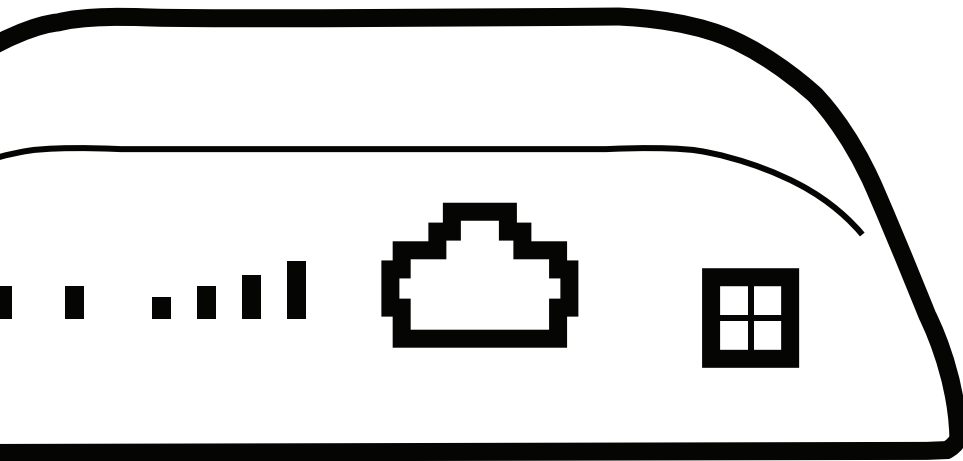




# COR Series Router

**IBR350**

Spec Sheet



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

# INTRODUCTION

## WHAT'S IN THE BOX

- M2M router with integrated business-class 4G LTE or HSPA+ or LTE/HSPA+/EVDO modem; includes integrated mounting holes
- 12VDC 1A power adapter (1.5 meter cord)
- Two modem antennas
- Quick Start Guide with warranty and regulatory information

## KEY FEATURES

### WAN

- LTE-only, HSPA+, or LTE/HSPA+/EVDO
- Advanced Modem Failure Check
- Standby

### 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

### 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

### VPN AND ROUTING

- • IPsec Tunnel – up to two concurrent sessions
- • GRE Tunnel
- • Routing Rules
- • NAT-less Routing
- • Virtual Server/Port Forwarding
- • IPv6
- • CP Secure VPN compatible\*

\*-Cradlepoint Secure VPN-NAT configuration only

## SECURITY

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

## SPECIFICATIONS

### WAN:

- Integrated LTE-only, HSPA+, or LTE/HSPA+/EVDO modem
- Dual-SIM slots (single on LTE-only)

**LAN:** One LAN 10/100 Ethernet port

### PORTS:

- Power
- One Ethernet LAN
- Two cellular antenna connectors (SMA)

**TEMPERATURE:** 0°C to 40°C (32°F to 104°F) operating

### HUMIDITY (non-condensing):

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

**POWER:** 12VDC 1A adapter

**SIZE:** 3.0 x 3.7 x 1.0 in (76.5 x 94.5 x 24.5 mm)

### CERTIFICATIONS:

- PTCRB, GCF-CC, FCC, IC, CE, Carrier; (others pending)
- Safety: UL/CUL
- Materials: WEEE, RoHS, RoHS-2, California Prop 65

## ACCESSORIES

- Universal 3G/4G multi-band cellular modem antenna – 2dBi/3dBi (Part # 170649-000)
- Replacement cellular paddle antenna (▲) (for IBR350P2 only) - 2dBi (Part #170555-000)
- 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)
- Barrel to 4-pin power adapter (Part # 170665-000)

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 IBR350 models include an integrated 4G LTE or HSPA+ or LTE/HSPA+/EVDO modem – specific model names include a specific modem (e.g., the COR IBR350L-VZ includes a Verizon LTE modem).

