

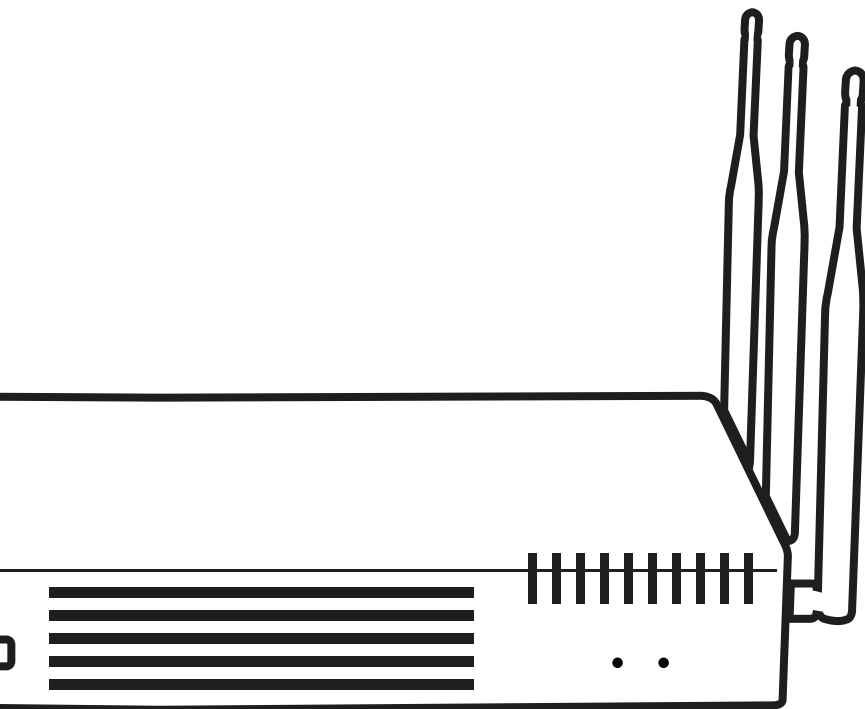


Global Leader in 4G LTE Network Solutions

AER Series Router

AER2100

Spec Sheet



cradlepoint.com

INTRODUCTION

WHAT'S IN THE BOX

- AER 2100 with integrated MC400 4G LTE modem
- External 3G/4G mobile broadband modem antennas (2) (SMA) w/ multiplexing for GPS; finger tighten only
- External dual-band high-gain WiFi antennas (3) reverse SMA (5 dBi, 2.4 GHz, 5 dBi 5 GHz, VSWR 2); finger tighten only
- 12V 3A AC/DC power adapter
- Multipurpose Retaining Tool
- Ethernet cable
- Quick Start Guide with warranty information

KEY FEATURES

WAN

- Integrated 4G LTE (with 3G failover)
 - Verizon, AT&T, Sprint, Europe, and generic models available
 - Dual integrated modem option
 - Dual SIM slot in each modem
 - Most models include support for active GPS
- WiFi as WAN
- Failover/Failback
- Load Balancing
- Advance Modem Failure Check
- WAN Port Speed Control
- WAN/LAN Affinity
- IP Passthrough

LAN

- VLAN 802.1Q
- DHCP Server, Client, Relay
- DNS and DNS Proxy
- DynDNS
- UPnP
- DMZ
- Multicast/Multicast Proxy
- QoS (DSCP and Priority Queuing)
- MAC Address Filtering

WIFI

- Dual-Band Dual-Concurrent (3x3 MIMO)
- 802.11x (a, b, g, n, ac)
- Up to 256 connected devices (128 per channel – 2.4 GHz and 5 GHz)
- WPA2 Enterprise (WiFi)
- Hotspot/Captive Portal
- SSID-based Priority

MANAGEMENT

- Cradlepoint Enterprise Cloud Manager²
- Web UI, API, CLI
- GPS Location
- Data Usage Alerts (router and per client)
- Advanced Troubleshooting (support)
- Auto APN Recovery
- Device Alerts
- SNMP
- SMS control
- Serial Redirector

VPN AND ROUTING

- IPsec Tunnel – up to 20 concurrent sessions
- OpenVPN (SSL VPN)¹
- L2TP¹
- GRE Tunnel
- VTI Tunnel support
- OSPF/BGP/RIP¹
- Per-Interface Routing
- Routing Rules
- NAT-less Routing
- Virtual Server/Port Forwarding
- NEMO/DMNR¹
- IPv6
- VRRP¹
- STP¹
- NHRP¹
- CP Secure VPN compatible

