Mobile Network Solutions

Cradlepoint Elastic Edge makes mobile networks more flexible, reliable & affordable





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SD-WAN | WiFi | Telematics

All-Inclusive Mobile Network Solutions

Cradlepoint Elastic Edge[™] provides a modern approach to mobile networking for organizations that depend on field forces and constant mobile connectivity, but that must manage it all with limited IT resources. Each all-in-one mobile routing solution provides extensible in-vehicle 4G LTE and WiFi connectivity and is built on Cradlepoint NetCloud services, which deliver the telematics and location services that fleet managers need and the networking capabilities required by IT managers.

Cradlepoint is the first to bring the flexibility & reliability of SD-WAN to mobile 4G LTE networks.

Capabilities:		Benefits:
Rugged, all-in-one design	\longrightarrow	Purpose-built solutions that can eliminate the need for separate AVL hardware
GPS and telematics support	\rightarrow	Provide location and telemetry data for critical fleet management applications
Cloud management	\rightarrow	Manage in-vehicle networks without adding IT staff
Dual 4G LTE modems	\rightarrow	Always-on connectivity with Auto-Carrier Selection
WiFi-as-WAN	\rightarrow	Automatically offload video and other bulk data traffic
Mobile SD-WAN	\longrightarrow	Use multiple 4G LTE or WiFi connections to ensure optimal app performance and uptime
Unified edge security	\rightarrow	Provide secure Internet access while protecting on-board users and devices
Advanced IoT support	\rightarrow	Connect, secure, and optimize in-vehicle IoT devices

Use Cases:

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Public & Private Transit





Mobile Command Centers

S NetCloud[™]

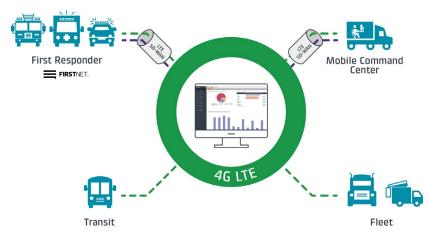
Built & Delivered on NetCloud

Cradlepoint NetCloud is a service-based platform that spans from cloud to mobile edge to make deploying, managing, and evolving an in-vehicle network easier and less resource-intensive than ever before.

NetCloud Manager: Centrally configure, monitor, visualize, control, and troubleshoot your on-the-move network – WAN to LAN and link to app – from a web console.

NetCloud OS: Cloud-controlled software delivers edge routing, security, and computing, as well as SD-WAN, LTE, and WiFi functionality.

NetCloud Perimeter: Create encrypted and perimeter-secured private overlays that protect in-vehicle IoT devices and isolate them from other networks.





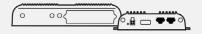
Easy to Own with NetCloud Solution Packages

Cradlepoint NetCloud Solution Packages make it easy to buy, deploy, support, and evolve your mobile network by delivering the essential NetCloud features, hardware endpoints, and support you need as a cloud service with flexible 1-, 3- or 5-year terms.

NetCloud Essentials

- + **Cloud Management:** Centrally manage your entire branch network.
- + **Orchestration:** Click to build a VPN over wireless broadband.
- + **Edge Router:** Full-featured router with integrated 4G LTE and WiFi.
- **SD-WAN:** Ensure application performance and availability while controlling LTE utilization.
- Unified Edge Security: Firewall, and intrusion and web security for Direct Internet Access (DIA).

Purpose-Built Endpoints



Mobile Routers: COR IBR1700, COR IBR900 Series

Extensibility: COR Extensibility Dock (for IBR900)

Comprehensive 24x7 Support

The right support when you need it, with an ongoing commitment to your success.

- Phone: 24-hour weekdays and emergency-only weekends
- Web: 24x7 online case management, 24x5 Chat, and 24x7 Knowledge Base
- + Limited lifetime warranty for hardware

All-in-One Design for Vehicles & Fleets

Converged Design With Extended 4G LTE Coverage Options Means Solutions for Every Type of In-Vehicle Deployment



COR IBR1700: Ruggedized 4G LTE router supports mission-critical fleet management applications



COR IBR900 Series: Compact, ruggedized 3G/4G/LTE router for advanced in-vehicle connectivity and networking



FEATURE SET	IBR1700	IBR900 SERIES
Supports LTE Advanced	Yes, 600 Mbps	Yes, 600 Mbps
Ports (WAN/LAN switchable)	5 ports – GigE	2 ports – GigE, plus 2 10/100 with Extensibility Dock
WiFi	Simultaneous Tri Band 802.11 a/b/g/n/ac Wave 2 MU-MIMO	Dual-band, dual-concurrent 802.11 a/b/g/n/ac Wave 2 MU-MIMO
GPS	Active GPS/GNSS & dead reckoning	Active GPS with TAIP, NMEA
SIM Slots	2 (4 with second modem)	2 (4 with Extensibility Dock)
OBDII Support	Yes, with accessory cable	Νο

*Band 14 modem will be available in the future.



