Omada Gateway | Datasheet

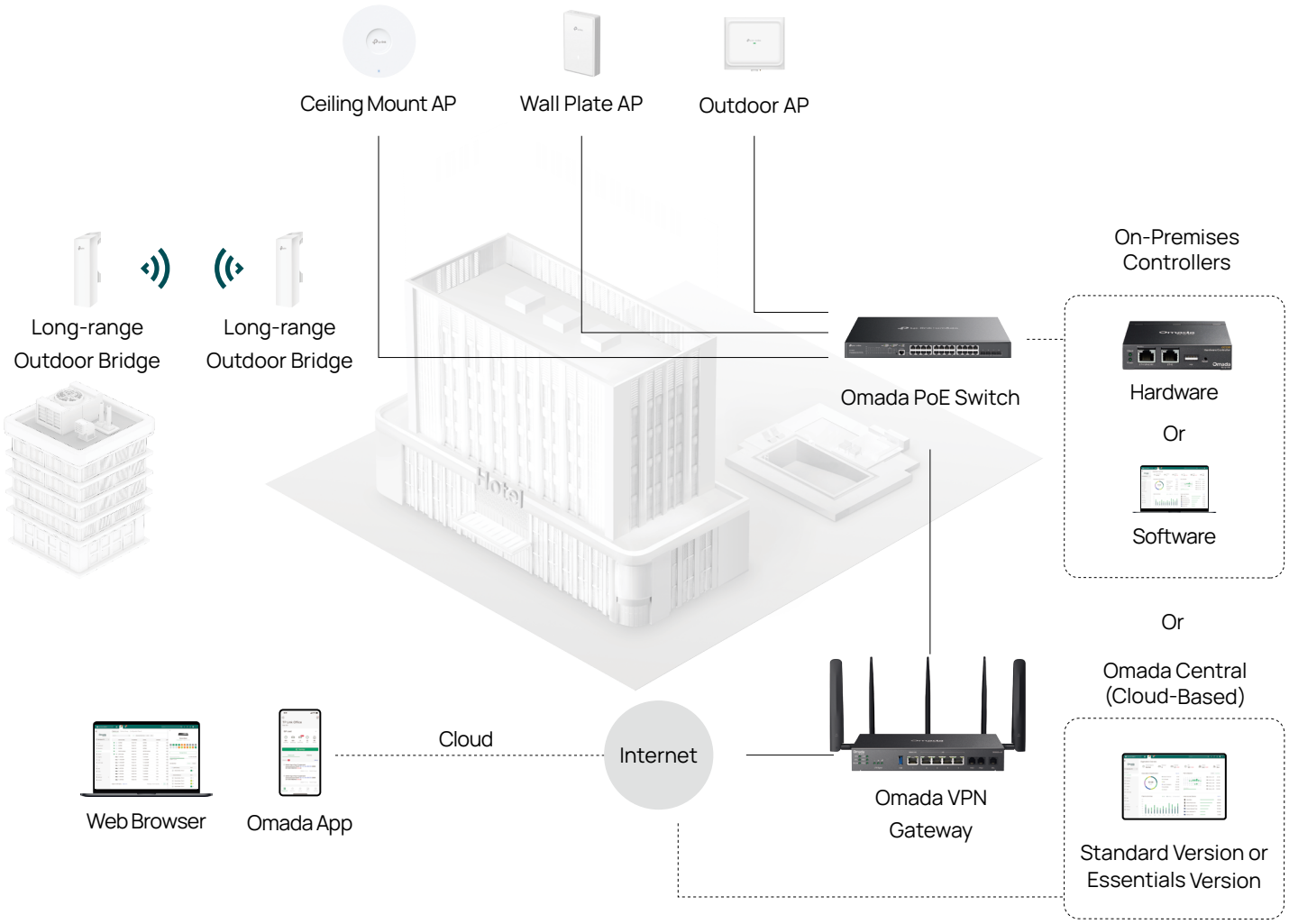
DR3650v-4G

Omada 4G+ Cat6 AX3000 Gigabit Desktop DSL Gateway

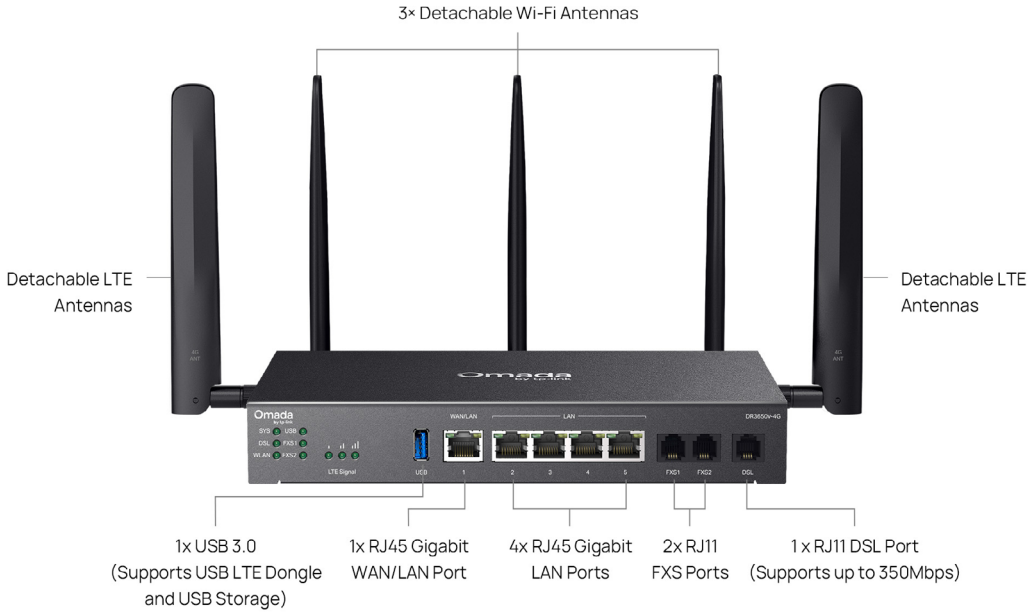
Highlights

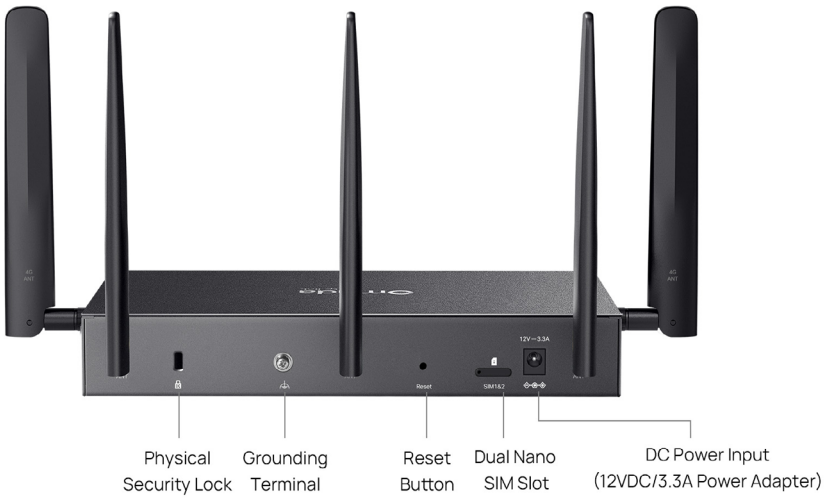
- AX3000 WiFi 6 with 2402 Mbps on 5 GHz and 574 Mbps on 2.4 GHz*
- 4G+ Cat6 up to 300Mbps
- 3× RJ11 Ports (2× FXS, 1× DSL) & 5× RJ45 Gigabit Ports & 1× USB 3.0 Port
- 2× Nano SIM for 4G/LTE Failover
- VDSL2 35b: Supports 350Mbps DSL Access†
- VDSL2/ADSL2+/ADSL2/ADSL Compatibility
- IPSec/PPTP/L2TP/OpenVPN/WireGuard/GRE/SSL VPN
- Load Balancing Across DSL, 4G, and Ethernet WAN for Optimized Connectivity
- Centralized Cloud Management
- Desktop/Wall/Rack Mounting (Purchase Rackmount Kit-D226 Separately)

Omada Solution



Product Pictures





Specifications

Model		DR3650v-4G
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, WireGuard VPN, GRE VPN, SNMP, 802.11a/b/g/n/ac/ax
	Interface	1 Gigabit WAN/LAN Port 4 Gigabit LAN Port 1 DSL Port 2 FXS Port
	USB	1*USB 3.0 (supports USB LTE dongle and USB Storage)
	LTE	Dual-SIM Nano SIM Slot (4G+ Cat6)
	LTE Speed	Downlink: 300 Mbps, Uplink: 50 Mbps
	DSL Standards	VDSL2: ITU G.993.2, ITU-T G.997.1 VDSL2 Profile, 8a, 8b, 8c, 8d, 12a, 12b, 17a, 35b ADSL2+:ITU-T G.992.5 ADSL2:ITU-T G.992.3 ADSL: ITU-T G.992.1(G.dmt), ITU-T G.992.2 (G.lite)
	DSL Speed	Up to 350Mbps
	Compatibility	VDSL2/ADSL2+/ADSL2/ADSL
	Wi-Fi Speed	2.4 GHz: 574 Mbps 5 GHz: 2402 Mbps HE160
	Antennas	Wi-Fi: Three 5GHz 5dBi & 2.4GHz 3.5dBi 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 (2100/1800/850/2600/900/800/700/1450 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 of EU: 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
	Button	Reset button
	Power Supply	12VDC / 3.3A Power Adapter

