



# COR IBR600B Series Spec Sheet



Cradlepoint COR IBR600C Series IoT routers are sold as part of an all-inclusive IoT networking solution in a NetCloud Solution Package.

**NetCloud Solution Packages for IoT include:**

- Compact routers, for IoT and M2M applications
- Award-winning remote cloud management and network intelligence with **NetCloud Manager**
- Secure IoT networking with **NetCloud Perimeter** for perimeter-secured overlay networks
- **24x7 support and limited lifetime warranty**

## WHAT TO BUY

Description	Part Numbers
<b>North America (U.S., Canada)</b>	
+ NetCloud Essentials for IoT Routers (Standard) with IBR600B-LP4	TAX-600BLP4-NNN
+ NetCloud Essentials for IoT Routers (Standard) with IBR650B-LP4	TAX-650BLP4-NON
<b>All Regions</b>	
+ NetCloud Advanced for Mobile Routers (Enterprise)	TAX-NCADV

*x = 1, 3, or 5 years*

**NetCloud Essentials** contains all the features and capabilities required for a broad range of mobile or in-vehicle applications. Essentials packages include 24x7 Support (Phone Support: 24 hour weekdays with Emergency response on weekends, Web: 24x7, Chat: 24x5) and a Limited Lifetime Warranty.

For additional capabilities, a **NetCloud Advanced** Upgrade can be added to the NetCloud Essentials Package at any time.

See additional details of what is included in the Essential and Advanced NetCloud software:

[cradlepoint.com/iot-networks](http://cradlepoint.com/iot-networks)

For more details on the COR IBR600C IoT Router, included with the NetCloud Solution Packages for mobile, see below.

## 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/DC-HSPA+
- WiFi as WAN\*
- Failover/Failback
- 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 NetCloud 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 & ROUTING

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

## SECURITY

- RADIUS and TACACS+ support\*
- 802.1x authentication for Ethernet
- Zscaler integration
- 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.

## SPECIFICATIONS

### WAN:

- Integrated 4G LTE modem (with DC-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)

### PORTS:

- 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 5 V 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: 0.17 A @ 12 V
  - Typical: 0.45 A @ 12 V
  - Max: 1.2 A @ 12 V
- IBR650B
  - Idle: 0.13 A @ 12 V
  - Typical: 0.25 A @ 12 V

## ACCESSORIES

- COR Extensibility Dock (Part #: 170700-000)
- 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)
- 9-wire power & GPIO cable (Part #170680-000)
- COR 2-meter power & GPIO cable (direct wire) (Part # 170585-000)
- COR vehicle power adapter (Part # 170635-000)
- COR wall power adapter (Part # 170584-001)

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/DC-HSPA+ modem.

**COR IBR600B-LP4, COR IBR650B-LP4:**

- Technology: Category 4 LTE, DC-HSPA+
- Downlink Rates: LTE 150 Mbps, DC-HSPA+ 42.2 Mbps
- Uplink Rates: LTE 50 Mbps, DC-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, DC-HSPA+ 23 dBm ± 1
- Antennas: two SMA male (plug), finger tighten only (maximum torque spec is 7 kgf/cm<sup>2</sup>)
- Industry Standards & Certs: FCC, WiFi Alliance (IBR600B only), Verizon, AT&T, PTCRB, carrier Private Networks
- SIM: two 2FF slots (secured)

