



# Cradlepoint COR IBR600 Series

## INTEGRATED BROADBAND ROUTERS

IBR600/IBR650 Models - Hardened for Machine-to-Machine



COR IBR600

The Cradlepoint COR IBR600 Series is built for your M2M network. The COR IBR600 Series is an affordable, highly featured compact router with an embedded modem designed for critical business and enterprise applications that require 24/7 connectivity.

With its compact size, sleek metal case, mounting bracket, and external mobile broadband and WiFi\* (IBR600 only) antennas, the Cradlepoint COR IBR600 Series is ideal for use in high-availability portable or fixed applications like ATMs, kiosks, surveillance, vehicles, etc.

Cradlepoint COR provides instant network connectivity with a built-in modem - just add a mobile broadband plan or insert an activated SIM (2FF) and go. It also supports traditional wired data networks like DSL, cable, or T1 for maximum network flexibility. Business-continuity features like failover/failback come standard in Cradlepoint COR. When configured for failover, COR detects network failures and seamlessly switches over to a secondary WAN - keeping your network online.

The Cradlepoint COR IBR600 Series provides VPN endpoint functionality, VLAN support, IPv6 support, multiple remote management methods including SMS, modem data usage management and alerts, GPIO support, USB-to-serial console passthrough support for out-of-band management of connected devices, and the ability to be part of a PCI-DSS compliant solution. It allows for secure access to company networks for enterprise applications and provides a secure way to transmit sensitive data to and from a remote site.

### EXTENDED ENTERPRISE LICENSE

Cradlepoint's Extended Enterprise License provides advanced routing and security features: BGP, OSPF, RIP, VRRP, STP, NHRP, L2TP, and NEMO/DMNR.

Subscription required. See [cradlepoint.com/eel](http://cradlepoint.com/eel) for details.

### THE HEART OF YOUR M2M NETWORK

- For use in 24/7 business-critical installations such as ATMs, kiosks, surveillance, vehicles, etc.
- WiFi\* (IBR600) and no-WiFi (IBR650) options available  
Wireless 2x2 MIMO "N" WiFi (802.11 b/g/n)\*
- Increase your network availability with WiPipe™-powered automatic failover and failback
- Supports both wireless and wired Internet connections (two Ethernet ports for either LAN/LAN or WAN/LAN)
- Several models available with 4G and/or 3G support for US and international carriers
- Certified for shock and vibration in accordance with MIL STD 810G and SAE J1455 - be confident in the device's ability to survive challenging environments, including vehicles
- IPsec VPN termination (tunnel, NAT-T, and transport) with GRE support and site-to-site dynamic VPN with NHRP
- Create a custom-branded hotspot with our captive portal feature (include ToS, advertisements, etc.)\*
- Standalone active GPS support on -PWD models (1x1 "N" WiFi support)\*

### CRADLEPOINT ENTERPRISE CLOUD MANAGER

Rapidly deploy and dynamically manage networks at geographically distributed locations with Enterprise Cloud Manager, Cradlepoint's next generation application platform. Improve productivity, reduce costs, and enhance the intelligence of your network and business operations.

Subscription required. See [cradlepoint.com/ecm](http://cradlepoint.com/ecm) for details.

*\*WiFi is only supported on IBR600 models.*



POWER / RESET / LAN / WAN / USB  
COR IBR600



SIM SLOT / ON-OFF / LEDs / SIGNAL STRENGTH  
COR IBR600

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

# COR IBR600/IBR650 Integrated Broadband Router

## Internet Access and Device Connectivity

Includes integrated 3G/4G modem (see attached for options and specifications)  
 2 Ethernet LAN/WAN ports for Ethernet-enabled devices or landline Internet  
 Wireless 2x2 MIMO “N” WiFi (802.11 b/g/n)\*  
 Supports up to 64 WiFi connections at a time\*  
 Two SSIDs (with individual security, bandwidth limits, and QoS settings; separate critical traffic or create a public WiFi hotspot)\*

## Security

IPsec VPN (up to 5 concurrent sessions) and GRE Tunneling option, also supports passthrough VPN connections (IPsec, L2TP, PPTP)  
 Layer 2 Tunneling Protocol (L2TP)\*\*  
 WEP, WPA, WPA2, WPA2 Enterprise with AES encryption for secure WiFi\*  
 802.1Q VLAN support to isolate, segment and secure network traffic  
 SPI (stateful packet inspection) firewall and NAT (network address translation) to prevent unwanted access to connected computers  
 Zone-based firewall  
 Variety of security features (URL filtering, IP & traffic filtering, DMZ, port forwarding) for safer Internet access  
 Advanced security mode and reporting to facilitate PCI-DSS compliance

## Flexibility

First-time and advanced setup wizards for easy, swift, and secure setup  
 Remote management with Cradlepoint Enterprise Cloud Manager  
 Multi-Carrier Software-Defined Radio with LPE models  
 SNMP v1/2c/3, CLI over SSH, and SMS  
 IP passthrough support provides 3G/4G-to-Ethernet adapter  
 Create a WiFi hotspot with a captive portal (terms of service, ads, etc)\*  
 Network failover support & load balancing  
 GPIO for additional hardware control, serial console available (USB-to-serial)  
 LAN/WAN affinity to assign specific LAN traffic to a WAN  
 Enterprise routing protocols:\*\* BGP, OSPF, RIP  
 VRRP for enterprise router redundancy\*\*  
 GPS NMEA GGA, VGT, and/or RMC sentence support  
 IPv6 support  
 Advanced APN management  
 Network Mobility (NEMO) support for session continuity in mobile networks\*\*  
 Roaming control and ability to force 3G or 4G bands