SECURITY

- RADIUS and TACACS+ support*
- 802.1x authentication for Ethernet
- Zscaler integration¹
- Certificate support
- ALGs
- MAC Address Filtering
- Advanced Security Mode (local user management only)
- Per-Client Web Filtering
- IP Filtering
- Content Filtering (basic)
- Website Filtering

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

CLOUD OPTIMIZED IP COMMUNICATIONS

- Automated WAN Failover/Failback support
- WAN Affinity and QoS allow prioritization of VoIP services
- Advanced VPN connectivity options to HQ
- SIP ALG and NAT to allow VoIP and UC communications to traverse firewall

- MAC Address Filtering
- 802.1p/q for LAN QoS segmentation and treatment of VoIP on LAN
- Private Network support (wired and 4G WAN)
- Cloud-based management²

1 – Requires an **ECM PRIME** subscription or an **Extended Enterprise License**

2 – **Enterprise Cloud Manager** requires a subscription

SYSTEM REQUIREMENTS

- At least one Internet source: a Cradlepoint integrated 3G/4G modem with an active data plan, an Ethernet-based modem, or WiFi as WAN
- Windows 7/8, Mac OS X, or Linux computer (with WiFi adapter)
- Internet Explorer v6.0 or higher, Firefox v2.0 or higher, Safari v1.0 or higher

SPECIFICATIONS

WAN:

- Integrated 4G LTE (one modem included; dual-modem option) Multi-Carrier Software-Defined radio
- Five 10/100/1000 Ethernet ports (cable/DSL/T1/satellite/Metro Ethernet; WAN/LAN switchable)
- WiFi (as WAN; Metro WiFi) 3x3 MIMO 2.4 GHz or 5 GHz (802.11 a/b/g/n/ac)

LAN:

- Dual-band dual-concurrent WiFi (802.11 a/b/g/n/ac)
- Five 10/100/1000 Ethernet ports (WAN/LAN switchable)
- Serial console support w/ USB-to-serial adapter

TEMPERATURE:

- 0°C to 50°C (32°F to 122°F) operating
- -20°C to 70°C (-4°F to 158°F) storage

HUMIDITY (non-condensing):

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

MEMORY: 256 MB DRAM; 16MB SPI Flash; 256 MB NAND Flash

SIZE:

- 10.25 x 8.5 x 1.75 in (260 x 214 x 45 mm)

WEIGHT: 6 lb

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

LAN TO WAN: 940 Mbps

WAN TO LAN: 940 Mbps

STATEFUL THROUGHPUT: 940 Mbps

WIFI POWER (FCC):

- 2.4 GHz band: 24.47 dBm
- Lower 5 GHz band: 16.9 dBm
- Upper 5 GHz band: 27.77 dBm

ACCESSORIES

- Second integrated 4G LTE modem
 - 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)
- Standard rack mount with modem and WiFi cables (Part # 170629-000)
- 12V 3A wall power adapter (Part # 170623-000)
- 12V 4A wall power adapter (Part # 170624-000)
- Directional Patch antennas for external (outside) mounting (Part # 170587-000)
- Directional Yagi (Log-Periodic) antennas for external (outside) mounting (Part # 170588-000)
- Omni-directional antennas for external (outside) mounting (Part # 170586-000)
- 12" Mag-mount antenna (Part # 170605-000)
- 4" Mini mag-mount antenna (Part # 170606-000)

BUSINESS-GRADE MODEM SPECIFICATIONS

AER 2100 models include an integrated 4G LTE modem (MC400); specific model names include a specific modem (e.g., the AER 2100LPE-VZ includes an MC400LPE-VZ modem for Verizon).

Please note that LPE models are flexible and support bands for multiple cellular providers; however, only the frequency bands in **bold** below are supported by the listed provider.

