

Omada Pro VPN Router with 10G Ports

MODEL: G611

Highlights

- Dedicated Quad-core Cortex-A72 @2.2GHz CPU for outstanding performance
- 4GB DDR4 high-speed memory for high concurrent connections
- Equipped with 1 10G SFP+ WAN port, 1 10G SFP+ WAN/LAN port, 1 Gigabit SFP WAN/LAN port, 8 Gigabit RJ45 WAN/LAN ports
- Supports multiple VPN protocols including SSL VPN/ OpenVPN/ WireGuard VPN/ IPSec/ PPTP/ L2TP/ L2TP over IPSec, helping users to establish VPN connections more flexibly
- Supports up to 2,300,000 concurrent connections
- Abundant features including load balance, bandwidth control and access control
- Professional 4 kV lightning protection keeps your investments as safe as possible

Specifications

Model		G611
Product Description		Omada Pro VPN Router with 10G Ports
General	CPU	Quad-core Cortex-A72 @2.2GHz
	Interface	1 10G SFP+ WAN port, 1 10G SFP+ WAN/LAN port, 1 Gigabit SFP WAN/LAN port, 8 Gigabit RJ45 WAN/LAN ports
	USB	2 USB3.0 (One supports 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 5e, 6 cable (Max 100 m)
	Button	Reset button
	Dual Redundant Power Supply	2 Fixed AC Power Supply
	Power Supply	100–240 VAC, 50/60 Hz
	Flash	4MB SPI NOR + 256 MB NAND
	DRAM	4 GB DDR4
	Surge Protection	4 kV surge protection
	FAN Quantity	2
	Max Power Consumption	26.36W (with USB3.0 connected) 19.12W (without USB3.0 connected)
	Dimensions (W x D x H)	17.3 × 8.7 × 1.7 in (440 × 220 × 44 mm)
SDN Support	Omada Pro Controller	Automatic Device Discovery Intelligent Network Monitoring Abnormal Event Warnings Unified Configuration
	Omada Pro Cloud-Based Controller	Reboot Schedule Captive Portal Configuration ZTP (Zero-Touch Provisioning) ¹

1. Zero-Touch Provisioning is supported only when using Omada Pro Cloud-Based Controller.

Model	G611	
Performance	Concurrent Session	2,300,000
	New Sessions /Second	20,000
	Static IP NAT Throughput (Upload / Download)	9445.82 Mbps / 9449.26 Mbps
	DHCP NAT Throughput (Upload / Download)	9426.83 Mbps / 9426.20 Mbps
	PPPoE NAT Throughput (Upload / Download)	9413.96 Mbps / 9102.01 Mbps
	L2TP NAT Throughput (Upload / Download)	9064.66 Mbps / 8587.57 Mbps
	PPTP NAT Throughput (Upload / Download)	8712.11 Mbps / 8505.61 Mbps
	64 Byte Packet forwarding rate (Upload / Download)	1080 Mbps / 1030 Mbps
	1,518 Byte Packet forwarding rate (Upload / Download)	9970 Mbps / 9970 Mbps
	SSL VPN Throughput	4486 Mbps
	WireGuard VPN Throughput	1411 Mbps
	IPSec VPN Throughput	ESP-SHA1-AES256: 3099.4 Mbps ESP-SHA256-AES256: 2928.4 Mbps ESP-SHA384-AES256: 2935.7 Mbps ESP-SHA512-AES256: 2878 Mbps
	L2TP VPN Throughput	Unencrypted: 10497 Mbps Encrypted: 3178.5 Mbps
	OpenVPN Throughput	4424.1 Mbps
	PPTP VPN Throughput	Unencrypted: 10497 Mbps Encrypted: 3178 Mbps
Basic Functions	WAN Connection Type	Static/Dynamic IP PPPoE PPTP L2TP 6to4 Tunnel IPv6 Pass-Through Mobile Broadband: 4G/3G modem for backup via USB port
	DHCP	DHCP Server/Client DHCP Address Reservation Multi-IP Interfaces Multi-Net DHCP
	MAC Clone	Modify WAN/LAN MAC Address ¹
	IPTV	IGMP v2/v3 Proxy
	IPv6	WAN Connection
	VLAN	802.1Q VLAN
	Stateful ACL	√
	mDNS Repeater	√
	Quality of Service	√
	Bridge VLAN	√
DNS Queries ²	√	

