

cradlepoint

AER2200 Spec Sheet



INTRODUCTION

WHAT'S IN THE BOX

- AER2200 with embedded LTE Advanced modem
- External 3G/4G mobile broadband modem antennas (2) (SMA); finger tighten only
- External dual-band high-gain WiFi antennas (4) reverse SMA (5 dBi, 2.4 GHz, 5 dBi 5 GHz, VSWR ≤ 2); finger tighten only
- 54 V, 1.2 A (65 W) AC/DC power adapter
- Ethernet cable
- Quick Start Guide
- Warranty information
- Rubber feet (4) for desk mounting

KEY FEATURES

WAN

- 600M: LTE Advanced 600/75 Mbps DL/UL, FDD/TDD w/HSPA+ fallback (SIM-based, Auto-carrier Selection for all North American, European, and Asia Pacific carriers)
- One embedded modem
- One MC400 slot for 2nd modem
- Dual SIM slot in each modem
- Active GPS
- 10 10/100/1000 Ethernet ports (WAN/LAN switchable)
- WiFi as WAN
- Smart WAN Selection
- Multi-PDN
- Failover/Failback
- Load Balancing
- Advance Modem Failure Check
- WAN Port Speed Control
- WAN/LAN Affinity
- IP Passthrough
- Standby
- DynDNS
- Auto QoS
- QoS (DSCP and Priority Queuing)

LAN

- 10 10/100/1000 Ethernet ports (WAN/LAN switchable); Supports four ports of PoE (1–4) for class I, II, III, or IV devices (default 30 W power budget, up to 120 W with accessory power supply)
- LLDP support
- VLAN 802.1Q
- DHCP Server, Client, Relay
- DNS and DNS Proxy
- Split DNS
- STP¹
- Multicast/Multicast Proxy

WIFI

- Dual-Band Dual-Concurrent (2x2 2.4 GHz MIMO and 4x4 5 GHz MIMO)
- 802.11 (a/b/g/n/ac) wave 2
- Up to 248 connected devices (124 per channel – 2.4 GHz and 5 GHz)
- WPA/WPA2 Personal, WPA2 Enterprise (WiFi), WEP Auto
- Hotspot/Captive Portal
- SSID-based Priority
- 802.11k – Radio Resource Management - Client load balancing
- 802.11r – Fast Roaming
- 802.11v – Wireless Network Management

MANAGEMENT

- Cradlepoint NetCloud Manager (NCM)²
- Real-time diagnostics/troubleshooting
- Remote connect / OOBM
- Secure remote cloud configuration
- GeoView location services
- Web UI, API, CLI
- NetCloud Engine gateway support
- Client and Traffic Visibility and Control
- SDK support
- GPS Location
- Data Usage Alerts
- Advanced Troubleshooting (support)⁵
- Device Alerts
- SNMP
- SMS control
- Console Port for OOBM

VPN & ROUTING

- IPsec Tunnel – up to 20 concurrent sessions
- IKEv2 support (includes MOBIKE)
- OpenVPN (SSL VPN)¹
- L2TP¹
- GRE Tunnel
- OSPF/BGP/RIP¹
- Route Filters (Access Control Lists, Prefix Filters, Route Maps, Communities for BGP)
- Policy-based Routing
- Per-Interface Routing
- Static Routing
- NAT
- NAT-less Routing
- WAN Affinity
- Virtual Server/Port Forwarding
- VTI Tunnel Support
- NEMO/DMNR¹
- IPv6
- VRRP¹
- STP¹
- NHRP¹

SECURITY

- RADIUS and TACACS+ support*
- 802.1x authentication for Wireless and Wired Networks
- Zscaler Internet Security⁴
- Certificate support
- Application-level gateways
- MAC Address Filtering
- CP Secure Threat Management³
- Advanced Security Mode (local user management only)
- IP Filtering
- Content Filtering
- FIPS 140-2 Inside version available

* - Native support for authentication. Authorization and accounting support through hotspot/captive portal services

1 – Requires an [Extended Enterprise License](#) and [NetCloud Manager](#)

2 – [NetCloud Manager](#) requires a subscription

3 – Requires a [CP Secure Threat Management](#) license

4 – Requires [Zscaler](#) Internet Security License

5 - Requires [CradleCare](#) Support

SPECIFICATIONS

WAN:

- Embedded 600M LTE Advanced modem (with DC-HSPA+ failover)
- MC400 slot for optional 2nd modem
- 10 10/100/1000 Ethernet ports (cable/DSL/T1/satellite/Metro Ethernet; WAN/LAN switchable)
- WiFi (as WAN; Metro WiFi) 2x2 MIMO 2.4 GHz and 4x4 MIMO 5 GHz (802.11 a/b/g/n/ac)

LAN:

- Dual-band dual-concurrent WiFi (802.11 a/b/g/n/ac wave 2)
- 10 10/100/1000 Ethernet ports (WAN/LAN switchable)
- Serial console

TEMPERATURE:

- 0 °C to 50 °C (32 °F to 122 °F) operating
- -20 °C to 70 °C (-4 °F to 158 °F) storage
- Redundant internal fans for reliable cooling

HUMIDITY (non-condensing):

- 10% to 85% operating
- 5% to 90% storage

MEMORY: 512 MB DRAM; 8 GB eMMC

SIZE:

- 7.3 × 8.3 × 1.7 in (185 × 210 × 44 mm)
- 1U height for rack mount

WEIGHT: 3 lb 5 oz (1.5 kg)

CERTIFICATIONS: FCC, WiFi Alliance, CE, IC, carrier certifications

WIFI POWER (FCC):

- 2402–2483.5 MHz (2.4 GHz band): 28.3 dBm conducted
- 5150–5250 MHz (5 GHz band 1): 29.1 dBm conducted
- 5725–5850 MHz (5 GHz band 3): 30.0 dBm conducted

WIFI POWER (Europe/Rest of World):

- 2.4 GHz band: 19.88 dBm EIRP
- 5150-5250 MHz: 22.96 dBm EIRP

GPS: Modem-based GPS

ACCESSORIES

- Second integrated 4G LTE modem
 - MC400LP6 (North America or EU)
 - MC400LP5 (Asia Pacific or Saudi Arabia)
 - MC400LP4 (AT&T, Verizon, T-Mobile and Canada)
 - MC400LPE-VZ (Verizon)
 - MC400LPE-AT (AT&T)
 - MC400LPE-SP (Sprint)
 - MC400LPE-GN (generic – for use on T-Mobile in the U.S. and Rogers, Bell, & TELUS in Canada)
 - MC400LP3-EU (Europe)
- 700 MHz–2700 MHz Wide Band Directional Antenna (Yagi/Log- Periodic) Part #: 170588-000
- AER2200 high power supply for up to 4 ports of PoE+ .at (30W) power (120W PoE budget) (line cord not included) Part #: 170751-000
- AER2200 Rack-Mount Brackets Part #: 170749-000
- 12" Mag-Mount Antenna with SMA Male Connector Part #: 170605-000
- 4" Mini Mag-Mount Antenna with SMA Male Connector Part #: 170606-000
- 2.4/5 GHz Dual-band Dual-concurrent WiFi Antenna Part #: 170628-000
- Universal 3G/4G/LTE Modem Antenna Part #: 170649-000
- GPS Screw-Mount Antenna Part #: 170651-000
- GPS Mag-Mount Antenna Part #: 170652-000
- Multi-Band Omni-Directional Antenna Part #: 170668-000
- Indoor/Outdoor Panel Patch Part #: 170669-000

