

BulletPlus-GL - 4G/LTE Ethernet/Serial/USB Gateway w/WIFI

The BulletPlus-GL provides a feature packed, compact industrial strength wireless solution using ultra fast 4G/LTE technology for critical data applications. With Global Band Support, the BulletPlus-GL provides up to 150 Mbps for today's data intensive applications. The BulletPlus-GL features 3x 10/100 Ethernet Ports, Dual SIM support, 802.11b/g/n WIFI, RS232/485 Serial Data, 2x Programmable I/O and Standalone GPS.

4G/LTE

Dual SIM

Standalone GPS

3x Ethernet Ports

Low Power

RS232/485 Serial Port



Features

- Low Power Consumption
- Ultra Fast 4G/LTE Operation w/Global Band Support
- Up to 150Mbps Downlink / 50 Mbps Uplink Over Air
- Dual SIM Card Support w/Failover
- Support for 802.11b/g/n devices (Up to 150 Mbps)
- IP Pass-through Mode
- Firewall with ACL Security, DMZ & Port Forwarding
- 2x Programmable Analog/Digital Inputs or 2 Digital Outputs
- IPSec, GRE / VPN Tunneling
- RS232/485 Serial Data/Console Port
- 3 - 10/100 Ethernet (PoE), (3x LAN or 1x WAN/2xLAN)
- USB Host Port
- Standalone GPS (TCP Server, UDP Reporting, SMTP)
- Wide Operating Temperature (-40°C to +85°C)
- Data Usage Alerts (Email, SMS)
- User interface via telnet or web browser
- Microhard NMS Support



BulletPlus-GL Specifications

Supported Bands	LTE FDD: B1,B2,B3,B4,B5,B7,B8,B12,B13, B18,B19,B20,B26,B28 TDD: B38,B39,B40,B41 WCDMA: B1,B2,B4,B5,B8,B6,B19 GSM: B2/B3/B5/B8		Security	VPN, IPSec with IKE/ISAKMP; Multiple tunnel support (16); 3DES and up to 256-bit AES Encryption, VPN Tunneling L2TP, GRE, HTTPS, RADIUS																																					
Cellular Data Features*	LTE FDD: Up to 150 Mbps DL, 50 Mbps UL LTE TDD: Up to 130 Mbps DL, 35 Mbps UL DC-HSPA+: Up to 42 Mbps DL, 5.7 Mbps UL WCDMA: Up to 384 Kbps DL, 384 Kbps UL EDGE: Up to 296 Kbps DL, 236.8 Kbps UL GSM: Up to 107 Kbps DL, 85.6 Kbps UL		Firewall	NAT, NAT-T VPN tunneling, Port forwarding, VPN/GRE pass-through; Access control lists , DMZ																																					
*Module Standalone Laboratory Performance			Management	Telnet, WebUI, SNMP V1/2/3, Wireless Upgrade (HTTP/FTP), AT Command Interface (Serial/Telnet), Microhard NMS Support, Data Usage Alerts, SSH																																					
WiFi Features	802.11b/g/n (2.4GHz)		Diagnostics	RSSI, Ec/No, Voltage, Temperature, Remote diagnostics, UDP Event Reporting, SMS Alerts, Netflow																																					
WiFi Performance	<table><tr><th>Rate</th><th>Mode</th><th>Tx (dBm)</th><th>Rx (dBm)</th></tr><tr><td>1 Mbps</td><td>b</td><td>30</td><td>-97 ± 1</td></tr><tr><td>11 Mbps</td><td>b</td><td>30</td><td>-92 ± 1</td></tr><tr><td>6 Mbps</td><td>g</td><td>30</td><td>-94 ± 1</td></tr><tr><td>54 Mbps</td><td>g</td><td>26</td><td>-75 ± 1</td></tr><tr><td>MCS0</td><td>n (HT20)</td><td>30</td><td>-96 ± 1</td></tr><tr><td>MCS7</td><td>n (HT20)</td><td>26</td><td>-75 ± 1</td></tr><tr><td>MCS0</td><td>n (HT40)</td><td>30</td><td>-94 ± 1</td></tr><tr><td>MCS7</td><td>n (HT40)</td><td>26</td><td>-73 ± 1</td></tr></table>		Rate	Mode	Tx (dBm)	Rx (dBm)	1 Mbps	b	30	-97 ± 1	11 Mbps	b	30	-92 ± 1	6 Mbps	g	30	-94 ± 1	54 Mbps	g	26	-75 ± 1	MCS0	n (HT20)	30	-96 ± 1	MCS7	n (HT20)	26	-75 ± 1	MCS0	n (HT40)	30	-94 ± 1	MCS7	n (HT40)	26	-73 ± 1	Input Voltage	7 - 30VDC Passive PoE on WAN (optional) Reverse polarity protection	
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Serial Interface	RS232/485* Serial Data Port *RS485 introduced on devices shipped after Nov 30, 2021		Current Consumption (@12VDC)	Idle (LTE Connected): 120 mA WiFi (AP mode+LTE): 170 mA																																					
Serial Baud Rate	300bps to 921kbps		Connectors:	Antenna	3x SMA Female (Cell, Div, GPS) 1x RPSMA Female (WiFi)																																				
Serial Port Service	Extensive Serial Port Support: TCP Server/Client / UDP Server/Client / Modbus / SMTP			Data	3x RJ-45 (Ethernet) 4 PIN Interlock (Vin, I/O))																																				
Ethernet	2x LAN 10/100, Auto - MDI/X IEEE 802.3 1x WAN 10/100, Auto - MDI/X IEEE 802.3			USB	DB9 RS232																																				
I/O	2x Programmable Analog/Digital Inputs or 2x Digital Outputs			SIM	Type A 2x 1.8 / 3.0V (2FF)																																				
USB	Host Type A USB 2.0		Environmental	Operating Temperature	-40°C to +85°C																																				
GPS	TCP Server, UDP/Email Reporting, GpsGate GPS, GNSS, GLONASS, BeiDou			Humidity	5-95%, non-condensing																																				
	Navigation Update Rate	Up to 5 Hz		Vibration	MIL-STD-810G																																				
	Accuracy	Position: 2.5 m CEP SBAS: 2.0 m CEP	Weight	Approx. 175 grams																																					
	Sensitivity* (Active/Passive Antenna)	Tracking : -160 dBm Cold Starts: -145 dBm Hot Starts: -155 dBm *Sensitivities are typical and may vary	Dimensions	Approx. 3.05" x 2.2" x 1.1" (77mm x 55mm x 28mm)																																					
SMS	SMS to/from Ethernet via Telnet SMS Alerts SMS Remote Control		Approvals	FCC / IC PTCRB UL Hazloc MIL-STD-810G Carrier Specific Approvals																																					
Carrier Connection	PAP, CHAP, ICMP Keep Alive, Traffic Watchdog, DDNS, IP pass-through.		Order Options																																						
Network Protocols	TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, DNS, Serial over IP, Modbus Slave (TCP/Serial)		Model	BulletPlus-GL																																					

Contact Information

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