

# Omada Gigabit VPN Router

MODEL: ER605 V2



## Highlights

- 1 Gigabit WAN port, 2 Gigabit LAN ports, 2 Gigabit WAN/LAN ports, and 1 USB2.0 port (supports USB LTE dongle) provide high-speed wired connectivity
- Supports multiple VPN protocols, including IPSec, L2TP, PPTP and OpenVPN. Up to 20 IPSec VPN tunnels, 16 L2TP VPN tunnels, 16 PPTP VPN tunnels, and 16 OpenVPN tunnels are simultaneously supported
- SPI firewall and DoS defense protect your network from most known Internet attacks
- Professional 4 KV lightning protection keeps your investment safe and sound

# 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

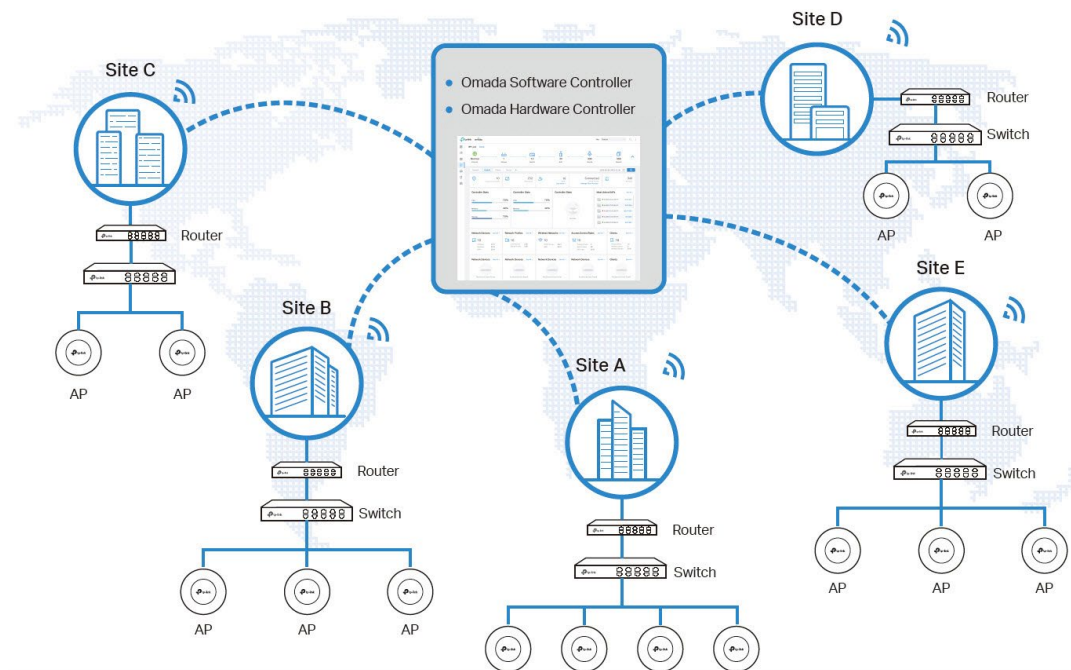


## Catering

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

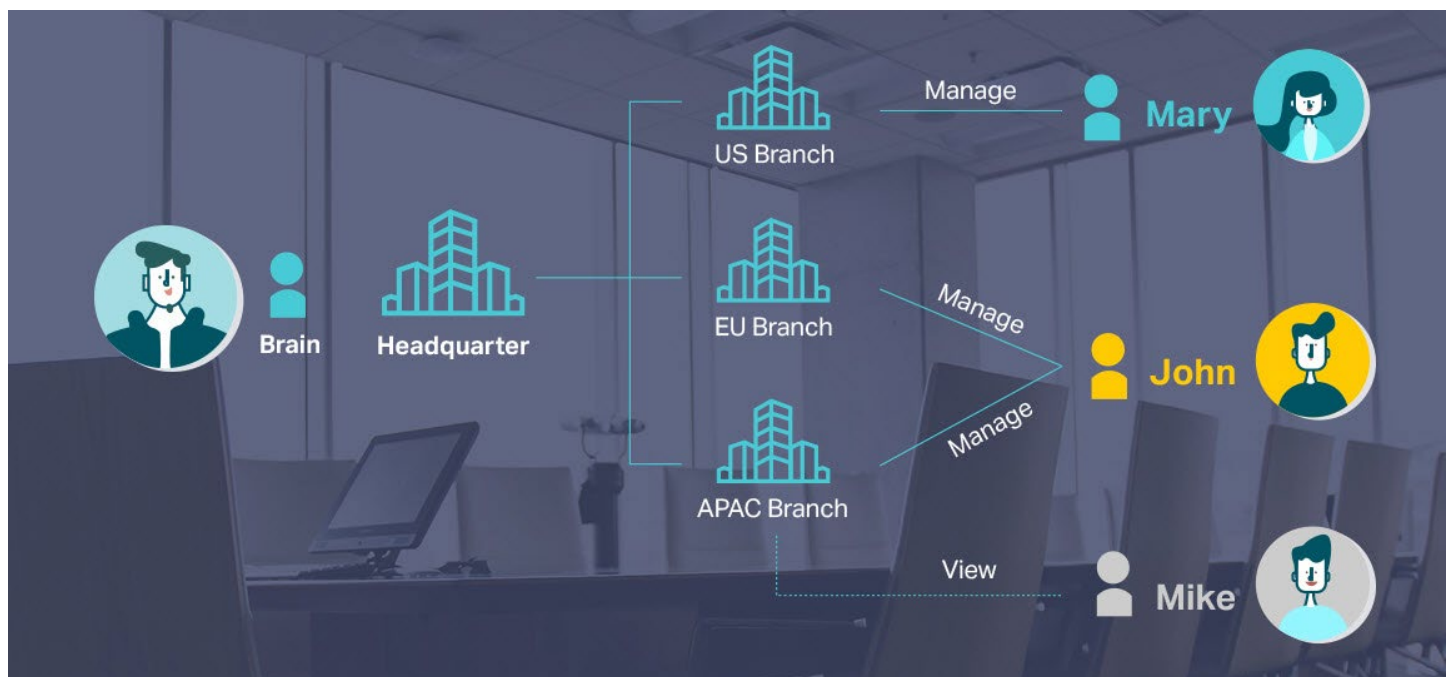
100% centralized cloud management of the whole network from different sites—all controlled from a single interface anywhere, anytime.



