

Router | Datasheet

G36W-4G

Omada Pro 4G+ Cat6 AX3000 Gigabit VPN Router



Highlights

- Dual-core ARM® Cortex-A53 processor and 512MB DDR4 high-speed memory for outstanding performance
- Wi-Fi 6 technology achieves up to 3x faster speeds, higher capacity and lower latency compared to the previous generation of Wi-Fi 5
- Equipped with 1 Gigabit SFP WAN/LAN port, 1 Gigabit RJ45 WAN port, 4 Gigabit RJ45 WAN/LAN ports and 1 Nano-SIM Card Slot
- 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

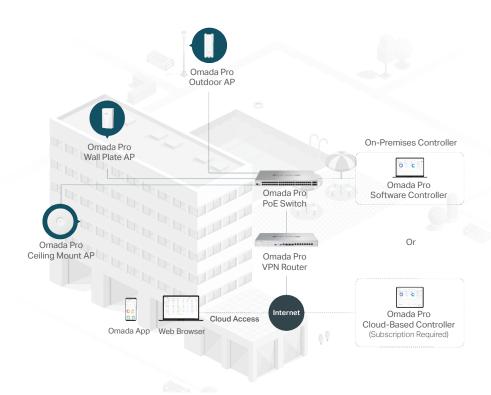


Product Pictures



Omada Pro Solution

Omada Pro is TP-Link's enterprise-grade product line designed to meet the high-capacity, security, and management needs of various industries. It provides one-stop professional cloud solutions, integrating a complete set of devices such as access points, switches, and routers. It's ideal for diverse vertical industries including multi-dwelling units (MDUs), K-12 education, hospitality, public works, catering, manufacturing, malls, and more.





Specifications

Model		G36W-4G
Product Picture		
Product Descript	tion	Omada Pro 4G+ Cat6 AX3000 Gigabit VPN Router
	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, 802.11a/b/g/n/ac/ax
	Interface	1 Gigabit SFP WAN/LAN Port 1 Gigabit WAN Port 4 Gigabit LAN/WAN Ports
	LTE	1 Nano SIM slot (4G+ Cat6)
	LTE Speed	Downlink: 300 Mbps, Uplink: 50 Mbps
	Wi-Fi Speed	2.4 GHz: 574 Mbps 5 GHz: 2402 Mbps HE160
Hardware	Antennas	Wi-Fi: Three 5GHz 5.5dBi & 2.4GHz 4.5dBi dual-band detachable antennas LTE: Two 4.0dBi omnidirectional detachable antennas
	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)
	Network Type	LTE Band of EU: 4G LTE-FDD: B1/B3/B5/B7/B8/B20/B28/B32 (2100/1800/850/2600/9 00/800/700/1450 MHz) 4G LTE-TDD: B38/B40/B41 (2600/2300/2500 MHz) 3G DC-HSDPA/HSPA+/HSDPA/HSUPA/WCDMA: B1/B3/B5/B8 (2100/1800/850/900 MHz) Carrier Aggregation: B1+B1/B3/B5/B7/B8/B20/B28/B38/B40/B41 B3+B3/B5/B7/B8/B20/B28/B38/B40/B41 B5+B5/B7/B38/B40/B41 B7+B7/B8/B20/B28/B32 B8+B32/B38/B40/B41 B20+B32/B38/B40 B28+B32/B38/B40/B41 B38+B38 B40+B40 B41+B41

