

High Performance 5G RedCap Cellular Ethernet/Serial Gateway w/ Dual SIM

The Bullet5G-RC is a high-performance, industrial-grade, multi-network router designed for both fixed and mobile applications. This rugged 5G RedCap router/gateway delivers download speeds of up to 223 Mbps¹ and upload speeds of up to 123 Mbps¹, making it ideal for medium speed, large capacity data needs! The Bullet5G-RC features Gigabit Ethernet, Dual SIM + eSIM, RS232/485 Serial, 2x Programmable I/O and Integrated GPS.



5G RedCap

5G RedCap - Future Proof

LTE CAT4 Fallback

Gigabit Ethernet

Dual SIM + eSIM

RS232/485 Serial

Features

- **Fast 5G-SA Redcap Operation with LTE CAT4 Fallback**
- **Up to 223 Mbps Download / 123 Mbps Upload¹**
- **Dual SIM Card Support w/Failover & Load Balancing**
- **Optional eSIM Support**
- **Firewall with ACL Security, DMZ & Port Forwarding**
- **2x Programmable I/O**
- **IPSec, GRE / VPN Tunneling**
- **RS232/485 Serial Console/Data Port**
- **Gigabit Ethernet**
- **IPv6 & IPv4 Support**
- **Integrated Multi-constellation GNSS/GPS (TCP/UDP/SMTP)**
- **Wide Operating Temperature (-40°C to +85°C)**
- **Data Usage Alerts (Email, SMS)**
- **User interface via SSH or HTTP/HTTPS web browser**
- **Microhard NMS2 & Microhard IoT Portal Support**



Bullet5G-RC Specifications



| Cellular Data Rate (Max.) ¹ | |
|--|--|
| 5G SA Sub-6 | DL 223 Mbps; UL 123 Mbps |
| LTE CAT4 | DL 195 Mbps; UL 105 Mbps |
| Cellular Frequency Bands | |
| 3GPP Rel-17 Redcap SA operation, Sub-6 GHz | |
| 5G | 5G NR SA n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 77/ 78/ 79 |
| | DL 2X2 MIMO n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 77/ 78/ 79 |
| LTE | LTE-FDD B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 30/ 66/ 70/ 71 |
| | LTE-TDD B34/ 38/ 39/ 40/ 41/ 42/ 43/ 48 |
| | DL 2X2 MIMO B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 30/ 38/ 39/ 40/ 41/ 42/ 43/ 48/ 66/ 70/ 71 |
| Network | |
| Carrier Connection | ICMP Keep Alive, Traffic Watchdog, DDNS, Failover |
| Network Protocols | IPv4, IPv6, TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, DNS, Serial over IP, Modbus Slave (TCP/Serial), Load Balancer |
| Security | VPN, IPsec with IKE/ISAKMP; Multiple tunnel support (16); 3DES and up to 256-bit AES Encryption, VPN Tunneling L2TP, GRE, Open VPN, HTTPS, RADIUS |
| Management | Telnet, WebUI, SNMP V1/2/3, Wireless Upgrade (HTTP/FTP), AT Command Interface (Serial/Telnet), Microhard NMS2 & IoT Portal Support, Data Usage Alerts, SSH |
| Diagnostics | RSSI, Ec/No, Voltage, Temperature, Remote diagnostics, UDP Event Reporting, SMS Alerts, Netflow |
| Serial | |
| Serial Interface | RS232/485 Console/Data Port Baud Rate: 300bps to 230kbps TCP Server/Client / UDP Server/Client / Modbus / SMTP |
| Ethernet | |
| LAN | 1x RJ45 Ethernet Ports (10/100/1000 Gbps) |
| I/O | |
| | 2x Programmable I/O |
| USB | |
| | 1x USB Micro-AB |

| GPS | |
|------------------------------|--|
| Reporting | TCP/UDP/Email, GpsGate, TAIP |
| GNSS | GPS, GLONASS, BDS, Galileo, QZSS |
| GPS Protocols | NMEA 0183 V3.0 |
| Acquisition Sensitivity | -145 dBm (Cold-start) |
| Tracking Sensitivity | -160 dBm (Open Sky/Active-patch Antenna) |
| Accuracy | <2m CEP-50 (Open sky, 1 Hz tracking) |
| Standalone time to first fix | 1s/29s/32s (hot/warm/cold) |
| Total number of SVs | ~55 SVs |
| Host Interfaces | |
| Antenna | 3x SMA Female (Main, DIV, GPS) |
| Data | Ethernet: RJ45 Serial: DE9 Female USB Micro-AB |
| SIM | 2x Nano (4FF), Optional eSIM |
| Power, I/O | 4 PIN Interlock |
| Input Voltage | |
| | 8 - 30Vdc Reverse Polarity Protection |
| Environmental | |
| Operating Temperature | -40°C to +85°C |
| Humidity | 5-95%, non-condensing |
| Dimensions | |
| Size | ~45mm (W) x 85mm (L) x 25mm (H) |
| Weight | ~ 175 grams |
| Approvals | |
| Regulatory | FCC, IC/ISED, PTCRB (Pending) |
| Carrier | Carrier Specific Approvals |
| UL Hazloc (C1Div2) | Pending |
| Order Options | |
| | Bullet5G-RC |

1. Chipset rated speeds



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