### COR IBR350LPE-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), finger tighten only (maximum torque spec is 7 kgfcm)
- **Industry Standards & Certs:** PTCRB, FCC, IC, UL, Verizon
- **SIM:** two 2FF slots
- **GPS:** standalone GPS support

### COR IBR350LPE-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), finger tighten only (maximum torque spec is 7 kgfcm)
- **Industry Standards & Certs:** PTCRB, FCC, IC, UL, AT&T

- **SIM:** two 2FF slots
- **GPS:** standalone GPS support

#### **COR IBR350LPE-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), finger tighten only (maximum torque spec is 7 kgfcm)
- **Industry Standards & Certs:** PTCRB, FCC, IC, UL
- **SIM:** two 2FF slots
- **GPS:** standalone GPS support

#### **COR IBR350LPE-GN – 4G LTE/HSPA+/EVDO (generic – for use on T-Mobile 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), finger tighten only (maximum torque spec is 7 kgfcm)
- **Industry Standards & Certs:** PTCRB, FCC, IC, UL
- **SIM:** two 2FF slots
- **GPS:** standalone GPS support

#### **COR IBR350P2/IBR350P2-INTL\***

- **Technology:** HSPA+
- **Downlink Rates:** HSPA+ 21 Mbps (theoretical)
- **Uplink Rates:** HSPA+ 5.76 Mbps (theoretical)
- **Frequency Bands:**
  - HSPA+/UMTS: (850/900/1900/2100 MHz)
  - GSM/GPRS/EDGE: (850/900/1800/1900 MHz)
- **Module Power:** UMTS 23dBm +/- 1 (typical conducted)
- **Module Antennas:** two SMA male (plug), 2 dBi gain; finger tighten only; maximum torque spec is 7 kgf-cm
- **Industry Standards & Certs:** PTCRB, GCF-CC, FCC, IC, CE; (others pending)
- **Model:** S3A519A
- **SIM:** two 2FF slots

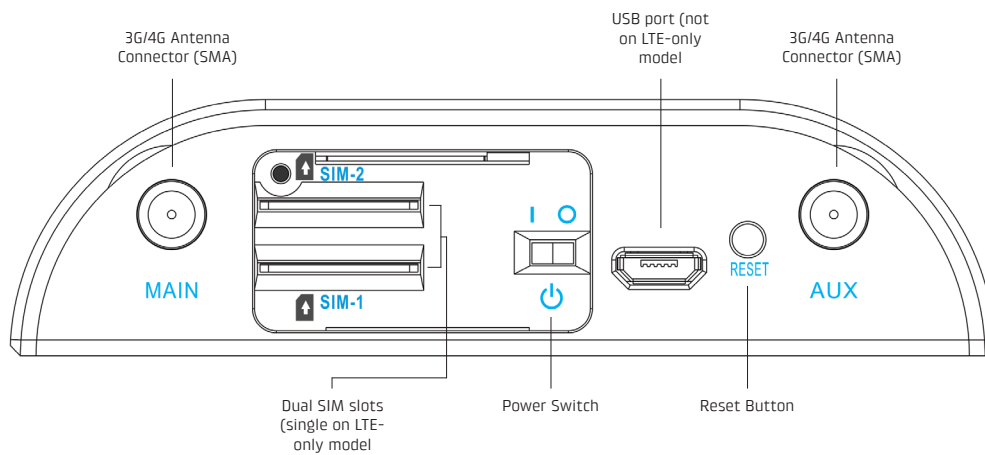
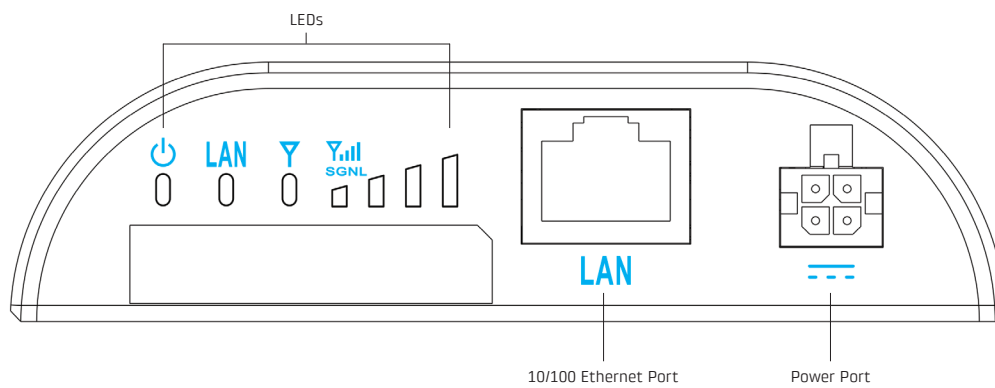
\*-Includes International Adapter Clips (US, UK, EU, AU)

## 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.

## HARDWARE



## LEDS



### POWER

- Blue = 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.

**LAN**    **ETHERNET LAN** Indicates information about a data source connected to the Ethernet LAN port.

- Green = Connected to an active Ethernet LAN interface.



**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.