

Omada Gateway | Datasheet

DR3220v-4G

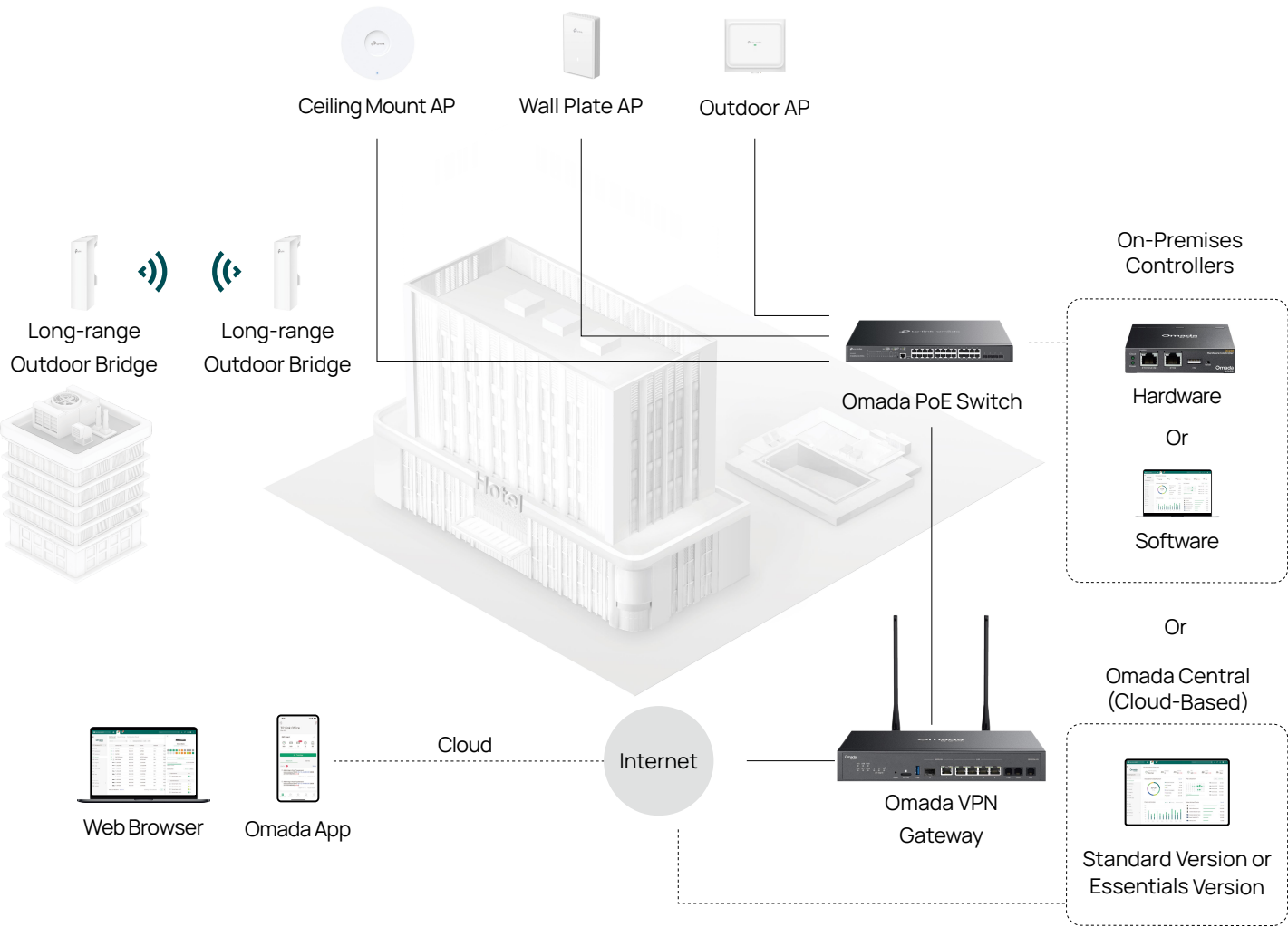
Omada 4G+ Cat6 Gigabit Rackmount DSL Gateway