1. LAN MAC Address can be modified only in Standalone Mode. 2. DNS Queries is supported only in Controller Mode.

Model		G611
Transmission	Load Balance	Intelligent Load Balance Application Optimized Routing Link Backup (Timing ¹ , Failover) Online Detection
	NAT	One-to-One NAT ² Multi-Net NAT Virtual Server Port Triggering ² NAT-DMZ FTP/H.323/SIP/IPSec/PPTP ALG, UPnP
	Routing	Static Routing Policy Routing
	Session Limit	IP-based Session Limit
	Bandwidth Control	IP/Port-based Bandwidth Control Guarantee & Limited Bandwidth
VPN	SSL VPN	SSL VPN Server SSL VPN Client 500 SSL VPN Tunnels
	IPSec VPN	300 IPSec VPN Tunnels LAN-to-LAN, Client-to-LAN Main, Aggressive Negotiation Mode DES, 3DES, SHA1, SHA 256, SHA 384, SHA 512, AES128, AES192, AES256 Encryption Algorithm IKE v1/v2 MD5, SHA1 Authentication Algorithm NAT Traversal (NAT-T) Dead Peer Detection (DPD) Perfect Forward Secrecy (PFS)
	PPTP VPN	PPTP VPN Server PPTP VPN Client (32) ³ 300 Tunnels (Shared with L2TP) PPTP with MPPE Encryption
	L2TP VPN	L2TP VPN Server L2TP VPN Client (32) ³ 300 Tunnels (Shared with PPTP) L2TP over IPSec
	OpenVPN	OpenVPN Server OpenVPN Client (10) ³ 110 OpenVPN Tunnels

1. The Timing mode in Link Backup is supported only in Standalone Mode.
2. One-to-One NAT and Port Triggering are supported only in Standalone Mode.
3. G611 can work as a VPN client and can connect with up to 32 PPTP/L2TP VPN servers and 10 OpenVPN servers.

Model		G611
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 Filtering Web Security ¹
	ARP Inspection ²	Sending GARP Packets ARP Scanning IP-MAC Binding
	DPI ³	Application Control, Traffic Monitor
	IDS/IPS ³	Intrusion detection systems (IDS) and intrusion prevention systems (IPS)
	Access Control	Source/Destination IP Based Access Control
Authentication	Web Authentication	No Authentication Simple Password ⁴ Hotspot (Local User / Voucher ⁴ / SMS ⁴ / Radius ⁴) External Radius Server External Portal Server ⁴
Management	Service	Dynamic DNS (Dyndns, No-IP, Peanuthull, Comexe)
	Maintenance	Web Management Interface Remote Management Export & Import Configuration SNMP v1/v2c/v3 Diagnostics (Ping & Traceroute) ⁴ NTP Synchronize ⁵ Syslog Support Gateway Online Detection ⁶ Remote Packet Capture ⁶
Others	Certification	CE, FCC, RoHS
	Package Contents	G611, Power Cord, Quick Installation Guide, Rackmount Kit, RJ45 Console Cord
	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. Web Group Filtering and Web Security are supported only in Standalone Mode.
2. ARP Inspection is supported only in Standalone Mode.
3. DPI and IDS/IPS are supported only in Controller Mode
4. The following web authentication methods are supported only in Controller Mode: Simple Password, Voucher, SMS, Radius, and External Portal Server.
5. Diagnostics (Ping & Traceroute) and NTP Synchronize are supported only in Standalone Mode.
6. Gateway Online Detection and Remote Packet Capture are supported only in Controller Mode.

Ordering Information

Host Router

Model	Description
G611	Omada Pro VPN Router with 10G Ports

SFP/SFP+ Modules

Model	Description
TL-SM311LS	Gigabit SFP module, Single-mode, LC interface, Up to 20km distance
TL-SM311LM	Gigabit SFP module, Multi-mode, LC interface, Up to 550m distance
TL-SM321A	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 20 km
TL-SM321A-2	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1550 nm/RX: 1310 nm, 2 km
TL-SM321B	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 20 km
TL-SM321B-2	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX: 1310 nm/RX: 1550 nm, 2 km
TL-SM5110-LR	10GBase-LR SFP+ LC Transceiver, single-mode, LC connector, 1310nm, 10 km
TL-SM5110-SR	10GBase-SR SFP+ LC Transceiver, multi-mode, LC connector, 850nm, 300 m

RJ45 SFP/SFP+ Modules

Model	Description
TL-SM331T	1000BASE-T RJ45 SFP Module
TL-SM5310-T	10GBASE-T RJ45 SFP+ Module

* 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.

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