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

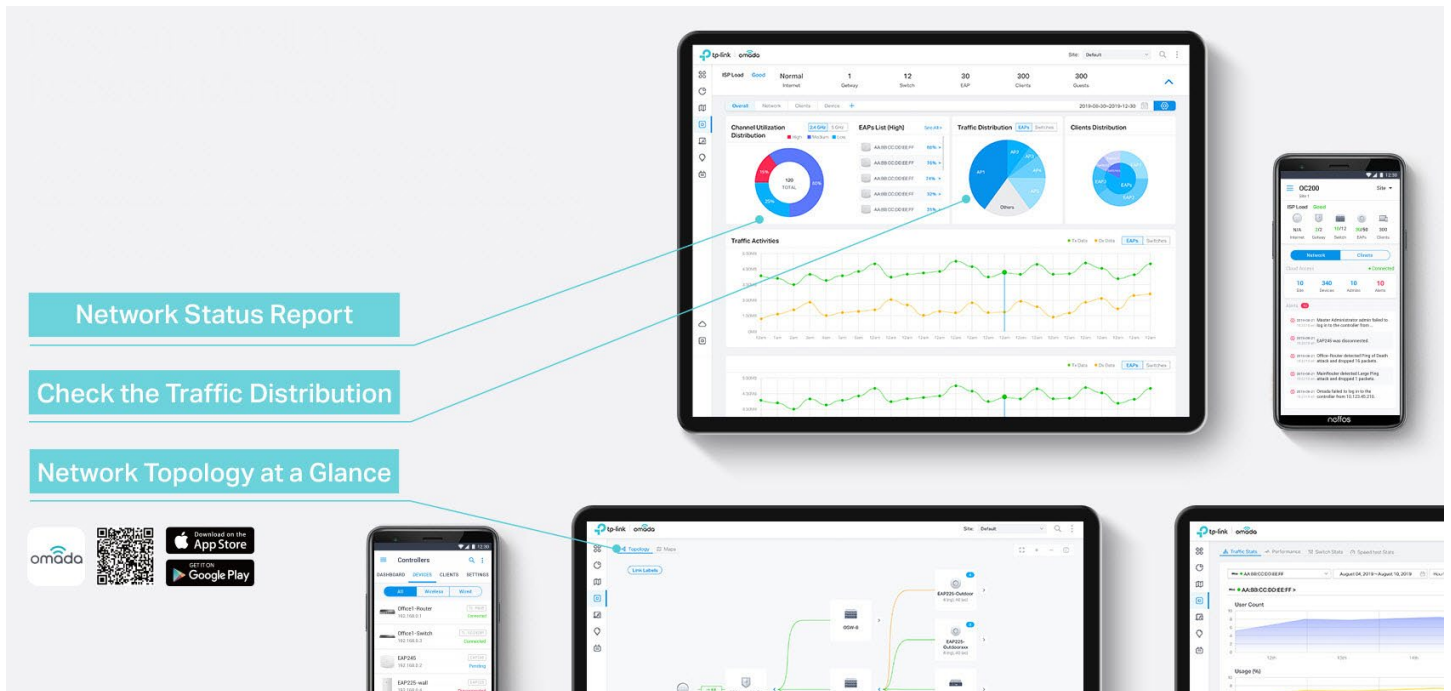
## Assign Different Management Roles

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.

