Omada Gateway | Datasheet

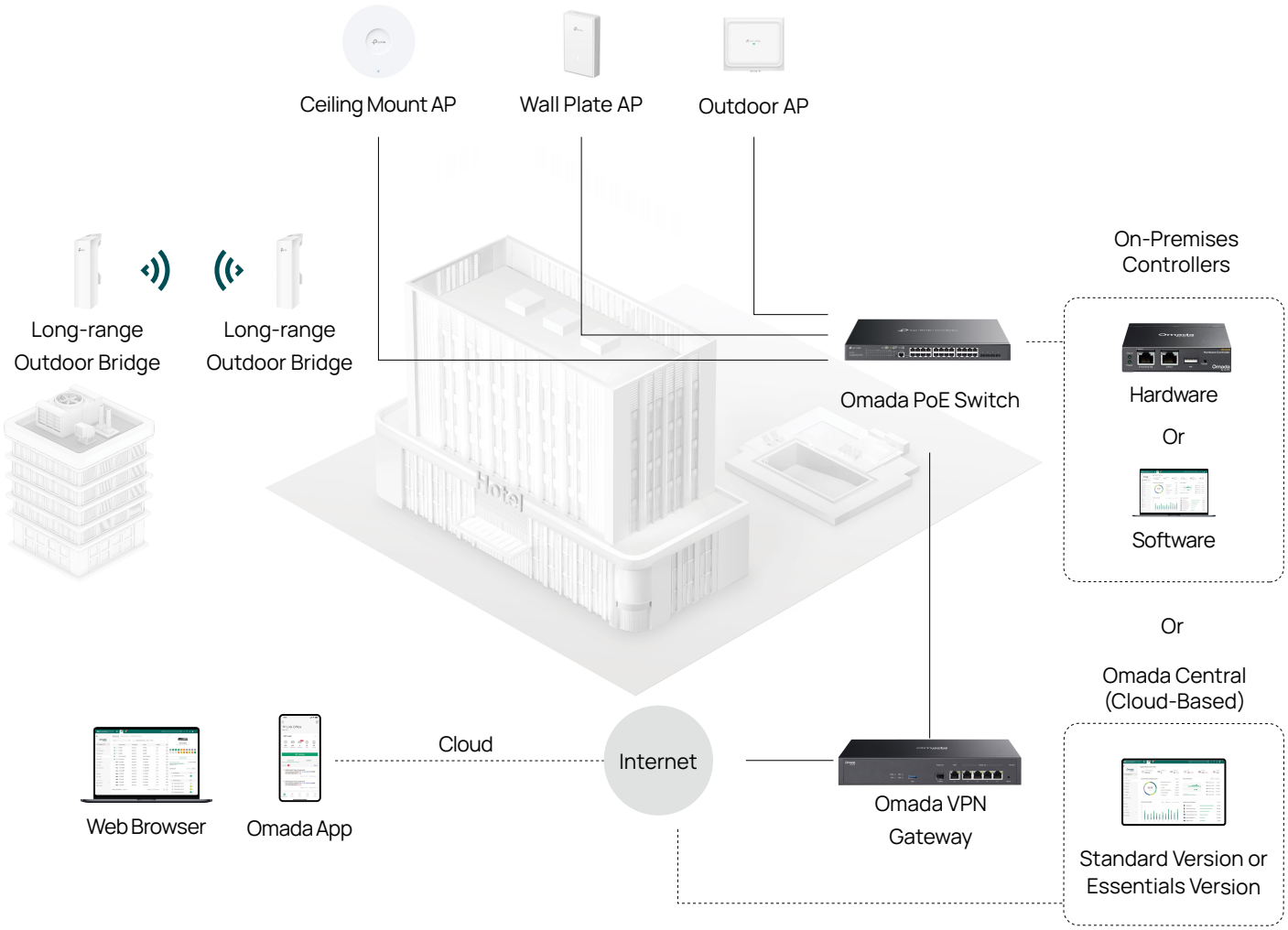
ER7406

Omada Gigabit Rackmount/Desktop VPN Gateway

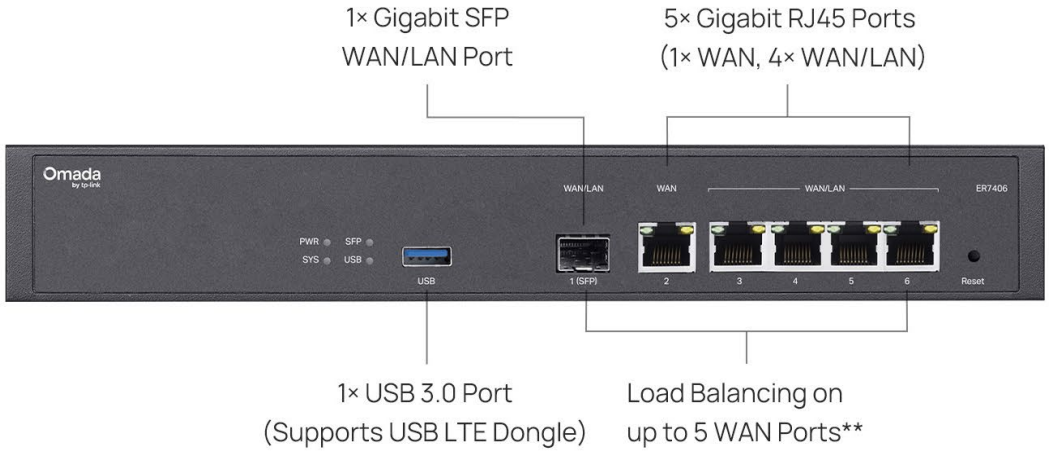
Highlights

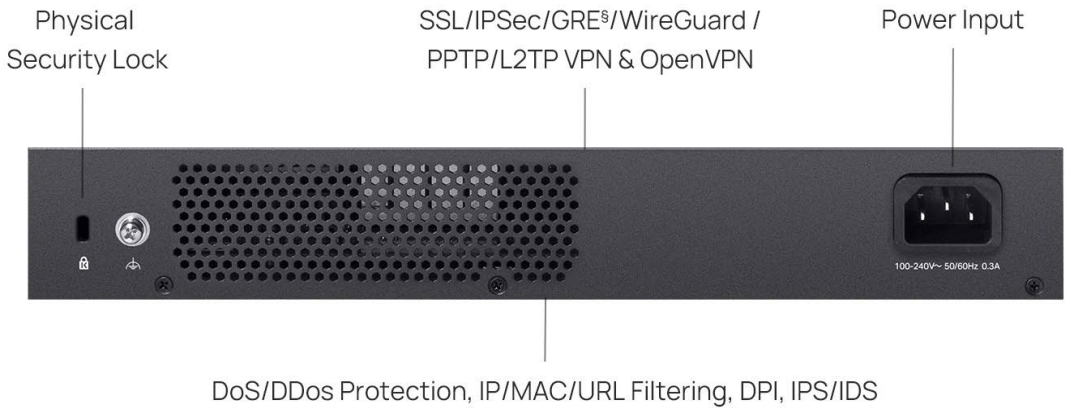
- Dual-core ARM® Cortex-A53 processor and 512MB DDR4 high-speed memory for outstanding performance
- Equipped with 1 Gigabit SFP WAN/LAN port, 1 Gigabit RJ45 WAN port, 4 Gigabit RJ45 WAN/LAN ports and 1 USB3.0 port (supports USB LTE dongle and USB Storage)
- Supports multiple VPN protocols including SSL/ Wireguard/ OpenVPN/ GRE VPN/ 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

Omada Solution



Product Pictures





§GRE VPN is supported only in Standalone Mode.
**At least one WAN/LAN port needs to function as a LAN port.

Specifications

Model		ER7406
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, GRE VPN, SNMP, LLDP
	Interface	1 Gigabit SFP WAN/LAN Port 1 Gigabit WAN port 4 Gigabit LAN/WAN ports
	USB	1 USB3.0 (supports USB LTE dongle and USB Storage[1])
	Fan Quantity	Fanless
	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	100-240VAC,50/60Hz
	Flash	128 MB NAND
	DRAM	512 MB DDR4
	LED	PWR, SYS, SFP, USB, WAN (1000M Link/Act, 100/10M Link/Act), WAN/LAN (1000M Link/Act, 100/10M Link/Act)
	Max Power Consumption	7.5 W (with USB 3.0 connected) 4.5 W (without USB 3.0 connected)
	Surge Protection	4 kV surge protection
	Mounting	Desktop/ Rackmount
	Dimensions (W x D x H)	11.6 × 5.5 × 1.7 in (294 × 140 × 44 mm)
	Net Weight	1.09 Kg
	MTBF	1045589h@25°C 778023h@40°C
SDN Support	Hardware Controller	Automatic Device Discovery Intelligent Network Monitoring Abnormal Event Warnings Unified Configuration Reboot Schedule Captive Portal Configuration ZTP (Zero-Touch Provisioning)[2]
	Software Controller	
	Cloud-Based Controller	

1. For compatibility list, visit https://www.omadanetworks.com/omada-router/compatibility/.
2. Zero-Touch Provisioning is supported only when using Omada Cloud-Based Controller.