## Support and Warranty

CradleCare Support with technical support, software upgrades, and advanced hardware exchange - 1, 3, and 5 year options  
 Limited 1 year warranty included with hardware repair or replacement - extended warranty to 2, 3, or 5 years

## IBR600/IBR650 Differences

**IBR600:** Includes WiFi, hotspot services/captive portal, WiFi as WAN  
**IBR650:** WiFi excluded in order to facilitate PCI and HIPAA compliance

\*WiFi-related items are only supported on IBR600 models  
 \*\*Requires an Extended Enterprise License

## Specifications

**WAN** Integrated modem, 10/100 Ethernet port, WiFi as WAN\*  
**LAN** WiFi (802.11 b/g/n)\*, two 10/100 Ethernet ports (WAN or LAN)  
**TEMPERATURE** -20°C to 60°C (-4°F to 140°F) operating modem as WAN  
 -20°C to 50°C (-4°F to 122°F) operating Ethernet as WAN  
 -30°C to 70°C (-22°F to 158°F) storage  
**RELATIVE HUMIDITY** (non-condensing) 10% to 85%, operating  
 5% to 90%, storage  
**POWER** DC input steady state voltage range: 9 - 18VDC  
 Recommended inline fuse for vehicle installations: 1.5A fast-blow (see vehicle best practices installation guide for details)  
**WiFi\*** (IBR600) Transmit power: 15 dBm typical for all modes; receive sensitivity: -68 dBm @ HT20 (11n), -65 dBm @ HT40 (11n), -72 dBm typical @ 54 Mbps (11g), -84 dBm typical @ 11 Mbps (11b); antennas: 5 dBi gain  
**SIZE** 3.3-in x 4-in x 0.9-in (85mm x 102mm x 22mm)  
**WEIGHT** 7.2 oz (200g)  
**CERTIFICATIONS** FCC, WiFi Alliance\*, Shock/Vibration (MIL STD 810G and SAEJ1455), carrier certifications (see individual SKUs for additional certifications)

## What's In The Box

COR IBR600/IBR650 Integrated Broadband Router w/ metal mounting bracket  
 External 3G/4G mobile broadband modem antennas (2) (SMA) w/ support for GPS on auxiliary connection (some models), 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 with warranty information

## Accessories

High-gain external antennas (Omni-directional, Patch, Yagi, 12" Mag-mount, 4" Mini mag-mount), GPIO/power cables, see [cradlepoint.com/COR](http://cradlepoint.com/COR) for more

## Requirements

**Internet Service and Modem** Active mobile broadband plan with cellular provider (most models require 2FF SIM) or Ethernet-based Internet connection (DSL, cable, satellite, T1)  
**Browser** (to configure router) Minimum of Firefox v2.0, Internet Explorer v7.0, Chrome, or Safari v1.0

## Router Details

**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), 802.1X Ethernet port security  
**Redundancy and Load Balancing** Failover/failback with 4G, 3G, Ethernet with rule selection, advanced load balancing options (round robin, spillover, data usage, rate), WAN failure detection, VRRP\*\*  
**Intelligent Routing** UPnP, DMZ, virtual server/port forwarding, routing rules, NAT-less routing, wired or wireless WAN-to-LAN IP passthrough, route management, per-interface routing, content filtering, IP filtering, website filtering, per-client Web filtering, local DHCP server, DHCP client, DHCP relay, DNS, DNS proxy; ALGs: PPTP, L2TP, PPPoE passthrough, IPsec passthrough, FTP (passive), FTP (active), SIP, TFTP, IRC, MAC address filtering, Dynamic DNS, LAN/WAN affinity, VLAN support (802.1Q), STP, enterprise routing protocols: BGP/OSPF/RIP, multicast proxy support, IP setting overrides, Network Mobility (NEMO)\*\*, IPv6  
**Management** Cradlepoint Enterprise Cloud Manager (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; SMS  
**Performance & Health Monitoring** WiPipe™ advanced QoS with traffic shaping, Modem Health Management (MHM) improves connectivity of modem, SSID-based priority, 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, etc.; certificate support; Hash (MD5, SHA128, SHA256, SHA384, SHA512), Cipher (AES, 3DES, DES), support for 5 concurrent connections, GRE tunneling, multiple networks supported in a single tunnel, site-to-site dynamic VPN with NHRP\*\*, L2TP\*\*

GPS Active standalone GPS on -PWD models, passive standalone GPS on others; GUI mapping as well as local (LAN) or remote (WAN) server logging; NMEA GGA, VGT, and/or RMC sentence support

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. Product specifications are subject to change without notice, and product appearance may differ from image depicted in this document. This product requires either an active subscription from a wireless service provider or an Ethernet-based broadband service from an Internet service provider to receive Internet service. Check with your broadband provider for service coverage, fees, and other charges. © 2015 Cradlepoint, Inc. All rights reserved. Cradlepoint and the Cradlepoint logo are trademarks of Cradlepoint, Inc. in the US and other countries. Other trademarks are the property of their respective owners.