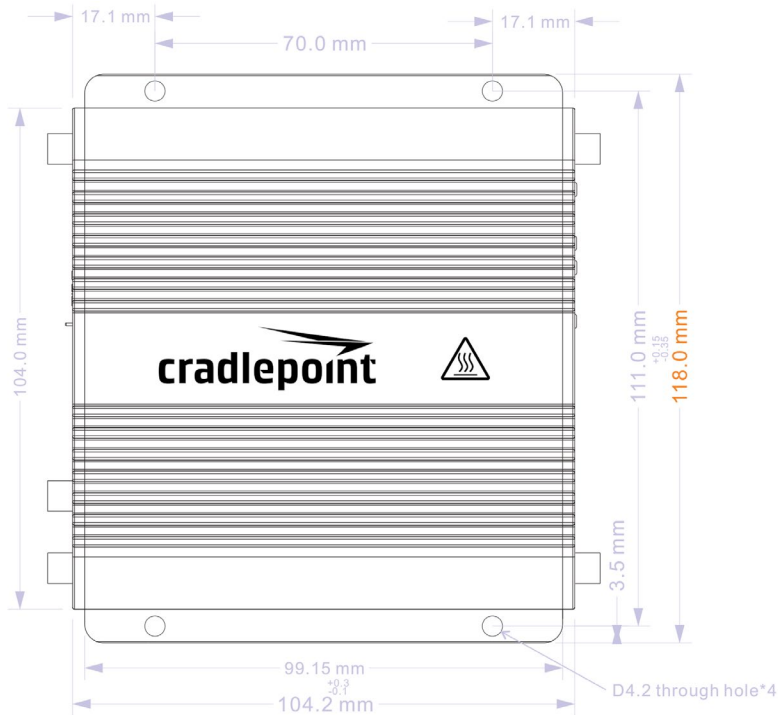
## SUPPORT & WARRANTY

The COR IBR600B is only sold as a component of NetCloud Solution Packages.

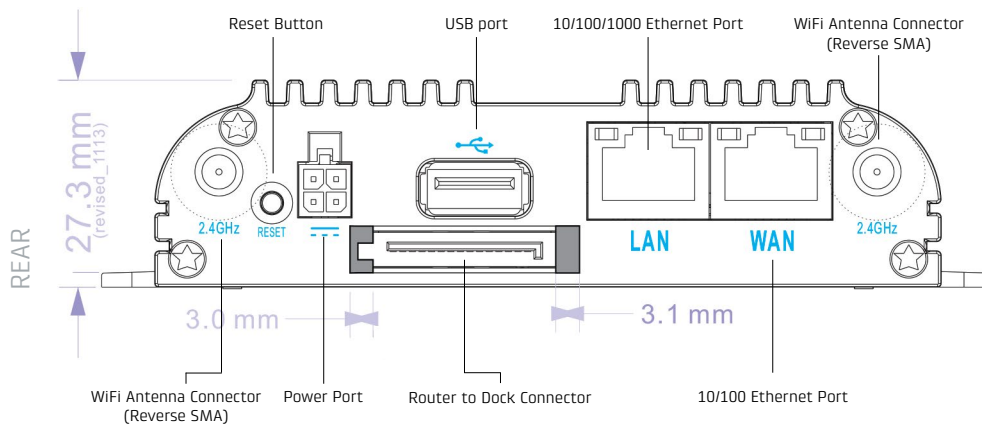
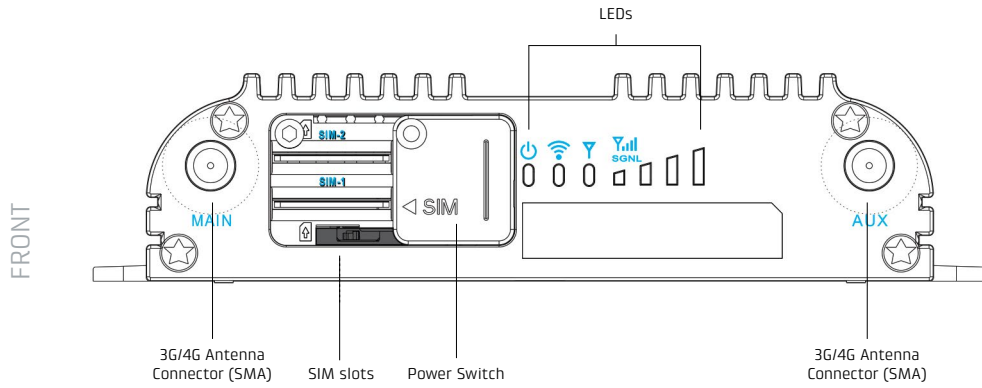
- NetCloud Solution Packages include support for the full subscription term.
- All Cradlepoint hardware products are covered by a limited lifetime warranty for as long as they are under a NetCloud Solution Package subscription.

The COR IBR600B includes a minimum three-year hardware warranty when purchased from an authorized Cradlepoint Partner.