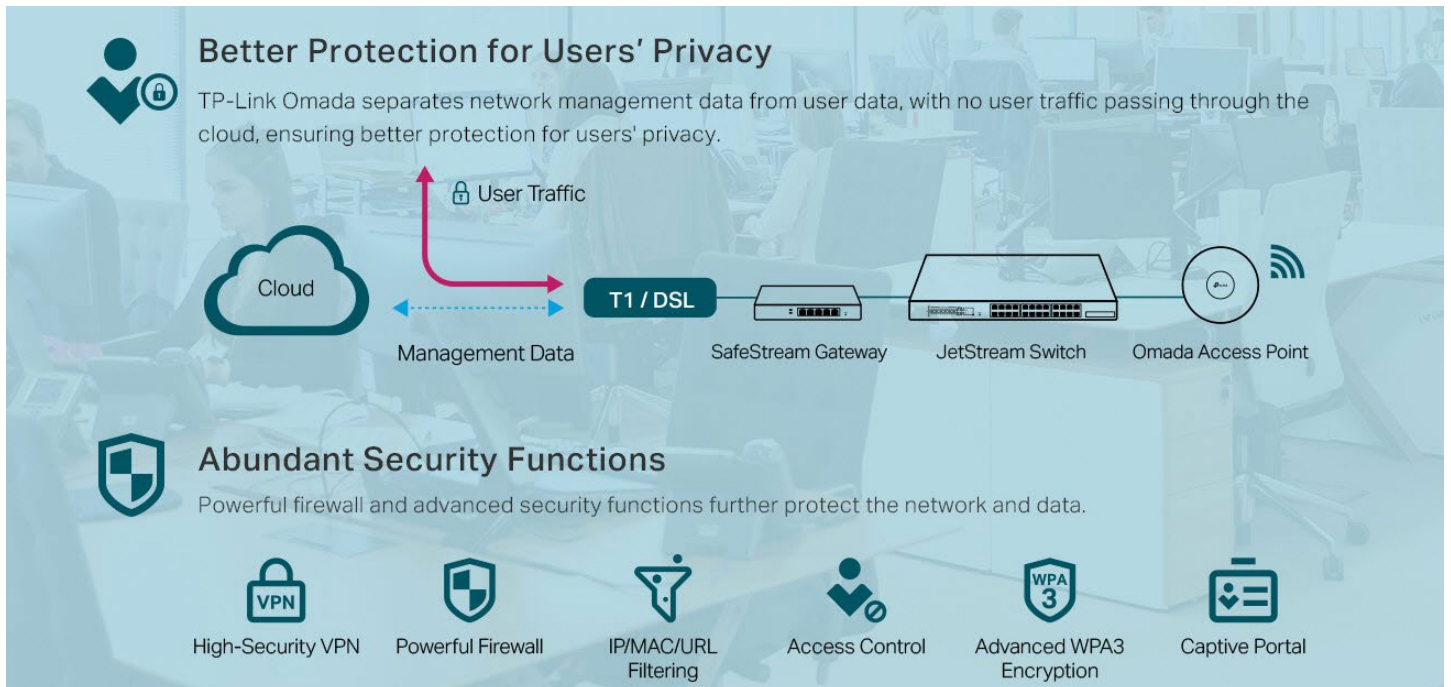


# Easy and Intelligent Network Monitoring

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



# Specifications

Model		ER605 V2
Product Picture		
Product Description		Omada Gigabit VPN Router
Hardware	Standards and Protocols	IEEE 802.3, IEEE802.3u, IEEE802.3ab, IEEE 802.3x, IEEE 802.1q TCP/IP, DHCP, ICMP, NAT, PPPoE, NTP, HTTP, HTTPS, DNS, IPSec, PPTP, L2TP, OpenVPN, SNMP
	Interface	1 Gigabit WAN port 2 Gigabit LAN/WAN ports 2 Gigabit LAN ports
	USB	1 USB2.0 (supports USB LTE dongle <sup>1</sup> )
	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 5e, 6 cable (Max 100 m)
	Button	Reset Button
	Power Supply	External 12 V/1 A DC Adapter
	Flash	128 MB NAND
	DRAM	256 MB DDR
	LED	PWR, SYS, WAN (Link/Act), LAN (Link/Act), USB
	Power Consumption (max.)	7.94 W
	Dimensions (W x D x H)	6.2 × 4.0 × 1.0 in (158 × 101 × 25 mm)
SDN Support	Hardware Controller (OC200/OC300)	Automatic Device Discovery Intelligent Network Monitoring Abnormal Event Warnings Unified Configuration
	Software Controller	Reboot Schedule Captive Portal Configuration
Performance <sup>2</sup>	Concurrent Session	150,000
	New Sessions /Second	2,600
	DPI Throughput	TCP: 905 Mbps UDP: 788 Mbps
	Static IP NAT Throughput	Upload: 945.77 Mbps; Download: 938.79 Mbps Bi-Directional: 1808.29 Mbps
	DHCP NAT Throughput	Upload: 945.54 Mbps; Download: 945.66 Mbps Bi-Directional: 1802.77 Mbps
	PPPoE NAT Throughput	Upload: 939.71Mbps; Download: 939.43 Mbps Bi-Directional: 1788.54 Mbps
	L2TP NAT Throughput	Upload: 815.55 Mbps; Download: 835.59 Mbps Bi-Directional: 903.13 Mbps
	PPTP NAT Throughput	Upload: 813.23 Mbps; Download: 850.91 Mbps Bi-Directional: 894.41 Mbps
	66 Byte Packet forwarding rate	Upload/Download: 954.50 Mbps Bi-Directional: 1130.00 Mbps
	1518 Byte Packet forwarding rate	Upload/Download: 997.50 Mbps Bi-Directional: 1965.00 Mbps

1. For compatibility list, visit <https://www.tp-link.com/er605/compatibility/>

2. Rated specifications are based on test results using software version ER605(UN)\_V2\_2.1.2 Build 20230210. Device performance may vary as a result of the actual scenario.

