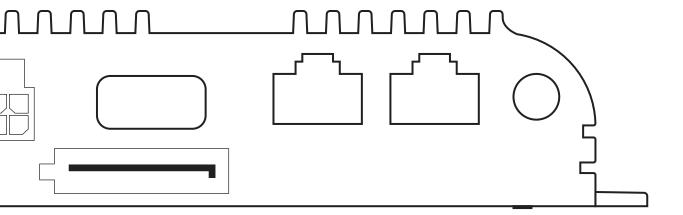


COR Series Router

IBR600B / IBR650B

Spec Sheet



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/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 Manager¹
- 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
- L2TP²
- GRE Tunnel
- OSPF/BGP/RIP²
- Per-Interface Routing
- Routing Rules
- NAT-less Routing
- Virtual Server/Port Forwarding
- NEMO/DMNR²
- IPv6
- VRRP²
- STP²
- NHRP²
- VTI Tunnel support
- OpenVPN support
- CP Secure VPN compatible

SECURITY

- RADIUS and TACACS+ support*
- 802.1x authentication for Ethernet
- Zscaler integration²
- 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 **NetCloud Manager** requires a subscription
- 2 Requires an Extended Enterprise License



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
 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
- max: 1.0 A @ 12 V
- DC input steady state voltage range: 9–33 VDC
- Recommended inline fuse for vehicle installations: 1.5 A fast-blow

SIZE: $4.6 \times 4.1 \times 1.1$ in (117 × 104 × 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

- 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/cm²)
- Industry Standards & Certs: FCC, WiFi Alliance (IBR600B only), Verizon, AT&T, PTCRB, carrier Private Networks
- SIM: two 2FF slots (secured)

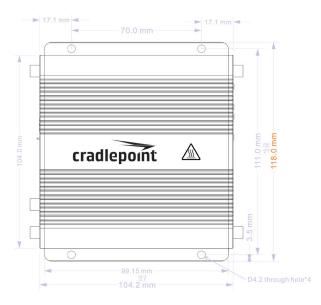
SUPPORT AND WARRANTY

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

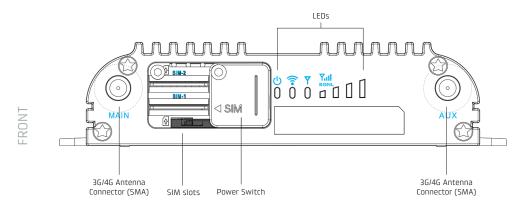
Three-year limited hardware warranty available world-wide on IBR600B/IBR650B series products when purchased from an approved Cradlepoint Partner or Distributor – extend warranty to 5 years.

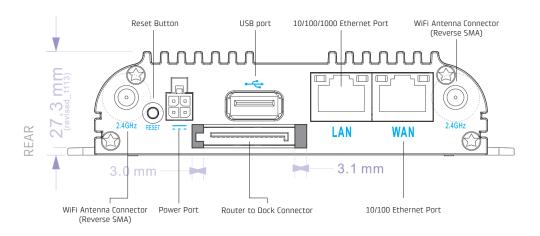


HARDWARE



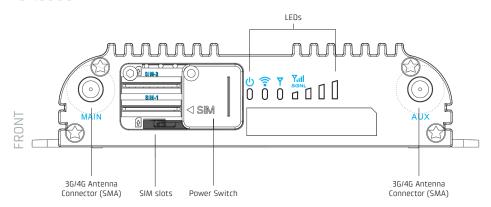
IBR600B-LP4

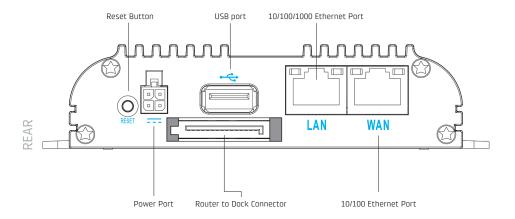






IBR650B-LP4







LEDS

INDICATOR	BEHAVIOR
ψ	POWER The Cradlepoint IBR600B/IBR650B must be powered using an approved 12 V DC power source.
	 Blue = Powered ON. No Light = Not receiving power. Check the power switch and the power source connection.
	WiFi BROADCAST Indicates WiFi activity (IBR600B only).
	 Green = WiFi is on and operating normally. Amber = Attention. Open the administration pages and check the router status.
Υ	INTEGRATED OR USB MODEM Indicates information about the integrated modem or attached USB modem.
	 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.
Y.ıll	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.)
Other	ADDITIONAL LED INDICATIONS
	 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. The IBR650B has a dedicated Attention LED. If a USB modem is plugged in, only Signal Strength LEDs will light up.

