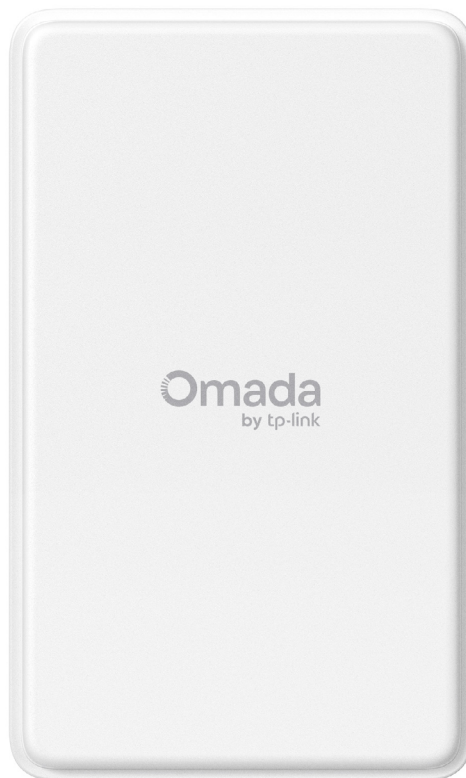# Omada Gateway | Datasheet
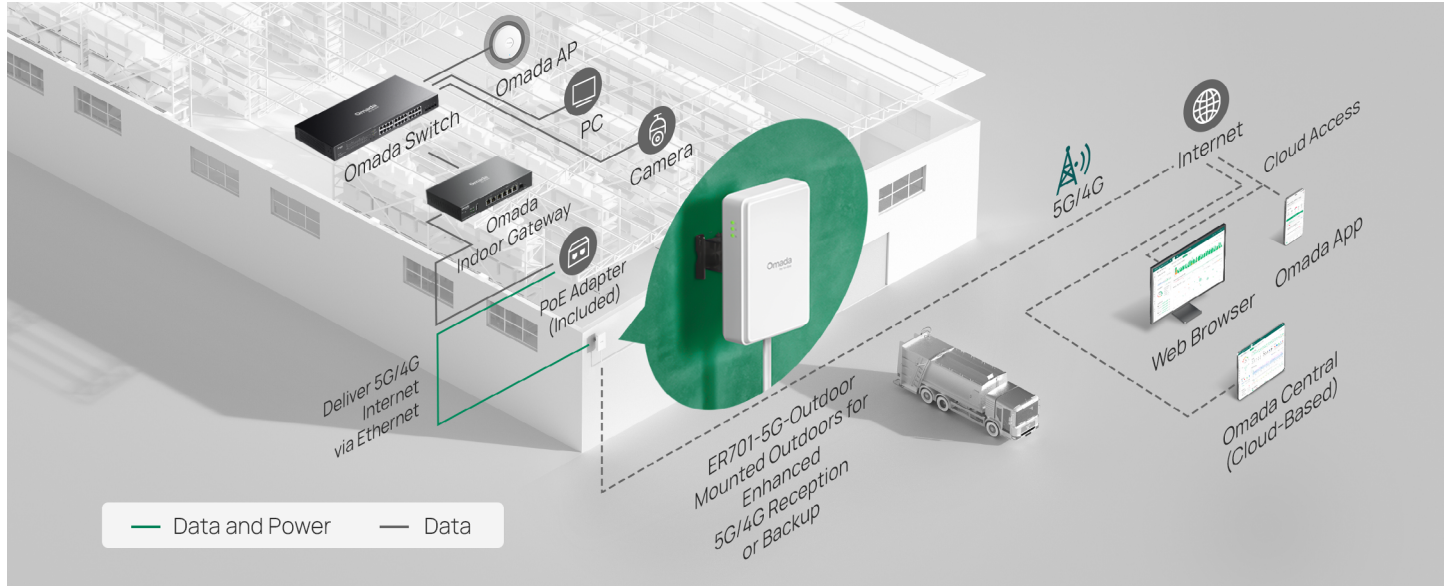
ER701-5G-Outdoor
Omada 5G Outdoor Gateway