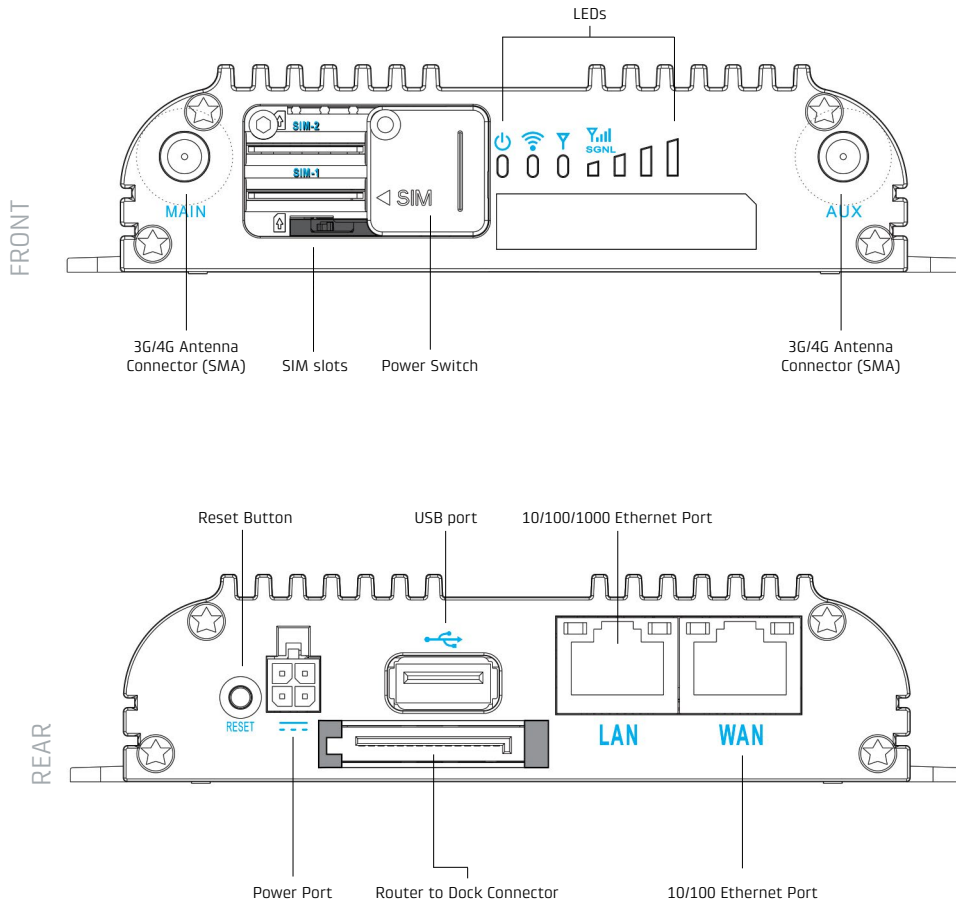
## HARDWARE



IBR600B-LP4







IBR650B-LP4





## LEDS

INDICATOR	BEHAVIOR
	<p><b>POWER</b> The Cradlepoint IBR600B/IBR650B must be powered using an approved 12 V DC power source.</p> <ul style="list-style-type: none"> <li>• Blue = Powered ON.</li> <li>• No Light = Not receiving power. Check the power switch and the power source connection.</li> </ul>
	<p><b>WiFi BROADCAST</b> Indicates WiFi activity (IBR600B only).</p> <ul style="list-style-type: none"> <li>• Green = WiFi is on and operating normally.</li> <li>• Amber = Attention. Open the administration pages and check the router status.</li> </ul>
	<p><b>INTEGRATED OR USB MODEM</b> Indicates information about the integrated modem or attached USB modem.</p> <ul style="list-style-type: none"> <li>• Green = Modem has established an active connection.</li> <li>• Blinking Green = Modem is connecting.</li> <li>• Amber = Modem is not active.</li> <li>• Blinking Amber = Data connection error. No modem connection possible.</li> <li>• Blinking Red = Modem is in the process of resetting.</li> </ul>
	<p><b>SIGNAL STRENGTH</b> Blue LED bars indicate the active modem's signal strength.</p> <ul style="list-style-type: none"> <li>• 4 Solid Bars = Strongest signal.</li> <li>• 1 Blinking Bar = Weakest signal. (A blinking bar indicates half of a bar.)</li> </ul>
<p><b>Other</b></p>	<p><b>ADDITIONAL LED INDICATIONS</b></p> <ul style="list-style-type: none"> <li>• Several different LEDs blink when the factory reset button is detected.</li> <li>• Two of the modem LEDs blink red in unison for 10 seconds when there is an error during NCOS upgrade.</li> <li>• The IBR650B has a dedicated Attention LED.</li> <li>• If a USB modem is plugged in, only Signal Strength LEDs will light up.</li> </ul>