Extend NetCloud Functionality

Customers can extend their NetCloud Essentials Solution Packages with a simple upgrade that provides advanced branch networking features, including:

- + Application-aware firewall+ Application-aware QoS
- + Application-based traffic analytics
- + Web content filtering



CLOUD-MANAGED EXTENSIBILITY

NetCloud Manager API: Extend the value of your Cradlepoint mobile network by integrating NetCloud Manager collected data with third-party management, security, and business applications.

NetCloud OS SDK:

Build, deploy, and run a variety of network and IoT edge computing apps on Cradlepoint's Linux-based multi-core routers.

Expand 4G LTE Coverage



COR Extensibility Dock:

The Extensibility Dock for the COR IBR900 Series extends connectivity and functionality with a second, modular 4G LTE modem; two Ethernet ports; programmable, general-purpose input/output ports; and redundant power supply.



Antennas:

Externally mount Cradlepoint-certified antennas to maximize the performance and reliability of your mobile networks. Options ranging from permanent roof-mounted antennas to temporary models are available to address signal challenges in any scenario, regardless of the cellular carrier.

Enhance Network Security

Cradlepoint's Innovation Partners program provides seamless integrations with the following industry-leading intrusion, Internet security, and event management solutions:



CP Secure Threat Management (IPS/IDS) POWERED BY TREND MICRO









Cisco OpenDNS

SIEM Platforms



Cradlepoint IBR900 Series Router

Compact, ruggedized Gigabit-Class LTE router for advanced Mobile and IoT connectivity



The Cradlepoint IBR900 Series router is a ruggedized Gigabit-Class LTE networking platform that was designed for persistent connectivity across a wide range of in-vehicle and mobile applications as well as portable or fixed IoT installations. The IBR900 Series accommodates environmentally harsh environments while delivering enterprise-class standards of reliability, scalability, comprehensive management, and security.

For organizations that depend on field forces and mobile networks, the Cradlepoint IBR900 Series mobile router with the NetCloud Mobile solution package provides ruggedized and GPS-enabled in-vehicle network solutions that are SD-WAN and SD-Perimeter-capable. With an available Gigabit-Class LTE modem, Gigabit Wi-Fi, and advanced security features, the IBR900 delivers enterprise networking capabilities for mobile applications that require secure, always-on connectivity.

The IBR900 Series with NetCloud IoT Solutions Package provides a compact ruggedized 4G LTE router solution for connecting and protecting IoT devices at scale. With an extensive list of safety and hardening certifications, it can be confidently deployed in the field, in buildings, or in embedded systems to deliver complete visibility, security, and control of connected devices anywhere.

Key Benefits:

- Deploy a robust, dependable Gigabit-Class LTE network platform for first responders and commercial fleets
- Add a second cellular modem, with an Extensibility Dock, for multi-link dependability
- View cellular health with an LTE signal strength map displaying all areas a fleet has driven
- Implement WiFi-as-WAN for dataintensive tasks such as video offloading
- Install in harsh environments where connectivity must be reliable
- Deploy IoT at scale and gain visibility, management, and actionable insights

Hardware Specs

Category	Mobile or IoT
Cloud Management	Yes
Wireless Connectivity	LTE
5G Optimized	None
Form Factor	Ruggedized Metal
Ethernet Ports	2 GbE (LAN/WAN switchable)
USB Ports	1
Serial Ports	0
Dual-Modem Support	Yes with COR Extensibility Dock
Cellular Standards	PTCRB, GCF
Network Operator Certifications	Certified: AT&T, Verizon, Sprint, Telstra, NTT DoCoMo, KDDI, Softbank Supported: T-Mobile, U.S. Cellular, Bell, Rogers, TELUS, Vodafone, EE, Optus
Regions	North America, Europe/Middle East/Africa, Asia-Pacific
Public Safety Networks	FirstNet Ready™
Firewall Throughput	940 Mbps
VPN Tunnel Count	10
Wi-Fi	Dual-band, dual-concurrent; 802.11ac Wave 2 (Wi-Fi 5)
GPS	Active
PoE	No
Operating Temperature	–30 °C to 70 °C (–22 °F to 158 °F)
Antennas & Power Adapter Included	IoT Package only

NetCloud Features for Mobile & IoT

Cradlepoint IBR900 Series Router is part of a NetCloud Mobile or IoT Package, an all-inclusive networking service comprised of hardware, software, support, warranty and training.

- Business intelligence and remote cloud management
- Purpose-built hardware
- 24x7 support and limited lifetime warranty

	ΙοΤ	Mobile
CP Secure Threat Management & Web Filter	0	•
Application Aware Networking & Traffic Analytics	0	•
Location Tracking & Coverage Map	0	•
Cellular Health Analytics	•	•
Security Insights	•	•
Out-of-Band Management with Remote Connect	•	•
Analytics & Insights	•	•
API	•	•
Location Services	•	•
Management & Orchestration	•	•
Asset Tracking	•	•
Alerts / Logs / Troubleshooting	•	0
OBD-II Support	0	•

• Essentials, • Advanced

Learn more at cradlepoint.com/ibr900





COR IBR1700

Solution: NetCloud Service for Mobile • Application: Mass Transit, School Buses, First Responder Command Center, Fleet Trucking

The Cradlepoint COR IBR1700 router is a ruggedized Gigabit-Class LTE networking platform that provides the next step on the Pathway to 5G. It is designed for persistent connectivity across a wide range of commercial and public sector in-vehicle and mobile applications, including first responders, mobile command centers, mass transit and school buses, commercial truck fleets, and near-shore vessels.

