

R2100 Series 5G Ruggedized Router

5G outdoor router for vehicles and IoT



Firewall Throughput:
900 Mbps



WAN Connectivity:
5G & LTE Cat 20



LAN Connectivity:
Wi-Fi 6, 2.5 GbE



Management:
NetCloud

The R2100 Series 5G Ruggedized Router is designed for vehicle and IoT deployments. This high-bandwidth, exterior-mounted solution provides mass transit, public safety, and other organizations optimal cellular performance in a uniquely flexible form factor. Designed to be mounted on the rooftop of a vehicle or attached to IoT cabinet enclosures, the R2100 integrates the modem, antennas, and router into a single aerodynamic, ruggedized casing allowing for simplified deployment. The R2100 is available with or without Wi-Fi 6 and can be deployed as a self-contained router or to supplement an existing router as a 5G adapter.

The R2100 Series is part of a NetCloud Mobile Performance or NetCloud Ruggedized IoT Package. Cradlepoint NetCloud provides connectivity, network, security, and location services to connect everything in the vehicle or IoT deployment while providing access to IT for remote management, troubleshooting, and analytics. When coupled with the Advanced Mobile Performance service plan, organizations gain a full suite of security and AVL capabilities, including threat management, web filtering, application visibility, analytics, and advanced GNSS/GPS functionality with location tracking and cellular coverage maps. The R2100 can also support the NetCloud Exchange services, which provide Zero Trust Network Access and 5G Optimized SD-WAN.

Key Benefits:

- Deploy the integrated 5G NR / Cat 20 LTE modem, antenna, and Wi-Fi 6-equipped router in one complete package
- Install as a self-contained 5G router or supplement an existing router as a 5G adapter
- Provide easy installation with a power cable or Power over Ethernet (PoE) and no coax cables
- Define policies through centralized cloud-based management for easy deployment at scale
- Prioritize access on public safety networks for reliable, secure connectivity
- Create a cellular coverage map of your area's 5G and LTE coverage
- Integrate into Automatic Vehicle Location systems with GNSS/GPS

Hardware Specs

Category	Mobile & IoT
Cloud Management	Yes
Wireless Connectivity	Dual Connectivity 5G & Cat 20 LTE
5G Status	5G embedded
Form Factor	Polycarbonate
Ethernet Ports	1 x 2.5 GbE RJ45
Bluetooth	No
Dual-Modem Support	No
Network Operator Standards	PTCRB (U.S., Canada), GCF (worldwide)
Network Operator Certifications	AT&T, T-Mobile, Verizon
Regions	North America, Latin America, Europe, Africa/Middle East, Asia-Pacific <i>See country and model availability.</i>
Public Safety Networks	FirstNet Trusted, T-Mobile Connecting Heroes, Verizon Frontline <i>See data sheet for model applicability.</i>
Firewall Throughput	900 Mbps
VPN Tunnel Count	10
Wi-Fi	Dual-band, dual-concurrent; 802.11ax (Wi-Fi 6)
GNSS/GPS	Passive
PoE	802.3at PD Type 2, Class 4 (30 W)
Operating Temp	-30 °C to 70 °C (-22 °F to 158 °F)
Private Cellular Network	Yes — CBRS, 4G LTE, 5G

NetCloud Features for Mobile & IoT

NetCloud Service delivers what organizations need to keep vehicles and IoT solutions connected and data secure and includes:

- **NetCloud Manager** for cloud-based control of LTE and 5G Wireless WANs
- Optional **NetCloud Exchange** 5G- and security-first WAN services
- 24x7 enterprise support and limited lifetime warranty
- On-demand training with Cradlepoint University

	Mobile	IoT
Secure Remote Management & Orchestration	●	●
Dynamic Routing Protocols, Traffic Steering & QoS	●	●
Zone-Based Firewall & VPN	●	●
Insights, Alerts & Dashboard Analytics	●	●
Extensibility (SDK, API, third-party integrations)	●	●
Troubleshooting & Diagnostics	●	●
Real-Time Troubleshooting Tools	●	●
Modem-Data-Usage Dashboard & Predictive Alerting	●	●
Location Services	●	●
Docker Container Support	●	●
Cellular Health, Traffic & Security Dashboards	●	○
Cellular Coverage Map & Location Tracking	●	○
Application-Aware Traffic Steering, QoS, Networking & Firewall	●	○
Web Filtering & Threat Management	●	○
NetCloud Exchange Secure Connect	●	●
NetCloud Exchange SD-WAN	●	●
NetCloud Exchange ZTNA	●	●