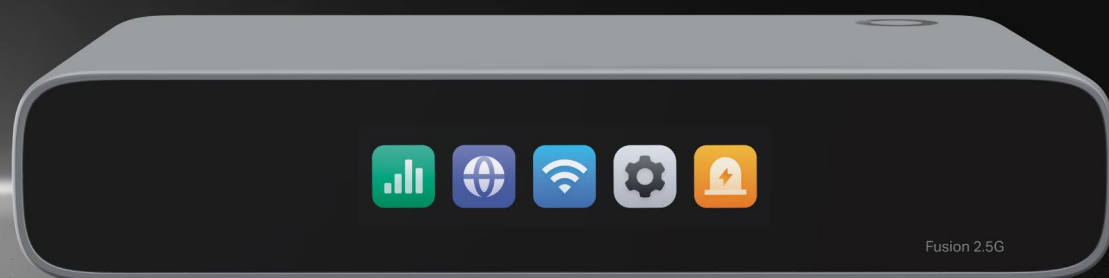


Enterprise Solution

Omada Fusion 2.5G Gateway



Model: Fusion 2.5G

Product Overview

Omada Fusion 2.5G Gateway is an all in one solution that integrates a gateway and controller into a single device. Positioned at the center of the Omada networking ecosystem, Fusion 2.5G unifies networking and centralized management with license free cloud control straight out of the box. Bluetooth based setup simplifies deployment, cuts installation time, and reduces on site visits through touchscreen based troubleshooting — helping increase profitability while delivering projects more efficiently.

- License Free Cloud Management for Multi Site Work
- Simplified Setup with Auto Device Detection via Bluetooth and One-Tap Bulk Device Adoption
- Enterprise Grade Performance: High-Performance Quad-Core CPU, Five 2.5G Ports, IPS/IDS at 2.1 Gbps*
- Quick Troubleshooting via Touchscreen, Less On-Site Work
- Secure Remote Network Access — One Click Away with Omada LightLink VPN
- Advanced Software Capabilities: App-Based ACL, One-Click Auto QoS, Full Mesh SD-WAN, Content Filtering

Product Appearance



*Actual throughput with IPS/IDS enabled may vary and is not guaranteed. Performance is subject to traffic conditions, enabled features, and network environment.

Feature Descriptions

License Free Cloud Management

Fusion 2.5G features a built-in controller, enabling full access to all functions — from day one, with no additional license required. It supports centralized multi-site management and allows administrators to remotely access and control the network through the Omada Cloud portal via web or Omada app.

Simplified Setup via Bluetooth

Fusion 2.5G features a built-in Bluetooth, supporting auto device detection via the Omada App and enables batch adoption of Omada networking devices, streamlining the initial setup process.

Enterprise Grade Performance

Fusion 2.5G features five 2.5G Ethernet ports and a high performance quad core CPU, eliminating LAN bottlenecks and ensuring stable operation under load. It delivers up to 2.1 Gbps IPS/IDS enabled throughput without impacting overall network performance.

Touchscreen for On Site Troubleshooting

A 2.51 inch integrated touchscreen provides access to network health scores, speed tests, alerts, and real time traffic, enabling basic diagnostics and troubleshooting directly on the device.

Secure Remote Network Access

Fusion 2.5G supports Omada LightLink VPN for secure remote access. Smart Split Tunneling routes only designated traffic through the VPN, reducing tunnel load while maintaining network performance.

Advanced Software Capabilities

Fusion 2.5G supports application- and category-level access control. QoS enables traffic prioritization through predefined profiles and custom rules, ensuring critical applications receive appropriate bandwidth. It supports SD-WAN connectivity for up to 20 sites without public IP addresses, while content filtering provides flexible category- and time-based rules for centralized policy enforcement.

Specifications

Item	Description	
Hardware	Standards and Protocols	IEEE 802.3, IEEE802.3i, IEEE802.3u, IEEE802.3ab, IEEE 802.1q, IEEE 802.1p, IEEE 802.1ab, TCP/IP, DHCP, ICMP, NAT, PPPoE, NTP, HTTP, HTTPS, DNS, IPSec, PPTP, L2TP, OpenVPN, WireGuard VPN, SNMP, LLDP
	Interface	1x 2.5G WAN port 4 x 2.5G LAN/WAN ports
	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) 2.5GBASE-T: UTP category 5, 5e, 6 cable (Max 100 m)
	Button	Reset button
	Indicator	LCM color touchscreen, 2.51 inch
	Power Supply	USB type C (5V DC/3A) (Adapter included)
	Flash	64Mbit Nor+16GB eMMC
	DRAM	2 GB DDR4
	Antenna	1x BLE Antenna
	Surge Protection	4kV
	ESD Protection	±8kV air discharge ±4kV contact discharge
	Dimensions (W x D x H)	6.3 × 5.12 × 1.24 in (160mmx130mmx31.5mm)
	Net Weight	0.510 Kg
	Fan	Fanless
	Enclosure Materials	Plastic
	Installation	Desktop/Magnetic Wall-mount/Rack-mount (magnetic wall mount kit and rack-mount kit sold separately)
	MTBF	613523h@25°C
Max Power Consumption	8.18 W (power adapter included)	
Performance ¹	Concurrent Session	150,000
	New Sessions /Second	7,800
	Static IP NAT Throughput (Upload / Download)	2362 Mbps / 2361Mbps
	DHCP NAT Throughput (Upload / Download)	2363 Mbps / 2359 Mbps
	PPPoE NAT Throughput (Upload / Download)	2355 Mbps / 2357 Mbps
	L2TP NAT Throughput (Upload / Download)	1727 Mbps / 1235 Mbps