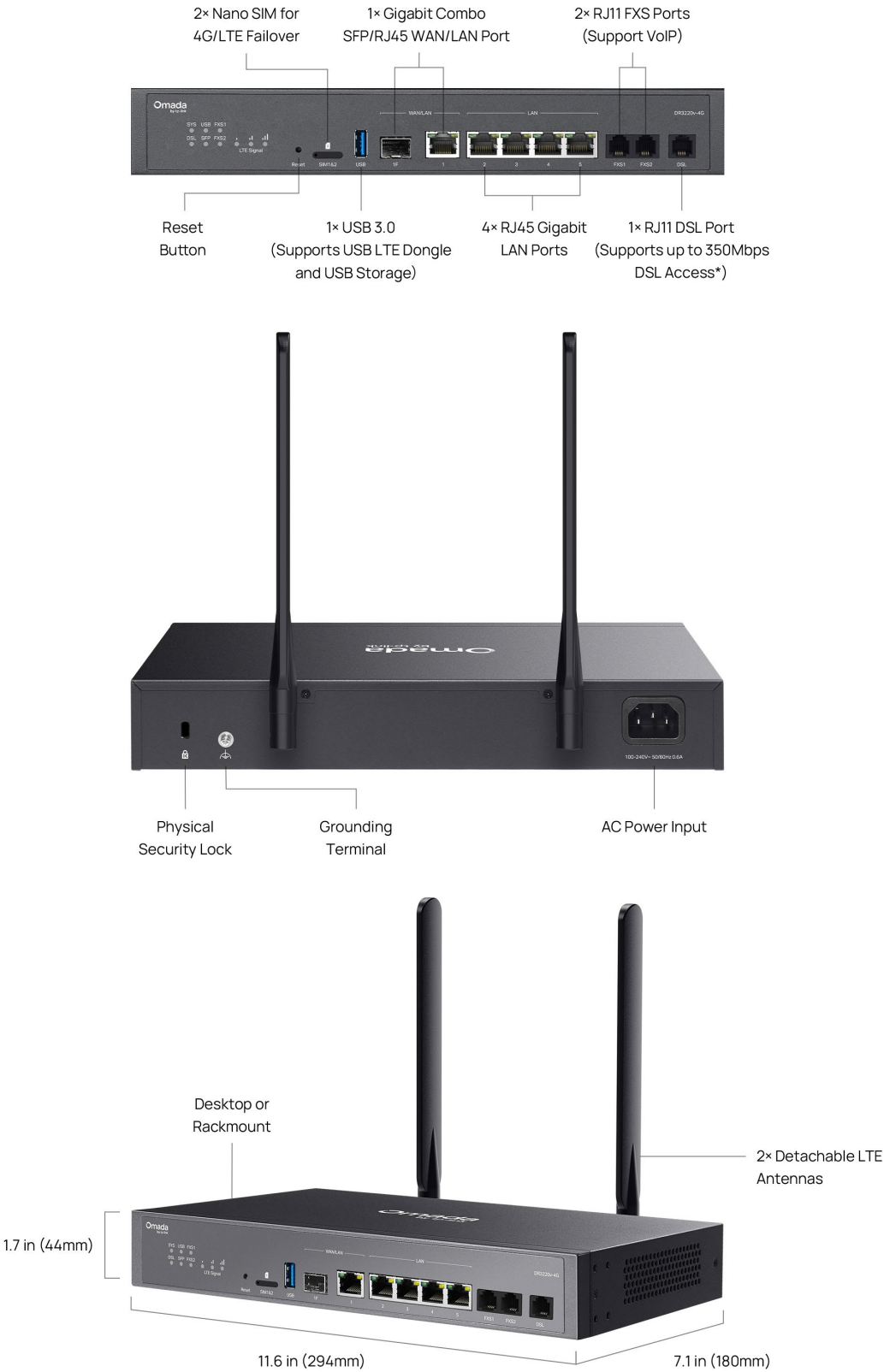
Highlights

- Support 4G+ Cat6 up to 300 Mbps*
- VDSL2 35b: Supports 350Mbps DSL Access[†]
- VDSL2/ADSL2+/ADSL2/ADSL Compatibility
- 1× Combo Gigabit SFP/RJ45 Port (1 SFP WAN/LAN Port+1 WAN/LAN Port)
- 1× DSL Port, 2× FXS Ports, 4×RJ45 Gigabit LAN Ports
- 1× USB 3.0 port (Supports USB storage, and LTE backup with LTE dongle)
- DPI Security Support
- IPSec/PPTP/L2TP/OpenVPN/WireGuard/GRE/SSL VPN
- Centralized Management
- Multi-WAN Load Balancing
- Desktop/Rack-Mounting

Omada Solution



Product Pictures



*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.