Model		G36W-4G
	Network Type	LTE Band of US: 4G LTE-FDD: B2/B4/B5/B7/B12/B13/B14/B25/B26/B29/B30/B66/B71 (1950/2100/850/2600/750/750/750/1950/850/700/2350/2150/650 MHz) 4G LTE-TDD: B41/B48 (2500/3600 MHz) Carrier Aggregation: B2+B2/B4/B5/B7/B12/B13/B14/B29/B30/B48/B66/B71 B4+B4/B5/B7/B12/B13/B29/B30/B71 B5+B5/B7/B25/B30/B41/B66 B7+B7/B12/B66 B12+B12/B25/B30/B66 B13+B66 B14+B30/B66 B25+B25/B26/B41 B29+B30/B66 B30+B66 B30+B66 B41+B41 B48+B48 B66+B66/B71
Hardware	Button	Reset button
	Power Supply	12VDC / 2A Power Adapter
	Flash	128 MB NAND
	DRAM	512 MB DDR4
	LED	SYS, WLAN, SFP, LTE Signal, WAN (1000M Link/Act, 100/10M Link/Act), WAN/LAN (1000M Link/Act, 100/10M Link/Act)
	Max Power Consumption	EU: 15.4W US: 17.3W
	Surge Protection	4 kV surge protection
	Mounting	Desktop/ Wall-mounting
	Dimensions (WxDxH)	$8.9 \times 5.2 \times 1.4$ in (226 \times 131 \times 35 mm) (Antenna dimensions not included)
	Hardware Controller	Automatic Device Discovery Intelligent Network Monitoring Abnormal Event Warnings
SDN Support	Omada Pro Controller	Unified Configuration Reboot Schedule Captive Portal Configuration
	Omada App	

^{1.} Rated specifications are based on test results using software version 1.0.0. Device performance may vary as a result of the actual scenario.



Model		G36W-4G
	Concurrent Session	150,000
	New Sessions /Second	5,100
	Static IP NAT Throughput (Upload / Download)	947.1Mbps/940.1Mbps
	DHCP NAT Throughput (Upload / Download)	949.2Mbps /941.1Mbps
	PPPoE NAT Throughput (Upload / Download)	942.6Mbps/941.1Mbps
	L2TP NAT Throughput (Upload / Download)	875.4Mbps/892.0Mbps
	PPTP NAT Throughput (Upload / Download)	881.2Mbps/895.8Mbps
Performance ¹	66 Byte Packet forwarding rate (Upload / Download)	1,453,489 pps / 1,453,488 pps
	1,518 Byte Packet forwarding rate (Upload / Download)	81274 pps/ 91275 pps
	IPSec VPN Throughput	ESP-SHA1-AES256: 652.2Mbps ESP-SHA256-AES256: 654.4Mbps ESP-SHA384-AES256: 646.5Mbps ESP-SHA512-AES256: 670.5 Mbps
	GRE	Unencrypted: 545.3Mbps Encrypted: 282.6Mbps
	WireGuard VPN	387.7Mbps
	SSL VPN	122.5Mbps
	OpenVPN	115.5Mbps
	L2TP VPN Throughput	Unencrypted: 990.0Mbps Encrypted: 475.0Mbps
	PPTP VPN Throughput	Unencrypted: 1177.9Mbps Encrypted: 177.4Mbps
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 Address
	IPTV	IGMP v2/v3 Proxy, Custom Mode, Bridge Mode
	IPv6	StaticIP / SLAAC / DHCPv6 / PPPoE / 6to4Tunnel / PassThrough / Non-Address mode
	Stateful ACL	√

Model		G36W-4G
	mDNS Repeater	√
	Quality of Service	√
	Bridge VLAN	√
Basic Functions	VLAN	802.1Q VLAN
	SMS	Receive/Send SMS
	DNS Queries	√
	Wildcard FQDN	√
	Wireless Encryption	WPA/WPA2/WPA3 Personal, WPA/WPA2/WPA3 Enterprise
	Multiple SSIDs	16 in total (8 per radio)
	Enable/Disable Wireless Radio	√
	Enable/Disable SSID Broadcast	√
	Guest Network	√
	Automatic Channel Selection Algorithm	√
	Transmit Power Control	Adjust transmit Power on dBm
	Seamless Roaming	√
	Mesh	√ (with EAP that supports Mesh)
	OFDMA	√
	Beamforming	√
	MU-MIMO	√
Wireless Function	Rate Limit	Based on SSID/Client
	Load Balance	√
	Airtime Fairness	√
	Band Steering	√
	RADIUS Accounting	√
	MAC Authentication	√
	Reboot Schedule	√
	Wireless Schedule	√
	Support Data Rates	802.11ax: 8 Mbps to 2402 Mbps (MCS0-MCS11, NSS = 1 to 2 HE20/40/80/160) 802.11ac: 6.5 Mbps to 2166.7 Mbps (MCS0-MCS11, NSS = 1 to 2 VHT20/40/80/160) 802.11n: 6.5 Mbps to 300 Mbps (MCS0-MCS15, HT20/40) 802.11g: 6, 9, 12, 18, 24, 36, 48,54 Mbps 802.11b: 1, 2, 5.5, 11 Mbps 802.11a: 6, 9, 12, 18, 24, 36, 48,54 Mbps

