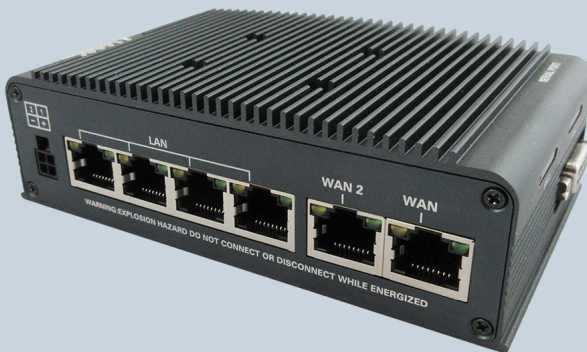


High Performance 5G Cellular Ethernet/Serial Gateway w/ Dual Band AX WiFi

The BulletPlusAX-5G is a high performance, industrial strength, multi-network router for fixed and mobile applications. The BulletPlusAX-5G rugged 5G router/gateway features a Qualcomm Snapdragon Chipset and is capable of up to 3.4 Gbps download¹ and 900 Mbps upload¹, ideal for data hungry applications! The BulletPlusAX-5G features 4x Gigabit LAN Ports, Dual Independent Gigabit WAN Ports, Dual SIM w/Failover, Concurrent Dual Band 802.11ax WiFi, Dual Serial Ports, 2x Programmable I/O, and Standalone GPS.

5G



5G Cellular

6x Gigabit Ethernet Ports

Concurrent Dual Band WiFi

Dual Serial Ports

Dual SIM w/Failover

Features

- Ultra Fast 5G Operation with 4G/LTE Fallback
- Up to 3.4 Gbps Download / 950 Mbps Upload ¹
- Dual SIM Card Support w/Failover & Load Balancing
- Optional eSIM Support
- Concurrent Dual Band 802.11AX (2.4 & 5 GHz) WiFi
- Firewall with ACL Security, DMZ & Port Forwarding
- 2x Programmable I/O
- IPSec, GRE / VPN Tunneling
- RS232/485 Serial Data Port / RS232 Console/Data Port
- 5 - Gigabit Ethernet (4LAN/1WAN)
- IPv6 & IPv4 Support
- Standalone 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 IoT (NMS) Portal Support



BulletPlusAX-5G Specifications



Cellular Data Rate (Max.)¹

5G SA Sub-6 DL 2.4 Gbps; UL 900 Mbps

5G NSA Sub-6 DL 3.4 Gbps; UL 550 Mbps

LTE DL 1.6 Gbps; UL 200 Mbps

WCDMA DL 42 Mbps; UL 5.76 Mbps

Cellular Frequency Bands

5G NR **NSA** n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/ 79

SA n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/ 79

LTE **FDD** B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 29/ 30/ 32/ 66/ 71

TDD B34/ 38/ 39/ 40/ 41/ 42/ 43/ 48

LAA B46

UMTS **WCDMA** B1/ 2/ 4/ 5/ 8/ 19

WiFi Features

Modes Access Point, Client - Concurrent 2.4 & 5 GHz

WiFi Performance 2.4 GHz

Mode	HT Mode	Max. Rate	Max. Power (Adjustable)	Max. Sensitivity
802.11b	N/A	11Mbps	5 - 22 dBm	-99 ± 2 dBm
802.11g	N/A	54Mbps	5 - 22 dBm	-95 ± 2 dBm
802.11n	HT20/40	MCS7	5 - 22 dBm	-90 ± 2 dBm
802.11ax	HE20/40/80	MCS11	5 - 22 dBm	-61 ± 2 dBm

WiFi Performance 5 GHz

Mode	HT Mode	Max. Rate	Max. Power (Adjustable)	Max. Sensitivity
802.11n	HT20/40	MCS7	5 - 24 dBm	-90 ± 2 dBm
802.11ac	VHT20/40/80	MCS9	5 - 24 dBm	-90 ± 2 dBm
802.11ax	HE20/40/80	MCS11	5 - 24 dBm	-61 ± 2 dBm

Serial Ports

Serial Interface 1x RS232/485 Serial Port, 1x RS232 Console + Data Port
Baud Rate: 300bps to 230kbps
TCP Server/Client / UDP Server/Client / Modbus / SMTP

Ethernet Ports

LAN 4x RJ45 Ethernet Ports (10/100/1000 Gbps)

WAN 2x RJ45 Ethernet Port (10/100/1000 Gbps)

I/O

2x Programmable I/O

USB

Type A USB 2.0 Host Mode

GPS (Optional)

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)

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 NMS Support, Data Usage Alerts, SSH

Diagnostics RSSI, Ec/No, Voltage, Temperature, Remote diagnostics, UDP Event Reporting, SMS Alerts, Netflow

Host Interfaces

Antenna WIFI: 2x RPSMA Female
Cellular: 4x SMA Female
GPS: 1x SMA Female (Optional)

Data Ethernet: 6x RJ45
Serial/Console: 2x DE9 Female
USB: Type A

SIM 2x Nano (4FF), eSIM (Optional)

Power, I/O 4 PIN Interlock

Input Voltage

7-30V_{DC}
Reverse Polarity Protection

Environmental

Operating Temperature -40°C to +85°C

Humidity 5-95%, non-condensing

Dimensions

Size Approx. 5" x 3" x 1.5" (127mm x 76mm x 38mm)

Weight Approx. 425 grams

Approvals

FCC/ISED(IC)
PTCRB
RoHS Compliant

Order Options

Model BulletPlusAX-5G
BulletPlusAX-5G-2

1. Chipset rated speeds



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