Specifications

Model		DR3220v-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, LLDP
	Interface	1 Combo Gigabit SFP/RJ45 Port (1 SFP WAN/LAN Port+1 WAN/LAN Port) 4×RJ45 Gigabit LAN Ports 1 DSL Port 2 FXS Ports
	USB	1*USB 3.0 (supports USB LTE dongle and USB Storage ¹)
	LTE	1 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
	Antennas	LTE: Two 3dBi 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	100-240V/50-60Hz 0.6A
	Flash	256MB NAND
	DRAM	512MB DDR4
	LED	SYS, DSL, USB, SFP, FXS1, FXS2, LTE Signal WAN/LAN (1000M Link/Act, 100/10M Link/Act), LAN (1000M Link/Act, 100/10M Link/Act)

1. For compatibility list, visit <https://www.omadanetworks.com/omada-router/compatibility/>.

Model		DR3220v-4G
Hardware	Max Power Consumption	8.55 W (No Link) 24.4 W (Full load + USB)
	Surge Protection	DSL Port: 6 kV surge protection Others Ports: 4 kV surge protection
	Mounting	Desktop/ Rack-mounting
	Dimensions (W x D x H)	11.6 × 7.1 × 1.7 in (294 × 180 × 44 mm) (Antenna dimensions not included)
	Net Weight	1.45 Kg
	MTBF	796893.75@25°C 611883.87@40°C
SDN Support	Hardware Controller	Automatic Device Discovery Intelligent Network Monitoring Abnormal Event Warnings Unified Configuration Reboot Schedule Captive Portal Configuration ZTP (Zero-Touch Provisioning) ¹
	Software Controller	
	Omada App	
Performance ²	Concurrent Session	150,000
	New Sessions /Second	4,050
	DPI Throughput	TCP: 881 Mbps UDP: 813 Mbps
	Static IP NAT Throughput (Upload / Download)	937.2 Mbps/936.1 Mbps
	DHCP NAT Throughput (Upload / Download)	945.8 Mbps /940.6 Mbps
	PPPoE NAT Throughput (Upload / Download)	942.9 Mbps/942.9 Mbps
	L2TP NAT Throughput (Upload / Download)	837.4 Mbps /881.5 Mbps
	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: 526.6 Mbps ESP-SHA256-AES256: 543.3 Mbps ESP-SHA384-AES256: 549.0 Mbps ESP-SHA512-AES256: 561.7 Mbps
	GRE	Unencrypted: 878 Mbps Encrypted: 520 Mbps
	WireGuard VPN	290 Mbps
	SSL VPN	126.7 Mbps
	OpenVPN	129.3 Mbps
	L2TP VPN Throughput	Unencrypted: 909.4 Mbps Encrypted: 494.9 Mbps
	PPTP VPN Throughput	Unencrypted: 897.5 Mbps Encrypted: 190.8 Mbps

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

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

Model		DR3220v-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
	LAN DNS	√
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
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

1. Port Triggering is supported only in Standalone Mode.

2. RIP and OSPF are supported only in Standalone Mode.

Model		DR3220v-4G
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) ¹ 50 Tunnels PPTP with MPPE Encryption
	L2TP VPN	L2TP VPN Server L2TP VPN Client (10) ¹ 50 Tunnels L2TP over IPSec
	GRE	√ (Only in Standalone Mode)
	SD-WAN	√ (Only in Controller Mode)
	WireGuard VPN	√
	SSL VPN	50 Tunnels
	OpenVPN	OpenVPN Server OpenVPN Client (5) ² 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 ³ URL Categories and URLs Filtering Web Security ³
	DNS Proxy	DNSSEC, DoH, DoT, DNS Override
	ARP Inspection	Sending GARP Packets ARP Scanning ⁴ 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

1. For PPTP VPN and L2TP VPN, DR3220v-4G can connect with up to 10 VPN servers.
2. For OpenVPN, DR3220v-4G can connect with up to 5 VPN servers.
3. Web Group Filtering and Web Security are supported only in Standalone Mode.
4. ARP Scanning is supported only in Standalone Mode.

Model		DR3220v-4G
Authentication	Web Authentication	No Authentication Simple Password ¹ Hotspot (Local User / Voucher ¹ / SMS ¹ / Radius ¹) External Radius Server External Portal Server ¹ LDAP ²
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 ² Port Mirroring CLI (only in Standalone Mode) Syslog Support TR-069 (data models of TR-098 and TR-181 are supported)
Others	Certification	CE
	Package Contents	DR3220v-4G, Power Cord, Ethernet Cable, Phone Cable, Rubber Feet, SIM Card Eject Pin, Rackmount Kit, Antenna Extension Base, 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. The following web authentication methods are supported only in Controller Mode: Simple Password, Voucher, SMS, Radius, and External Portal Server.
2. LDAP and NTP Synchronize are supported only in Standalone Mode.

Ordering Information

Host Gateway	
Model	Description
DR3220v-4G	Omada 4G+ Cat6 Gigabit Rackmount DSL Gateway

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

[†]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.

*Actual 4G downlink speeds vary between buildings. Factors affecting 4G speeds include the internet service plan, real-time network capacity, equipment and client limitations, and environmental factors.

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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