Model		G36W-4G
Transmission	Load Balance	Intelligent Load Balance Application Optimized Routing Link Backup (Timing, Failover) Online Detection
	NAT	One-to-One NAT Multi-Net NAT Virtual Server Port Triggering ¹ NAT-DMZ FTP/H.323/SIP/IPSec/PPTP ALG UPnP
	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
	WireGuard VPN	\checkmark
	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.
- $2. \quad \hbox{RIP and OSPF are supported only in Standalone Mode.} \\$
- 3. For PPTP VPN and L2TP VPN, G36W-4G can connect with up to 10 VPN servers. For OpenVPN, G36W-4G can connect with up to 5 VPN servers.



Model		G36W-4G
	Attack Defense	TCP/UDP/ICMP Flood Defense Block TCP Scan (Stealth FIN/Xmas/Null) Block Ping from WAN
	Filtering	Web Group Filtering ¹ URL Filtering Web Security ¹
	DNS Proxy	DNSSEC, DoH, and DoT
Security	ARP Inspection	Sending GARP Packets ARP Scanning ² IP-MAC Binding
	Access Control	Source/Destination IP Based Access Control
	DPI	Application Control, Traffic Monitor
	IDS/IPS	Intrusion detection systems (IDS) and intrusion prevention systems (IPS)
Authentication	Web Authentication	No Authentication Simple Password ³ Hotspot (Local User / Voucher ³ / SMS ³ / Radius ³) External Radius Server External Portal Server ³ LDAP
	Service	Dynamic DNS (Dyndns, No-IP, Peanuthull, Comexe, DDNS Customization)
Management	Maintenance	Web Management Interface Remote Management Export & Import Configuration SNMP v1/v2c/v3 Diagnostics (Ping & Traceroute) ⁴ NTP Synchronize ⁴ Port Mirroring CLI (only in Standalone Mode) Syslog Support Intelligent anomaly detection Gateway Online Detection Remote Packet Capture
	Certification	CE, FCC, RoHS
Others	Package Contents	G36W-4G, Power Adapter, Quick Installation Guide
	System Requirements	Microsoft Windows 98SE, NT, 2000, XP, Vista™ or Windows 7/8/8.1/10/11 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. 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 Server, DNS Queries, Wildcard FQDN, IDS/IPS, DPI, Intelligent anomaly detection, Gateway Online Detection, Remote Packet Capture.
- 4. Diagnostics (Ping & Traceroute) and NTP Synchronize are supported only in Standalone Mode.



Ordering Information

Host Router	
Model	Description
G36W-4G	Omada Pro 4G+ Cat6 AX3000 Gigabit VPN Router

SFP Modules		
Model	Description	
M311LS (TL-SM311LS)	Gigabit SFP module, Single-mode, LC interface, Up to 20km distance	
SM311LM (TL-SM311LM)	Gigabit SFP module, Multi-mode, LC interface, Up to 550m distance	
SM321A (TL-SM321A)	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 20 km	
SM321A-2 (TL-SM321A-2)	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 2 km	
SM321B (TL-SM321B)	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 20 km	
SM321B-2 (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
SM331T (TL-SM331T)	1000BASE-T RJ45 SFP Module

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