BUSINESS-GRADE MODEM SPECIFICATIONS

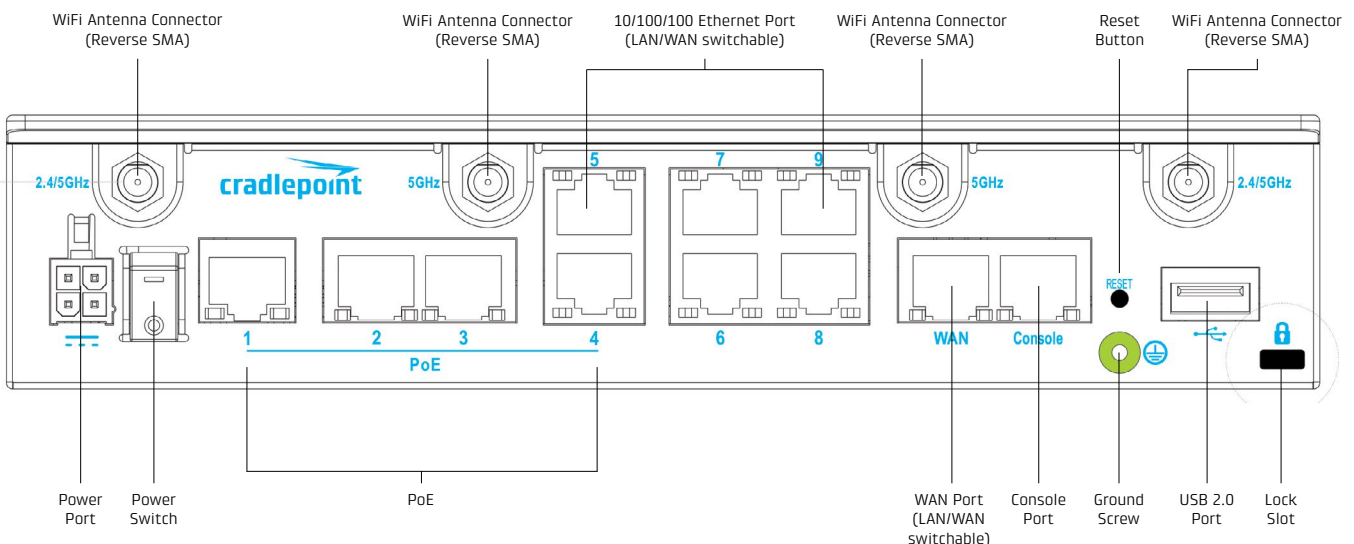
AER2200 600M models include an integrated LTE Advanced 600 Mbps LTE modem. The LP6 modems support SIM-Based Auto-Carrier selection so there is only one model for all of North America. Simply insert the SIM and wait for the router to automatically detect the SIM and establish a connection.