Model		ER605 V2
Performance <sup>1</sup>	IPSec VPN Throughput	ESP-SHA1-AES256: 259.78 Mbps ESP-SHA256-AES256: 260.81 Mbps ESP-SHA384-AES256: 37.65 Mbps ESP-SHA512-AES256: 38.32 Mbps
	WireGuard VPN	130.96 Mbps
	OpenVPN	21.70 Mbps
	GRE	Unencrypted: 359.74 Mbps Encrypted: 78.11 Mbps
	L2TP VPN Throughput	Unencrypted: 640.99 Mbps Encrypted: 77.31 Mbps
	PPTP VPN Throughput	Unencrypted: 759.55 Mbps Encrypted: 75.80 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
	MAC Clone	Modify WAN/LAN MAC Address <sup>2</sup>
	IPTV	IGMP v2/v3 Proxy, Custom Mode, Bridge Mode
	IPv6	StaticIP / SLAAC / DHCPv6 / PPPoE / 6to4Tunnel / PassThrough / Non-Address mode
	stateful ACL	√
	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 <sup>3</sup> NAT-DMZ FTP/H.323/SIP/IPSec/PPTP ALG UPnP
	Routing	Static Routing Policy Routing RIP <sup>3</sup> OSPF <sup>3</sup>

1. Rated specifications are based on test results using software version ER605(UN)\_V2\_2.1.2 Build 20230210. Device performance may vary as a result of the actual scenario.
2. LAN MAC Address can be modified only in Standalone Mode.
3. Port Triggering, RIP, OSPF are supported only in Standalone Mode.

Model		ER605 V2
Transmission	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 DES, 3DES, AES128, AES192, AES256, SHA2-384 and SHA2-512 Encryption Algorithm IPsec Failover IKE v1/v2 MD5, SHA1 Authentication Algorithm, SHA2 Authentication Algorithm NAT Traversal (NAT-T) Dead Peer Detection (DPD) Perfect Forward Secrecy (PFS)
	PPTP VPN	PPTP VPN Server PPTP VPN Client (10) <sup>1</sup> 16 Tunnels PPTP with MPPE Encryption
	L2TP VPN	L2TP VPN Server L2TP VPN Client (10) <sup>1</sup> 16 Tunnels L2TP over IPSec
	GRE	Only in Standalone Mode
	WireGuard VPN	√
	OpenVPN	OpenVPN Server OpenVPN Client (10) <sup>1</sup> 16 OpenVPN Tunnels "Certificate + Account" Mode Full Mode
Security	Attack Defense	TCP/UDP/ICMP Flood Defense Block TCP Scan (Stealth FIN/Xmas/Null) Block Ping from WAN
	Filtering	Web Group Filtering <sup>2</sup> URL Filtering Web Security <sup>2</sup>
	DNS Proxy	DNSSEC, DoH and DoT
	ARP Inspection	Sending GARP Packets <sup>3</sup> ARP Scanning <sup>3</sup> IP-MAC Binding
	Access Control	Source/Destination IP Based Access Control

1. ER605 can work as a VPN client and can connect with up to 10 VPN servers.
2. Web Group Filtering and Web Security are supported only in Standalone Mode.
3. Sending GARP Packets and ARP Scanning are supported only in Standalone Mode.

Model		ER605 V2
Authentication	Web Authentication	No Authentication Simple Password <sup>1</sup> Hotspot (Local User / Voucher <sup>1</sup> / SMS <sup>1</sup> / Radius <sup>1</sup> ) External Radius Sever External Portal Sever <sup>1</sup> LDAP <sup>2</sup>
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) <sup>3</sup> NTP Synchronize <sup>3</sup> Port Mirroring CLI (only in Standalone Mode) Syslog Support
Others	Certification	CE, FCC, RoHS
	Package Contents	ER605, Power Adapter, RJ-45 Ethernet Cable, 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 40 °C (32 °F to 104 °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. The following web authentication methods are supported only in Controller Mode: Simple Password, Voucher, SMS, Radius, and External Portal Sever.
2. LDAP is supported only in Standalone Mode.
3. Diagnostics (Ping & Traceroute) and NTP Synchronize are supported only in Standalone Mode.

\* Some models featured in this guide may be unavailable in your country or region. Visit TP-Link website for local sales information: [www.tp-link.com](http://www.tp-link.com).

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