

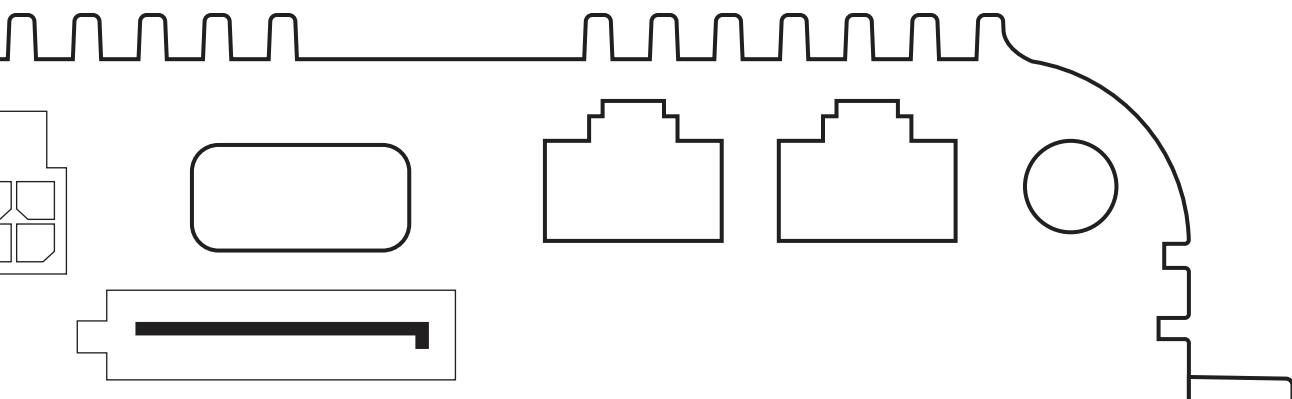


*Global Leader in 4G LTE Network Solutions*

# COR Series Router

**IBR600B / IBR650B**

Spec Sheet



[cradlepoint.com](http://cradlepoint.com)

# INTRODUCTION

## WHAT'S IN THE BOX

- COR IBR600B/IBR650B Integrated Broadband Router w/ integrated mounting bracket
- External 3G/4G mobile broadband modem antennas (2) (SMA), finger tighten only
- External WiFi antennas (2) reverse SMA\*, 5 dBi gain, finger tighten only
- 12V / 1.5A power supply w/ locking connector; GPIO/power cable available
- Quick Start Guide, regulatory and warranty information

\* - IBR600B only

## KEY FEATURES

### WAN

- Cat 4 LTE modem with auto-carrier selection (Verizon, AT&T, T-Mobile)
- Dual-modem capable with optional COR Extensibility Dock 4G LTE/HSPA+
- WiFi as WAN\*
- Failover/Fallback
- Load Balancing
- Advanced Modem Failure Check
- WAN Port Speed Control
- WAN/LAN Affinity
- IP Passthrough

\* - IBR600B only

### 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\*

- 802.11 b/g/n
- Up to 64 connected devices
- Two SSIDs
- WPA2 Enterprise WiFi
- Hotspot/Captive Portal
- SSID-based Priority

\* - IBR600B only

## MANAGEMENT

- Cradlepoint Enterprise Cloud Manager<sup>1</sup>
- Web UI, API, CLI
- Data Usage Alerts (router and per client)
- Advanced Troubleshooting (support)
- Device Alerts
- SNMP
- SMS control
- Auto APN Recovery

## VPN AND ROUTING

- IPsec Tunnel – up to five concurrent sessions
- L2TP<sup>2</sup>
- GRE Tunnel
- OSPF/BGP/RIP<sup>2</sup>
- Per-Interface Routing
- Routing Rules
- NAT-less Routing
- Virtual Server/Port Forwarding
- NEMO/DMNR<sup>2</sup>
- IPv6
- VRRP<sup>2</sup>
- STP<sup>2</sup>
- NHRP<sup>2</sup>
- VTI Tunnel support
- OpenVPN support
- CP Secure VPN compatible