Highlights

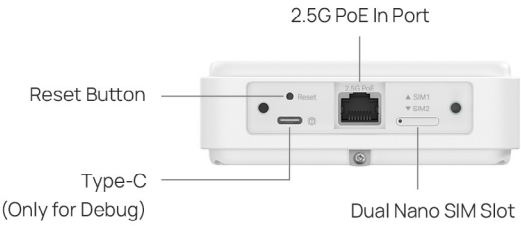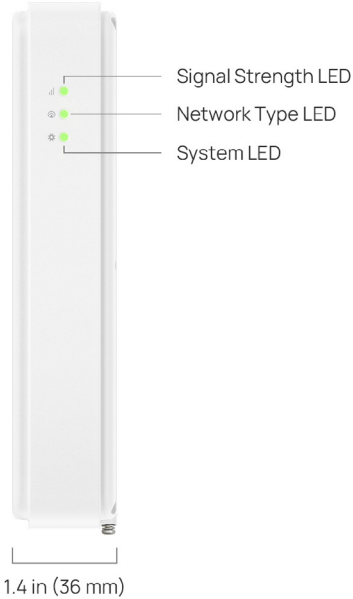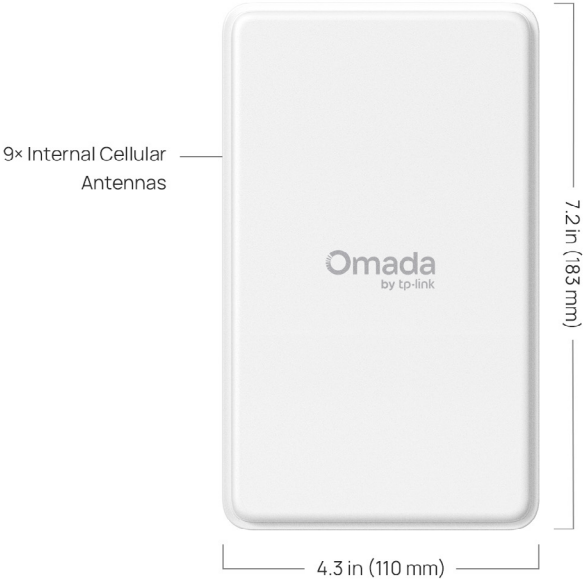- 5G NR up to 7.01 Gbps (SA)/4.5 Gbps (NSA)*
- 1× 2.5G PoE In Port
- 9× Internal Cellular Antennas + 1× Internal Wi-Fi Antenna (for Easy Setup)
- Dual Nano SIM Slot
- App-Guided Antenna Alignment for Optimal 5G Performance
- Centralized Management[△]
- IP66 Weatherproof Enclosure
- Wall Mount/Pole Mount/Window Mount

Application Scenario

Delivering blazing-fast, reliable 5G, the Omada ER701-5G-Outdoor brings instant connectivity to areas where wired broadband isn't practical. It serves as either primary 5G/4G broadband access or an internet backup for indoor gateways. Perfect for remote deployments, temporary sites, and hard-to-wire facilities.

Product Images

9× Internal Cellular Antennas

7.2 in (183 mm)

4.3 in (110 mm)

Signal Strength LED

Network Type LED

System LED

1.4 in (36 mm)

2.5G PoE In Port

Reset Button

Type-C
(Only for Debug)

