Cradlepoint COR IBR350 Specifications

Figure 1: COR IBR350

Highly Available, Cloud-Managed M2M Gateway

The Cradlepoint COR IBR350 Series is a compact, LTE-only, HSPA+, or multi-carrier/software-defined radio (LTE/HSPA+/EVDO) networking solution designed for mission critical connectivity for M2M deployments.

Ideal for kiosks and digital signs, this cloud-managed solution provides organizations the ability to scale deployments quickly and manage their distributed networks easily in real-time.

Designed with form & function in mind for the cost-conscious consumer, COR IBR350 is perfect to get your applications online.

Key Features

- Cloud-managed for zero-touch deployment and intelligent management
- Internal Verizon LTE; AT&T, T-Mobile, and Rest-of-World HSPA+; or Verizon, Sprint, AT&T, or T-Mobile/Canada LTE/HSPA+/EVDO modem
- Compact
- Integrated mounting holes

- One 10/100 Ethernet port
- Connectors for external cellular modem antennas (two)

Features

WAN

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

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[1]
- 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

Security

- RADIUS and TACACS+
- 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

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 operating

HUMIDITY (non-condensing)

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

POWER

- 12VDC 1A adapter

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

HOUSING – plastic

CERTIFICATIONS

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

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

Feature Details

- **WAN Security** – NAT, SPI, ALG, inbound filtering of IP addresses, port blocking, service filtering (FTP, SMTP, HTTP, RPL, SNMP, DNS, ICMP, NNTP, POP3, SSH), protocol filtering, WAN ping (allow/ignore)
- **Intelligent Routing** – UPnP, DMZ, virtual server/port forwarding, routing rules, NAT-less routing, route management, content filtering, IP filtering, website filtering, per-client Web filtering, local DHCP server, DHCP client, DHCP relay, DNS, DNS proxy; ALGs: PPTP, SIP, TFTP, FTP, IRC; MAC address filtering, Dynamic DNS, LAN/WAN affinity, VLAN 802.1Q, multicast proxy support, IP setting overrides, IPv6 support
- **Management** – Enterprise Cloud Manager: cloud-enabled management and application platform (subscription-based); web-based GUI (local management), optional RADIUS or TACACS+ username/password; remote WAN web-based management w/ access control (HTTP, HTTPS); SNMP v1, v2c, & v3; CLI over SSH, SSH to serial, SSH to telnet; API; one-button firmware upgrade; modem configuration, update, and management; modem data usage w/ alerts, per-client data usage; custom AT scripting to modems
- **Performance & Health Monitoring** – Advanced QoS with traffic shaping, with DSCP/DiffServe QoS, Modem Health Management (MHM) improves connectivity of modem, WAN port speed control, several levels of basic and advanced logging for troubleshooting
- **VPN** (IPsec) – Tunnel, NAT-T, and transport modes; connect to Cradlepoint, Cisco/Linksys, CheckPoint, Watchguard, Juniper, SonicWall, Adtran and others; certificate support; Hash (MD5, SHA128, SHA256, SHA384, SHA512), Cipher (AES, 3DES, DES); support for 2 concurrent connections, GRE tunneling

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 – extend warranty to 2, 3, or 5 years

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 IBR350L-VZ – 4G LTE for Verizon

- **Technology**: LTE
- **Downlink Rates**: LTE 100 Mbps (theoretical)
- **Uplink Rates**: LTE 50 Mbps (theoretical)
- **Frequency Bands**:

    - LTE: Band 4 – AWS (1700/2100 MHz), Band 13 (700 MHz)

- **Power**: LTE 23 dBm +/– 1 (typical conducted)
- **Antennas**: two SMA male (plug), finger tighten only (maximum torque spec is 7 kgf-cm)
- **Industry Standards & Certs**: FCC, UL, Verizon
- **SIM**: one 2FF slot

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.

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 kgf-cm)
- **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 kgf-cm)
- **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 kgf-cm)
- **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 kgf-cm)
- **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)