\*-Cradlepoint Secure VPN-NAT configuration only

## SECURITY

- RADIUS and TACACS+ support\* 802.1x authentication for Ethernet
- Zscaler integration<sup>2</sup>
- Certificate support
- ALGs
- MAC Address Filtering
- Advanced Security Mode (local user management only)
- Per-Client Web Filtering
- IP Filtering
- Content Filtering (basic)
- Website Filtering
- Zone-Based Object Firewall with host address (IP or FQDN), port, and mac address

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

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

2 - Requires an **Extended Enterprise License**

## SPECIFICATIONS

### WAN:

- Integrated 4G LTE modem (with HSPA+ failover)
- Dual-modem capable with optional COR Extensibility Dock
- One 10/100/1000 Ethernet port (WAN or LAN), one 10/100 (WAN or LAN)

**LAN:** One 10/100/1000 Ethernet port (WAN or LAN), one 10/100 Ethernet port (WAN or LAN)

### POR TS:

- Power
- 2-wire GPIO
- Two Ethernet LAN or WAN
- Two cellular antenna connectors (SMA)
- Two WiFi connectors\* (reverse SMA)
- Cradlepoint COR Extensibility Dock Port/custom cable Port (15-pin) with 4 GPIOs, power input, ignition sensing and 5V out

### TEMPERATURE:

- -20 °C to 60 °C (-4 °F to 140 °F) operating
- -30 °C to 70 °C (-22 °F to 158 °F) storage

### HUMIDITY (non-condensing):

- 5% to 95% operating
- 5% to 95% storage

### POWER:

- **IBR600B**
  - Idle: 0.17A @ 12V
  - Typical: - 0.45A @ 12V
  - Max: 1.2A @ 12V
- **IBR650B**
  - Idle: 0.13A @ 12V
  - Typical: 0.25A @ 12V
  - max: 1.0A @ 12V
- DC input steady state voltage range: 9 – 33VDC
- Recommended inline fuse for vehicle installations: 1.5A fast-blow

**SIZE:** 4.6 x 4.1 x 1.1 in (117 x 104 x 27.3 mm)

**WEIGHT:** 10.1 oz. (285 g)

### CERTIFICATIONS:

- FCC
- WiFi Alliance\*
- Safety: UL/CUL, CB Scheme, EN60950-1
- Shock/Vibration/Humidity: compliant with MIL STD 810G and SAEJ1455
- Materials: WEEE, RoHS, RoHS-2, California Prop 65
- Vehicle: E-Mark, compliant with ISO 7637-2
- Telecom: PTCRB/CTIA
- Carrier certifications (see individual SKUs for additional certifications)

\*-IBR600B only

**GPS Protocols:** TAIP and NMEA 0183 V3.0

*NOTE: GPS requires COR Extensibility Dock with 2nd modem that supports GPS (MC400LP6, MC400LPE)*

## ACCESSORIES

- Indoor/Outdoor Panel Patch Part #: 170669-000
- Multi-Band Omni-Directional Antenna Part #: 170668-000
- Universal 3G/4G/LTE antenna w/ SMA connector (2dBi/3dBi) (Part # 170649-000)
- Directional Yagi (Log-Periodic) antenna for external (outside) mounting (Part # 170588-000)
- 12" Mag-mount antenna (Part # 170605-000)
- 4" Mini mag-mount antenna (Part # 170606-000)
- COR 2 meter power & GPIO cable (direct wire) (Part # 170585-000)
- COR vehicle power adapter (Part # 170635-000)
- COR wall power adapter (Part # 170584-000)

See the Cradlepoint [antenna accessories page](#) for more information about antennas. Also see the Antenna Ordering and Installation Guide, available as a PDF in the Resources section of antenna and router product pages.

## BUSINESS-GRADE MODEM SPECIFICATIONS

COR IBR600B/IBR650B models include an integrated 4G LTE/HSPA modem.