Dual Nano SIM Slot

Specifications

Model	ER701-5G-Outdoor
Product Description	Omada 5G Outdoor Gateway
Hardware	
Standards and Protocols	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3x, IEEE802.1q, IEEE802.11b/g/n, IEEE802.3at, TCP/IP, DHCP, ICMP, NAT, NTP, HTTP, HTTPS, DNS, SNMP
Interface	1×2.5G RJ45 Port
SIM	1×Dual Nano SIM slot
5G NR Speed	SA: Downlink: 7.01 Gbps, Uplink: 1.25 Gbps NSA: Downlink: 4.5 Gbps, Uplink: 730 Mbps
LTE Speed	Downlink: 1.6 Gbps, Uplink: 211 Mbps
Wi-Fi Speed	2.4 GHz: 150 Mbps
Antennas	9 internal Cellular antennas 1 internal Wi-Fi antenna
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) 2500BASE-T: UTP category 5, 5e, 6 cable (Max 100 m)
Network Type	5G NR:N1/N3/N5/N7/N8/N20/N26/N28/N38/N40/N41/N75/N76/N77/N78 (2100/1800/850/2600/900/800/850/700/2600/2300/2500/1500/1450/3700/3500 MHz)[1] 4G FDD-LTE: B1/B3/B5/B7/B8/B20/B26/B28/B32 (2100/1800/850/2600/900/800/850/700/1500 MHz)[1] 4G TDD-LTE: B38/B40/B41/B42/B43 (2600/2300/2500/3500/3700 MHz) 3G WCDMA: B1/B5/B8 (2100/850/900 MHz)
Button	Reset button
Power Supply	802.3at PoE: 42-57V 0.6A Passive PoE: 48V 0.375A
Flash	4GB eMMC Flash
DRAM	2GB LPDDR4x
LED	System, Network Type, Signal Strength
Max Power Consumption	15.3W (802.3at PoE or Passive PoE)
Surge Protection	6 kV surge protection
Mounting	Wall-mounting/Pole-mounting/Window-mounting
Dimensions (W x D x H)	7.2 × 4.3 × 1.4 in (183 × 110 × 36 mm)
MTBF	900444.67h@25°C 581835.65h@60°C

1. N75/N76 and B32 only support downlink.

Model		ER701-5G-Outdoor
SDN Support	Hardware Controller	Automatic Device Discovery Intelligent Network Monitoring Abnormal Event Warnings Unified Configuration Reboot Schedule Captive Portal Configuration
	Software Controller	
	Omada App	
Basic Functions	WAN Connection Type	5G/4G/3G
	DHCP	DHCP Server DHCPv6 PD Server (only in Standalone Mode) DHCP Options Customization DHCP Address Reservation Multi-IP Interfaces Multi-Net DHCP
	Stateful ACL	√
	Quality of Service	√
	Bridge VLAN	√
	VLAN	802.1Q VLAN
	SMS	Receive/Send SMS
Wireless Function	Wireless Encryption	WPA/WPA2 Personal
	SSID	1
	Enable/Disable Wireless Radio	√
	Enable/Disable SSID Broadcast	√
	Automatic Channel Selection Algorithm	√
	Transmit Power Control	Adjust transmit Power on dBm
	Support Data Rates	802.11n: 6.5 Mbps to 150 Mbps (MCS0-MCS7, HT20/40) 802.11g: 6, 9, 12, 18, 24, 36, 48 ,54 Mbps 802.11b: 1, 2, 5.5, 11 Mbps
Transmission	Online Detection	√
	NAT	Multi-Net NAT Virtual Server Port Triggering[1] NAT-DMZ FTP/H.323/SIP/IPSec/PPTP ALG UPnP
	Routing	Static Routing OSPF[2]
	Session Limit	IP-based Session Limit
	Bandwidth Control	IP-based Bandwidth Control
Performance	Concurrent Session	500, 000
	New Session/Second	6,100

1. Port Triggering is supported only in Standalone Mode.
2. OSPF is supported only in Standalone Mode.

Model		ER701-5G-Outdoor
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]
	DNS Proxy	DNSSEC, DoH, and DoT
	DPI	Deep Packet Inspection
	ARP Inspection	Sending GARP Packets ARP Scanning[2] IP-MAC Binding
	Access Control	Source/Destination IP Based Access Control
Authentication	Web Authentication	No Authentication Simple Password[3] Hotspot (Local User / Voucher[3] / SMS[3] / Radius) External Radius Server External Portal Server 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] CLI (only in Standalone Mode) Syslog Support
Others	Certification	Certification CE, NCC, BSMI, RoHS
	Package Contents	ER701-5G-Outdoor Gateway, Passive PoE Adapter, Mounting Kits, 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: -30 °C to 60 °C Storage Temperature: -40 °C to 70 °C Operating Humidity: 5% to 95% 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, and SMS.
4. NTP Synchronize are supported only in Standalone Mode.

Ordering Information

Host Gateway	
Model	Description
ER701-5G-Outdoor	Omada 5G Outdoor Gateway