Model		ER7406
Performance[1]	Concurrent Session	150,000
	New Sessions /Second	4,600
	IPS Throughput	TCP: 918 Mbps UDP: 920 Mbps
	DPI Throughput	TCP: 933 Mbps UDP: 927 Mbps
	Static IP NAT Throughput (Upload / Download)	945.3 Mbps / 940.5 Mbps
	DHCP NAT Throughput (Upload / Download)	939.6 Mbps / 940.9 Mbps
	PPPoE NAT Throughput (Upload / Download)	943.6 Mbps / 940.9 Mbps
	L2TP NAT Throughput (Upload / Download)	908.6 Mbps / 918.4 Mbps
	PPTP NAT Throughput (Upload / Download)	906.2 Mbps / 915.9 Mbps
	66 Byte Packet forwarding rate (Upload / Download)	1,453,489 pps / 1,453,488 pps
	1,518 Byte Packet forwarding rate (Upload / Download)	81,279 pps / 81,275 pps
	IPSec VPN Throughput	ESP-SHA1-AES256: 885.3Mbps ESP-SHA256-AES256: 844.8 Mbps ESP-SHA384-AES256: 868.5 Mbps ESP-SHA512-AES256: 849.5 Mbps
	GRE	Unencrypted: 1094.2 Mbps Encrypted: 702.2 Mbps
	WireGuard VPN	341.3 Mbps
	SSL VPN	131.6 Mbps
	OpenVPN	139.1 Mbps
	L2TP VPN Throughput	Unencrypted: 1422.4 Mbps Encrypted: 686.2 Mbps
	PPTP VPN Throughput	Unencrypted: 1356.1 Mbps Encrypted: 205.1 Mbps
Basic Functions	WAN Connection Type	Static IP Dynamic IP PPPoE (supports MRU Configuration) PPTP L2TP
	DHCP	DHCP Server DHCPv6 PD Server (only in Standalone Mode) DHCP Options Customization DHCP Address Reservation Multi-IP Interfaces Multi-Net DHCP WAN DHCP 60
	MAC Clone	Modify WAN/LAN MAC Address[2]
	IPTV	IGMP v2/v3 Proxy, Custom Mode, Bridge Mode
	IPv6	StaticIP / SLAAC / DHCPv6 / PPPoE / 6to4Tunnel / PassThrough / Non-Address mode
	Stateful ACL	√
	LAN DNS	√

1. Rated specifications are based on test results. Device performance may vary as a result of the actual scenario.
2. LAN MAC Address can be modified only in Standalone Mode.

Model		ER7406
Basic Functions	mDNS Repeater	√
	Quality of Service	√
	Bridge VLAN	√
	VLAN	802.1Q VLAN
Transmission	Load Balance	Intelligent Load Balance Application Optimized Routing Link Backup (Timing, Failover) Online Detection
	NAT	One-to-One NAT Multi-Net NAT Port Forwarding Port Triggering[1] NAT-DMZ FTP/H.323/SIP/IPSec/PPTP ALG UPnP Disable NAT
	Routing	Static Routing Policy Routing RIP[2] OSPF[2]
	Session Limit	IP-based Session Limit
	Bandwidth Control	IP-based Bandwidth Control
VPN	IPSec VPN	100 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)[3] 50 Tunnels PPTP with MPPE Encryption
	L2TP VPN	L2TP VPN Server L2TP VPN Client (10)[3] 50 Tunnels L2TP over IPSec
	GRE	√ (Only in Standalone Mode)
	SD-WAN	√ (Only in Controller mode)
	WireGuard VPN	√
	SSL VPN	50 Tunnels
	OpenVPN	OpenVPN Server OpenVPN Client (5)[3] 55 OpenVPN Tunnels "Certificate + Account" Mode Full Mode

1. Port Triggering is supported only in Standalone Mode.
2. RIP and OSPF are supported only in Standalone Mode.
3. For PPTP VPN and L2TP VPN, ER7406 can connect with up to 10 VPN servers. For OpenVPN, ER7406 can connect with up to 5 VPN servers.

Model		ER7406
Security	Attack Defense	TCP/UDP/ICMP Flood Defense Block TCP Scan (Stealth FIN/Xmas/Null) Block Ping from WAN
	Filtering	Web Group Filtering[1] URL Categories and URLs Filtering Web Security[1]
	DNS Proxy	DNSSEC, DoH, DoT, DNS Override
	ARP Inspection	Sending GARP Packets ARP Scanning[2] IP-MAC Binding ARP Detection
	Access Control	Source/Destination IP Based ACL Stateful ACL IPv4/IPv6 ACL National Based ACL FQDN
	DPI	Deep Packet Inspection Support 2421 type Applications
	IPS/IDS	Signature-based IPS/IDS threat detection
Authentication	Web Authentication	No Authentication Simple Password[3] Hotspot (Local User / Voucher[3] / SMS[3] / Radius[3]) External Radius Sever External Portal Sever[3] LDAP[4]
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[5] Port Mirroring CLI (only in Standalone Mode) Syslog Support
Others	Certification	CE, FCC, RoHS
	Package Contents	ER7406, Power Cord, Quick Installation Guide, Rackmount Kit
	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 50 °C (32 °F to 122 °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. Web Group Filtering and Web Security are supported only in Standalone Mode.
2. ARP Scanning is supported only in Standalone Mode.
3. The following web authentication methods are supported only in Controller Mode: Simple Password, Voucher, SMS, Radius, and External Portal Sever.
4. LDAP is supported only in Standalone Mode.
5. NTP Synchronize is supported only in Standalone Mode.

Ordering Information

Host Gateway	
Model	Description
ER7406	Omada Gigabit Rackmount/Desktop VPN Gateway

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

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