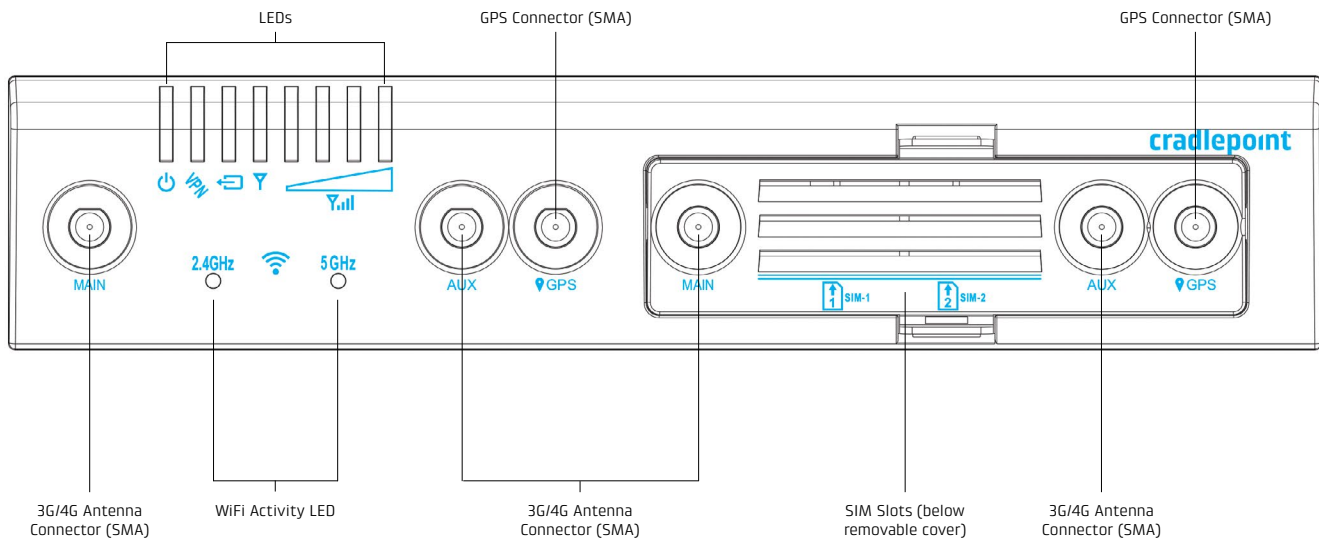
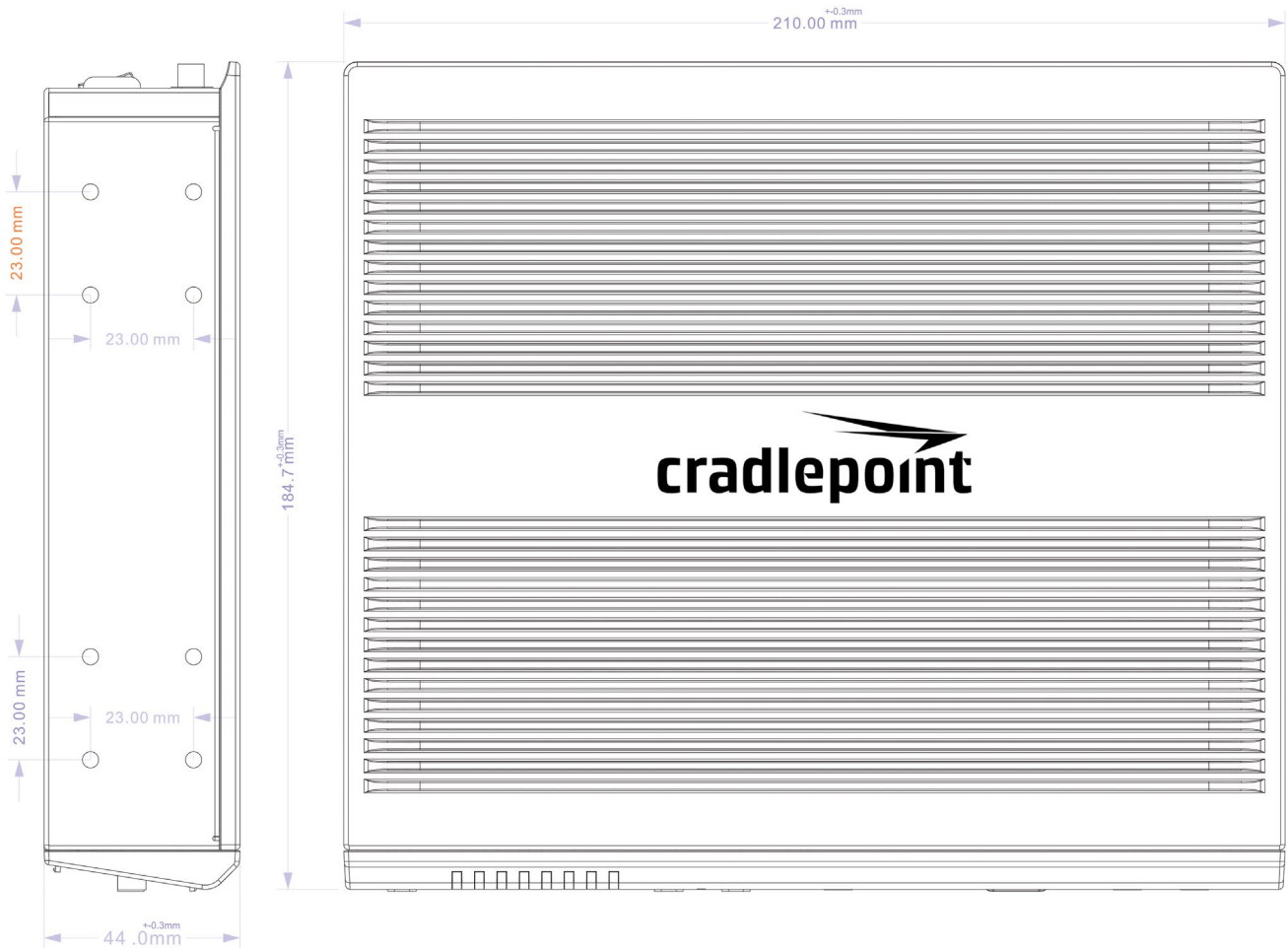
The LTE bands certified for each carrier are listed below.