With the available Gigabit-Class LTE modem, optional second modem, 802.11ac Wave 2 dual-band, and dual-concurrent Gigabit WiFi, the IBR1700 routers provide reliable 24x7 connectivity for employees and devices, both inside and outside the vehicle.

Mobile networks require strong security for various implementations including on-board public WiFi and cloud application access. Offering multi-zone firewalls, IDS/IPS, Internet security, and FIPS 140-2 certification, Cradlepoint mitigates security risks for mobile networks and users.

Cradlepoint COR IBR1700 is sold with the NetCloud Essentials Plan, an allinclusive networking service package comprised of services, hardware, and support.

The NetCloud Service for Mobile includes:

- NetCloud management & control service with branch-specific capabilities
- Customer choice of purposebuilt hardware
- 24x7 support & limited lifetime warranty
- Option to purchase add-on plans for Advanced functionality



Key Features

Networking Features

- High network availability with optional second modem
- Supports SIM-based Auto-Carrier Selection worldwide
- Ruggedized for vibration, shock, dust, splash & humidity
- Wave 2 dual-band, dual-concurrent Gigabit WiFi for multiple device connectivity
- OBD-II port connectivity with optional cable
- Dead reckoning with Dedicated GPS + 3-axis Accelerometer + OBD-II
- Ignition sensing & built-in transient & reverse polarity voltage protection
- GPIO ports for IoT & vehicle integrations
- Mobile SD-WAN

Extensibility Features

- Second modem slot for increased availability & bandwidth
- Supports NetCloud OS SDK for Edge Computing
- Supports NetCloud API to utilize router data in third-party applications & network management tools

Benefits

Increase Network Availability

- Multi-carrier LTE support with dual-SIM capability
- Supports Ethernet & WiFi-as-WAN
- Dual-modem capable for failover & load balancing
- Ruggedized to ensure always-on connectivity
- Real-time alerts to monitor vital network signs

Deploy & Scale Quickly

- Increase speed to deployment with "zerotouch" configuration
- Configure, manage, monitor & troubleshoot remotely with NetCloud Manager

Secure & Protect

- Advanced security, VPN & stateful firewall to protect sensitive data
- PCI-compliant network element
- Cloud-managed security & content filtering (CIPA compliant)
- FIPS 140-2 Inside versions available
- Certified on public safety networks worldwide

Extend & Customize

- Built-in second modem slot: Add a second carrier for highest availability
- NetCloud SDK: Support unique applications with custom scripts running on the router
- NetCloud API: Utilize router data while maintaining single-pane-of-glass network management

Quick Specs

Enterprise-Grade LTE Modem	Supports up to 1.2 Gbps download & 150 Mbps upload*
SIM-Based Auto-Carrier Selection	Yes
Ports (LAN / WAN)	5 LAN / WAN switchable GigE
WiFi	Simultaneous tri-band 802.11 a/b/g/n/ac Wave 2 MU-MiMo
GPS	Active GPS / GNSS & dead reckoning
SIM Slots	2 (4 with second modem)
Housing	Ruggedized IP64
Operating Temperature	-22°F to +158°F (-30°C to 70°C)
Dual Modem Support	With field-upgradable MC400 slot
GPIOs	7 GPIO + 2 ADC
Ignition Sensing / Sleep Mode	Yes
FIPS 140-2	With FIPS 140-2 Inside SKUs

NetCloud Service Plans with the IBR1700:

Package	Part Numbers	
North America (U.S. & Canada)		
NetCloud Mobile Essentials Package	MAx-1700120B-NNA	
NetCloud Mobile Essentials Package	MAx-17001200-NNA	
NetCloud Mobile Essentials Package	MAx-1700600M-NNA	
Europe (EU)		
NetCloud Mobile Essentials Package	MAx-1700120B-EWA	
NetCloud Mobile Essentials Package	MAx-1700600M-EWA	
Asia-Pacific (AP)		
NetCloud Mobile Essentials Package	MAx-1700120B-PAA	
NetCloud Mobile Essentials Package	MAx-1700600M-PWA	
All Regions		
NetCloud Mobile Advanced Plan	MAx-NCADV	

*Theoretical maximum speed with available Gigabit-Class LTE modem, x = 1, 3, or 5 years

Comprehensive 24x7 Support & Limited Lifetime Warranty

Cradlepoint's all-inclusive NetCloud Service Plan includes limited lifetime hardware warranty and global 24x7 enterprise-class support (phone support: 24-hour weekdays with emergency response on weekends; web: 24x7, chat: 24x5). With comprehensive support and warranty, Cradlepoint solutions are designed to keep networks secure, problem-free, and operationally efficient. Learn more at cradlepoint.com/support-services



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