Model		DR3650v-4G
Hardware	Flash	256MB NAND
	DRAM	512MB DDR4
	LED	SYS, DSL, WLAN, USB, FXS1, FXS2, LTE Signal WAN/LAN (1000M Link/Act, 100/10M Link/Act), LAN (1000M Link/Act, 100/10M Link/Act)
	Max Power Consumption	Power adapter not included: 28.482 W (Full load + USB) Power adapter included: 31.42 W (Full load + USB)
	Surge Protection	DSL Port: 6 kV surge protection Others Ports: 4 kV surge protection
	Mounting	Desktop/ Wall/Rack-mounting
	Dimensions (W x D x H)	8.9 × 5.2 × 1.4 in (226 × 131 × 35 mm) (Antenna dimensions not included)
	MTBF	612053.103632h@25℃ 430515.503016h@40℃
SDN Support	Hardware Controller	Automatic Device Discovery Intelligent Network Monitoring Abnormal Event Warnings Unified Configuration Reboot Schedule Captive Portal Configuration
	Software Controller	
	Omada App	
Performance[1]	Concurrent Session	150,000
	New Sessions /Second	3,800
	Static IP NAT Throughput (Upload / Download)	937.2 Mbps/936.1Mbps
	DHCP NAT Throughput (Upload / Download)	945.8 Mbps /940.6Mbps
	PPPoE NAT Throughput (Upload / Download)	942.9 Mbps/942.9Mbps
	L2TP NAT Throughput (Upload / Download)	837.4 Mbps /881.5Mbps
	PPTP NAT Throughput (Upload / Download)	803.0 Mbps/910.5 Mbps
	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: 569.9Mbps ESP-SHA256-AES256: 543.3Mbps ESP-SHA384-AES256: 549.0Mbps ESP-SHA512-AES256: 539.3Mbps
	GRE	Unencrypted: 541.8Mbp Encrypted: 289.2Mbps
	WireGuard VPN	311.6Mbps
	SSL VPN	126.7Mbps
	OpenVPN	129.3Mbps
	L2TP VPN Throughput	Unencrypted: 909.4 Mbps Encrypted: 494.9Mbps
	PPTP VPN Throughput	Unencrypted: 897.5 Mbps Encrypted: 190.8 Mbps

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

Model		DR3650v-4G
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 Address
	IPTV	IGMP v2/v3 Proxy, Custom Mode, Bridge Mode
	SMS	Receive / Send SMS
	IPv6	StaticIP / SLAAC / DHCPv6 / PPPoE / 6to4Tunnel / PassThrough / Non-Address mode
	Stateful ACL	√
	mDNS Repeater	√
	Quality of Service	√
	Bridge VLAN	√
	VLAN	802.1Q VLAN
VoIP	Protocols	RTP/RTCP, SIP
	SIP Registrars	12
	Telephone Functions	Telephony Book, DND & Call Blocking, Call Waiting, Call Forwarding, Call hold, Call return, Emergency Number, Call log, Voice mail
	Telephone Operation Codes	√
	Voice Codec	G.711 A/u law, G.726, G.729 A/B, G.722
Wireless Function	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	√
	Rate Limit	Based on SSID/Client
	Load Balance	√
	Airtime Fairness	√

Model		DR3650v-4G
Wireless Function	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
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 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

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, DR3650v-4G can connect with up to 10 VPN servers.

Model		DR3650v-4G
VPN	GRE	√ (Only in Standalone Mode)
	SD-WAN	√ (Only in Controller Mode)
	WireGuard VPN	√
	SSL VPN	50 Tunnels
	OpenVPN	OpenVPN Server OpenVPN Client (5)[5] 55 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[1] URL Categories and URLs Filtering Web Security[1]
	DNS Proxy	DNSSEC, DoH, and DoT
	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 Max Throughput (Upload / Download) 942.7Mbps/937.3Mbps
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
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[4] Port Mirroring CLI (only in Standalone Mode) Syslog Support TR-069 (data models of TR-098 and TR-181 are supported)

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.
4. NTP Synchronize is supported only in Standalone Mode.
5. For OpenVPN, DR3650v-4G can connect with up to 5 VPN servers.

Model		DR3650v-4G
Others	Certification	CE, RoHS
	Package Contents	DR3650v-4G, Power Adapter, Ethernet Cable, Phone Cable, Rubber Feet, SIM Card Eject Pin, 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

Ordering Information

Host Gateway	
Model	Description
DR3650v-4G	Omada 4G+ Cat6 AX3000 Gigabit Desktop DSL Gateway

*Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and coverage are not guaranteed and will vary.

†Maximum wired signal rates are the physical rates. Actual data throughput is not guaranteed and will vary as a result of network conditions, client limitations, and environmental factors.

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