AER2200-600M-NA, AER2200-600M-EU, AER2200-600M-AU





- Technology: LTE Advanced, DC-HSPA+
- Downlink Rates: LTE 600 Mbps, DC-HSPA+ 42.2 Mbps
- Uplink Rates: LTE 75 Mbps, DC-HSPA+ 5.76 Mbps
- Frequency Bands:
 - LTE Bands
 - LTE FDD: 1–5, 7–8, 12–13, 17, 20, 25–26, 28–30, 66
 - LTE TDD: 38, 40–41
 - HSPA+: 1–2, 4–5, 8
- LTE 2DL Carrier Aggregation Combinations:
 - **North America:** B2+B2, B2+B4, B2+B5, B2+B12, B2+B13, B2+B17, B2+B29, B2+B30, B4+B4, B4+B5, B4+B7, B4+B12, B4+B13, B4+B17, B4+B29, B4+B30, B5+B30, B12+B12, B12+B30, B25+B25, B25+B26, B25+B41, B26+B41, B29+B30, B41+B41
 - **Europe:** B1+B20, B3+B3, B3+B7, B3+B20, B3+B38, B7+B7, B7+B8, B7+B20, B38+B38
 - **Australia:** B1+B3, B1+B7, B1+B28, B3+B8, B3+B28, B5+B7, B5+B40, B7+B8, B7+B20
- LTE 3DL Carrier Aggregation Combinations:
 - North America: B2+B2+B12/17, B2+B2+B13, B2+B2+B4, B2+B4+B5, B2+B4+B12, B2+B4+B13, B2+B4+B29, B2+B5+B30, B2+B12+B12, B2+B12+B30, B2+B29+B30, B4+B4+B5, B4+B4+B7, B4+B4+B12, B4+B4+B13, B4+B5+B30, B4+B12+B12, B4+B12+B30, B4+B29+B30, B25+B26+B41, B25+B41+B41, B26+B41+B41, B41+B41+B41
 - Europe: B1+B3+B20, B1+B7+B20, B3+B3+B7, B3+B3+B20, B3+B7+B20, B3+B7+B7, B3+B20+B38, B3+B38+B38
 - Australia: B3+B3+B5, B3+B3+B8, B3+B7+B7, B3+B7+B28, B7+B7+B28, B28+B40+B40, B40+B40+B40
- Fallback: WCDMA/DC-HSPA+ (42/5.76 Mbps): Bands 1, 2, 3, 4, 5, 8
- Power: LTE: 23 dBm ±1; DC-HSPA+: 23 dBm ±1
- Antennas: two SMA male (plug), finger tighten only (maximum torque spec is 7 kgf/cm2)
- GPS: active GPS support
- SMS: SMS support
- Industry Standards & Certs: CE, FCC, GCF-CC, IC, PTCRB, AT&T, Sprint, Verizon

HARDWARE





LEDS

INDICATOR	BEHAVIOR
	<p>POWER: The Cradlepoint AER2200 must be powered using an approved 54 V DC power source.</p> <ul style="list-style-type: none"> • Green = Powered ON. • No Light = Not receiving power. Check the power switch and the power source connection. • Amber = Attention. Open the administration pages and check the router status.
VPN	<p>VPN: Indicates status of VPN connection.</p> <ul style="list-style-type: none"> • Blue = Connected to an active VPN.
	<p>REMOVABLE MODEM: Indicates the status of removable modem(s).</p> <ul style="list-style-type: none"> • Green = Modem has established an active connection. • Blinking Green = Modem is connecting. • Blinking Amber = Data connection error. No modem connection possible. • Blinking Red = Modem is in the process of resetting.
	<p>INTEGRATED MODEM: Indicates information about the integrated modem.</p> <ul style="list-style-type: none"> • Green = Modem has established an active connection. • Blinking Green = Modem is connecting. • Amber = Modem is not active. • Blinking Amber = Data connection error. No modem connection possible. • Blinking Red = Modem is in the process of resetting. • No Light = Modem not connected.
	<p>SIGNAL STRENGTH: Blue LED bars indicate the active modem's signal strength (only for integrated and removable modems).</p> <ul style="list-style-type: none"> • 4 Solid Bars = Strongest signal. • 1 Blinking Bar = Weakest signal. (A blinking bar indicates half of a bar.)
2.4GHz 5GHz	<p>WiFi BROADCAST: These two LEDs indicate activity on the WiFi broadcast for both the 2.4 GHz and 5 GHz bands.</p> <ul style="list-style-type: none"> • 2.4 GHz (green) = 2.4 GHz WiFi is on and operating normally. • 5 GHz (blue) = 5 GHz WiFi is on and operating normally.
Other	<p>ADDITIONAL LED INDICATIONS</p> <ul style="list-style-type: none"> • Several different LEDs blink when the factory reset button is detected. • Two of the modem LEDs blink red in unison for 10 seconds when there is an error during NCOS upgrade.

SUPPORT & WARRANTY

The AER2200 is only sold as a component of NetCloud Solution Packages.

- NetCloud Solution Packages include support for the full subscription term.
- All Cradlepoint hardware products are covered by a Limited Lifetime Warranty for as long as they are under a NetCloud Solution Package subscription

The AER2200 includes a minimum three-year hardware warranty when purchased from an authorized Cradlepoint Partner.