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

Item		Description
Performance	PPTP NAT Throughput (Upload / Download)	1843 Mbps / 1399 Mbps
	66 Byte Packet forwarding rate (Upload / Download)	3,472,452 pps / 3,472,359 pps
	1,518 Byte Packet forwarding rate (Upload / Download)	202,671 pps / 202,668 pps
	LightLink VPN Throughput	527 Mbps
	IPSec VPN Throughput	ESP-SHA1-AES256: 1023 Mbps, ESP-SHA256-AES256: 1073 Mbps ESP-SHA384-AES256: 972 Mbps ESP-SHA512-AES256: 1087 Mbps
	OpenVPN Throughput	223 Mbps
	L2TP VPN Throughput	892 Mbps
	PPTP VPN Throughput	193 Mbps
	SSL VPN Throughput	250 Mbps
	WireGuard VPN Throughput	605 Mbps
	IPS Throughput (Upload / Download)	2183Mbps / 2152Mbps
	DPI Throughput (Upload / Download)	2206 Mbps / 2219Mbps
Network	WAN Connection Type	Static IP Dynamic IP PPPoE PPTP L2TP MAP-E DS-Lite
	DHCP	DHCP Server DHCP Options Customization DHCP Address Reservation Multi-IP Interfaces Multi-Net DHCP WAN DHCP 60
	IPTV	IGMP v2/v3 Proxy, Custom Mode, Bridge Mode
	IPv6	StaticIP / SLAAC / DHCPv6 / PPPoE / 6to4Tunnel / PassThrough / Non-Address mode
	VLAN	802.1Q VLAN
	MAC Clone	Modify WAN Address
	Bridge VLAN	√
	Virtual WAN	WAN Connection Type: Static IP, Dynamic IP, PPPoE Max Virtual WAN Entries: 3

Item		Description
Traffic Management	ACL	Source/Destination IP Based ACL Stateful ACL IPv4/IPv6 ACL National Based ACL FQDN
	Routing	Static Routing Policy Routing
	QoS(Quality of Services)	√
	Load Balance	Intelligent Load Balance Application Optimized Routing Link Backup Online Detection
	NAT	One-to-One NAT Virtual Server NAT-DMZ FTP/H.232/SIP/IPSec/PPTP ALG UPnP Disable NAT
	MAC Filtering	√
	IP-MAC Binding	√
Session Limit	IP-based Session Limit	
VPN	LightLink VPN	Invite by Link Invite by Email LightLink Clients (253)
	IPSec VPN	20 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) 16 Tunnels PPTP with MPPE Encryption
	L2TP VPN	L2TP VPN Server L2TP VPN Client (10) 16 Tunnels L2TP over IPSec
	OpenVPN	OpenVPN Server OpenVPN Client (10) 110 OpenVPN Tunnels "Certificate + Account" Mode Full Mode
	WireGuard VPN	√
	SSL VPN	80 Tunnels

Item		Description
Security	Content Filtering	URL Category, Ad Block, Allow List, Block List
	Application Control	Deep Packet Inspection (DPI) Application Filter Rules
	IDS/IPS	Signature-based IPS/IDS threat detection
	Secure DNS	DNSSEC, DoH, DoT, DNS Redirection
	Firewall	Stateful Firewall Attack Defense
	IMPB ¹	DAI DHCP Snooping
Authentication	Portal	No Authentication Simple Password Voucher Local User SMS RADIUS Form Auth External LDAP Server External Portal Server Google
	802.1X ¹	√
	MAC-Based Authentication ¹	√
Management	Managed Omada Devices	Recommended 40 devices
	Service	Dynamic DNS (Dyndns, No-IP, Peanuthull, Comexe, TP-Link DDNS, DDNS Customization) UPnP mDNS Reboot Schedule
	Maintenance	Web Management Interface Remote Management Export & Import Configuration SNMP v1/v2c/v3 Diagnostics (Ping & Traceroute) NTP Synchronize Port Mirroring Syslog Support
Others	Certification	CE, FCC, RoHS
	Package Contents	Fusion Gateway, Power Adapter, Ethernet Cable, 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: -10°C to 40 °C (14°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. *These features refer to functions supported by the devices adopted by the Fusion gateway and can be configured through it.

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

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