AER 2100LPE-VZ – 4G LTE/HSPA+/EVDO for Verizon

- **Technology:** LTE, HSPA+, EVDO Rev A
- **Downlink Rates:** LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1 Mbps (theoretical)
- **Uplink Rates:** LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps (theoretical)
- **Frequency Bands:**
 - **LTE Band 2 (1900 MHz), Band 4 – AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)**
 - HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
 - GSM/GPRS/EDGE (850/900/1800/1900 MHz)
 - **CDMA EVDO Rev A/1xRTT (800/1900 MHz)**
- **Power:** LTE 23 dBm +/- 1, HSPA+ 23 dBm +/- 1, EVDO 24 dBm +0.5/-1 (typical conducted)
- **Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf-cm)
- **GPS:** active GPS support
- **Industry Standards & Certs:** FCC, Verizon
- **Modem Part Number:** MC400LPE

AER 2100LPE-AT – 4G LTE/HSPA+/EVDO for AT&T

- **Technology:** LTE, HSPA+, EVDO Rev A
- **Downlink Rates:** LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1 Mbps (theoretical)
- **Uplink Rates:** LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps (theoretical)
- **Frequency Bands:**
 - **LTE Band 2 (1900 MHz), Band 4 – AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)**

- **HSPA+/UMTS (850/900/1900/2100 MHz, AWS)**
- **GSM/GPRS/EDGE (850/900/1800/1900 MHz)**
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)
- **Power:** LTE 23 dBm +/- 1, HSPA+ 23 dBm +/- 1, EVDO 24 dBm +0.5/-1 (typical conducted)
- **Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf-cm)
- **GPS:** active GPS support
- **Industry Standards & Certs:** PTCRB, FCC, IC, AT&T
- **Modem Part Number:** MC400LPE

AER 2100LPE-SP – 4G LTE/HSPA+/EVDO for Sprint

- **Technology:** LTE, HSPA+, EVDO Rev A
- **Downlink Rates:** LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1 Mbps (theoretical)
- **Uplink Rates:** LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps (theoretical)
- **Frequency Bands:**
 - **LTE Band 2 (1900 MHz), Band 4 – AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), **Band 25 (1900 MHz)****
 - HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
 - GSM/GPRS/EDGE (850/900/1800/1900 MHz)
 - **CDMA EVDO Rev A/1xRTT (800/1900 MHz)**
- **Power:** LTE 23 dBm +/- 1, HSPA+ 23 dBm +/- 1, EVDO 24 dBm +0.5/-1 (typical conducted)
- **Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf-cm)
- **GPS:** active GPS support
- **Industry Standards & Certs:** FCC, Sprint
- **Modem Part Number:** MC400LPE

AER 2100LP3-EU (2100LP3-UK*) – 4G LTE/HSPA+ for Europe (United Kingdom)

- **Technology:** LTE, HSPA+
- **Downlink Rates:** LTE 100 Mbps, HSPA+ 21.1 Mbps (theoretical)
- **Uplink Rates:** LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)
- **Frequency Bands:**
 - **LTE Band 1 (2100 MHz), Band 3 (1800 MHz), Band 7 (2600 MHz), Band 8 (900 MHz), Band 20 (800 MHz)**
 - **HSPA+/UMTS (800/850/900/1900/2100 MHz)**
 - **GSM/GPRS/EDGE Quad-Band (850/900/1800/1900 MHz)**
- **Power:** LTE Band 1/3/8/20 – 23 dBm +/- 1; LTE Band 7 – 22 dBm +/- 1, HSPA+ 23 dBm +/- 1 (typical conducted)
- **Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only
- **GPS:** active GPS support
- **Industry Standards & Certs:** CE, GCF-CC
- **Modem Part Number:** MC400LP3