### COR IBR600B-LP4-NA, COR IBR650B-LP4-NA

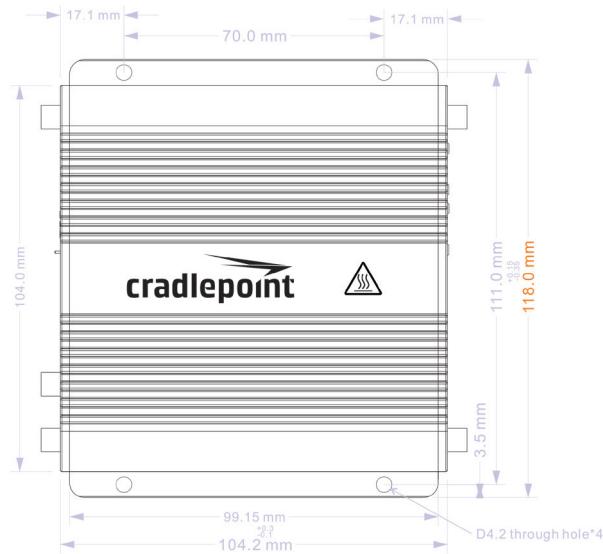
- **Technology:** Category 4 LTE, HSPA+
- **Downlink Rates:** LTE 150 Mbps, HSPA+ 42.2 Mbps
- **Uplink Rates:** LTE 50 Mbps, HSPA+ 5.76 Mbps
- **Frequency Bands:**
  - LTE: Band 2 (1900 MHz), Band 4 – AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz)
  - DC-HSPA+/UMTS Rel. 9, Cat 24: Bands 5 and 2 (850/1900 MHz)
- **Power:** LTE 23 dBm +/- 1, HSPA+ 23 dBm +/- 1
- **Antennas:** two SMA male (plug), finger tighten only (maximum torque spec is 7 kgfcm)
- **Industry Standards & Certs:** FCC, WiFi Alliance (IBR600B only), Verizon, AT&T, PTCRB, carrier Private Networks
- **SIM:** two 2FF slots (secured)

## SUPPORT AND WARRANTY

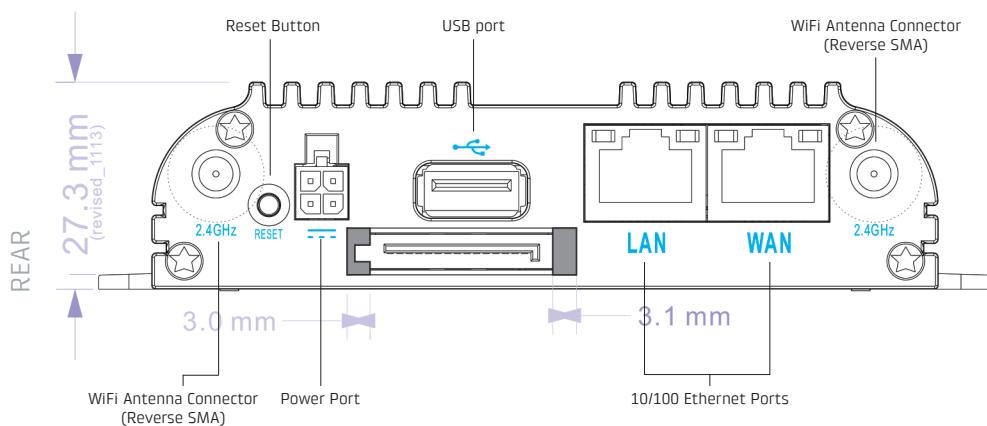
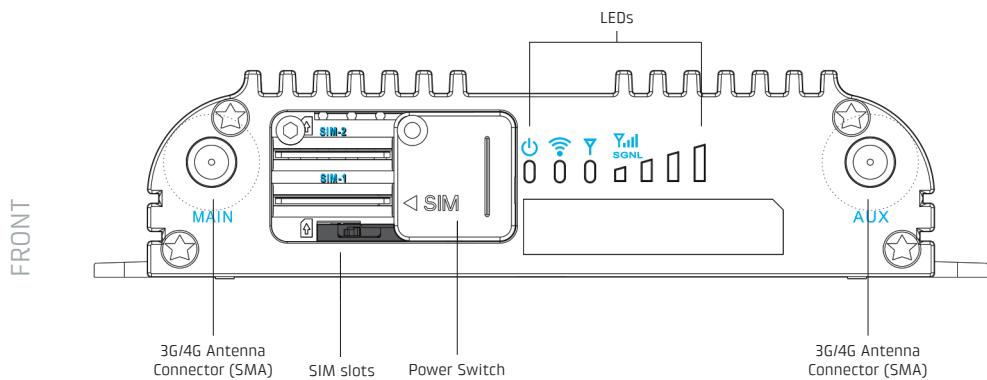
CradleCare Support available in the US and Canada with technical support, software upgrades, and advanced hardware exchange – 1-, 3-, and 5-year options.

