIX or Linux

Environment

- Operating Temperature: 0–45 °C (32–113 °F);
- Storage Temperature: -40–70 °C (-40–158 °F)
- Operating Humidity: 10–90% RH non-condensing
- Storage Humidity: 5–90% non-condensing