**The 2100LP3-EU and 2100LP3-UK models are equivalent except for the line cord.*

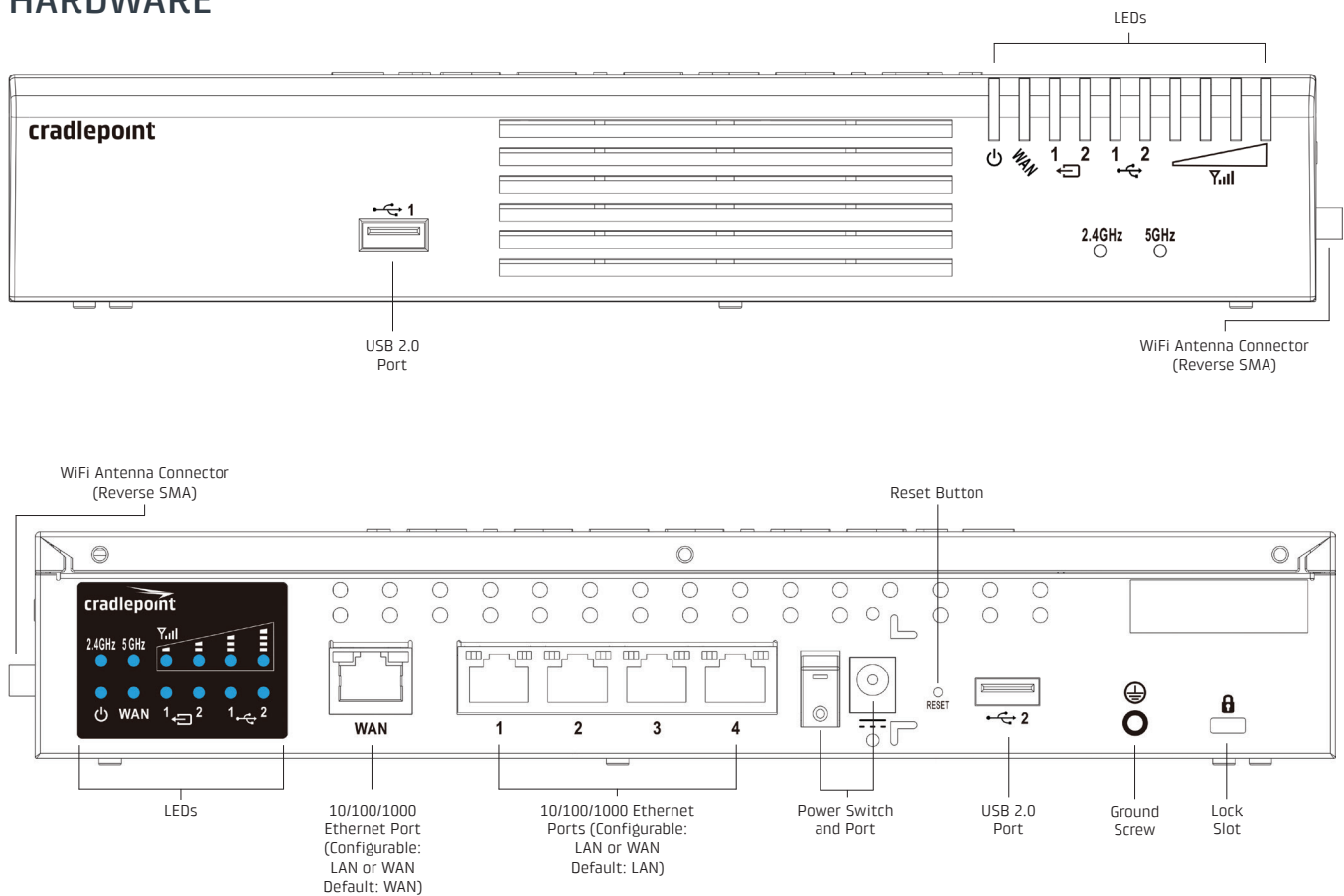
AER 2100LPE-GN – 4G LTE/HSPA+/EVDO (generic – for use on T-Mobile and US Cellular in the U.S. and Rogers, Bell, & TELUS in Canada)

- **Technology:** LTE, HSPA+, EVDO Rev A
- **Downlink Rates:** LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1 Mbps (theoretical)
- **Uplink Rates:** LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps (theoretical)
- **Frequency Bands:**
 - **LTE Band 2 (1900 MHz), Band 4 (AWS), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25**

(1900 MHz)

- **HSPA+/UMTS (850/900/1900/2100 MHz, AWS)**
- **GSM/GPRS/EDGE (850/900/1800/1900 MHz)**
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)
- **Power:** LTE 23 dBm +/- 1, HSPA+ 23 dBm +/- 1, EVDO 24 dBm +0.5/-1 (typical conducted)
- **Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf-cm)
- **GPS:** active GPS support
- **Industry Standards & Certs:** PTCRB, FCC, IC
- **Modem Part Number:** MC400LPE

HARDWARE



SUPPORT AND WARRANTY

CradleCare Support available with technical support, software upgrades, and advanced hardware exchange – 1-, 3-, and 5-year options.

One-year limited hardware warranty available in the US and Canada; two-year limited hardware warranty for integrated EU products when purchased from an authorized EU distributor – extend warranty to 2, 3, or 5 years.