Three-year limited hardware warranty available world-wide on IBR600B/IBR650B series products when purchased from an approved Cradlepoint Partner or Distributor – extend warranty to 5 years.

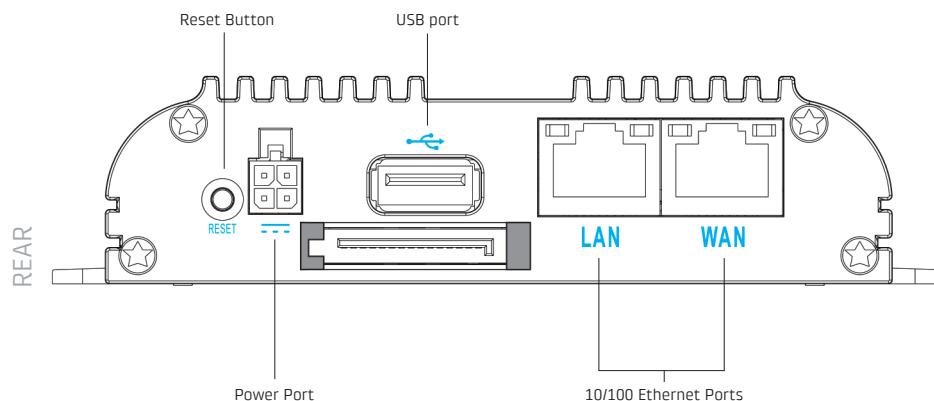
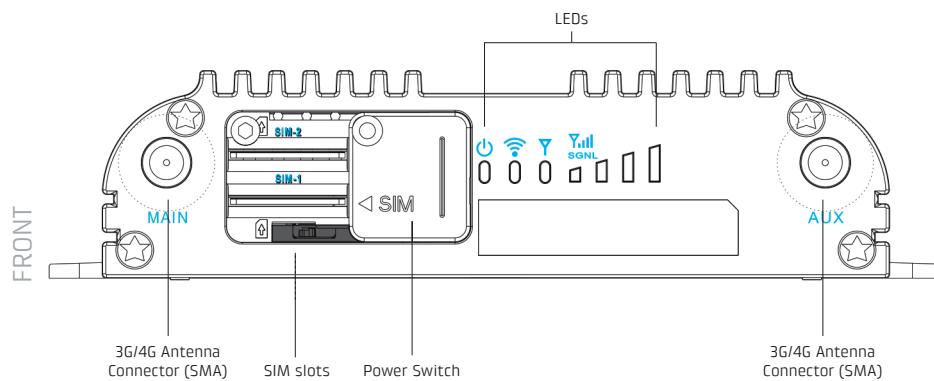
## HARDWARE



### IBR600B-LP4



## IBR650B-LP4



## LEDS

 **POWER** The Cradlepoint IBR600B/IBR650B must be powered using an approved 12V DC power source.

- Green = Powered ON.
- No Light = Not receiving power. Check the power switch and the power source connection.
- Flashing Amber = Attention. Open the administration pages and check the router status.



**WiFi BROADCAST** Indicates WiFi activity.

- Green = WiFi is on and operating normally.
- Flashing Amber = Attention. Open the administration pages and check the router status.



**INTEGRATED MODEM** Indicates information about the integrated modem.

- Green = Connected to integrated modem.



**SIGNAL STRENGTH** Blue LED bars indicate the active modem's signal strength.

- 4 Solid Bars = Strongest signal.
- 1 Blinking Bar = Weakest signal. (A blinking bar indicates half of a bar.)

### ADDITIONAL LED INDICATIONS

- Several different LEDs flash 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 firmware upgrade.