

BulletCAT12 - LTE Advanced Carrier Aggregation 600 Mbps CAT12 Gateway

The BulletCAT12 provides a feature packed, compact industrial strength wireless solution using robust LTE Advanced Carrier Aggregation technology for critical data communications. This Bullet provides incredibly fast CAT12 LTE connections with speeds of up to 600 Mbps for today's data intensive applications. The BulletCAT12 features Dual SIM (Failover), Gigabit Ethernet, RS232/485 Serial Data, 2x Programmable I/O and GPS.

CAT12 - 600 Mbps LTE

Carrier Aggregation

Standalone GPS

Gigabit Ethernet

Dual SIM (Failover)

RS232/485 Serial Port



Features

- **Input Voltage:** 5-30V_{DC} (5V @ 2.0A)
- **Ultra Fast CAT12 LTE Operation**
- **Up to 600 Mbps Downlink / 150 Mbps Uplink Over Air**
- **Increased performance with Carrier Aggregation**
- **Data Usage & Systems Alerts (Email, SMS)**
- **Firewall with ACL Security, DMZ & Port Forwarding**
- **2x Programmable Analog/Digital Inputs or 2 Digital Outputs**
- **IPSec, GRE / VPN Tunneling**
- **RS232/485 Serial Console/Data Port**
- **10/100/1000 Ethernet (PoE)**
- **IPv6 & IPv4 Support**
- **MQTT Support**
- **Standalone GPS (TCP/UDP/SMTP)**
- **Wide Operating Temperature (-40°C to +85°C)**
- **User interface via SSH or HTTP/HTTPS web browser**
- **Microhard NMS Support**



BulletCAT12

Specifications

Supported Bands	<p>LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B9/B12/B13/B14/B17/B18/B19/B20/B21/B25/B26/B28/B29/B30/B32/B66; LTE-TDD: B38/39/B40/B41 WCDMA: B1/B2/B3/B4/B5/B8/B9/B19</p> <p>DL 2×CA: B1+3/5/18/19/20/26; B2+2/4/5/12/13/17/29/30/66; B3+3/5/7/8/19/20/28; B4+4/5/12/13/17/29/30; B5+7/30/66; B7+7/20/28; B12+30; B13+66; B19+21; B20+B32; B29+30; B38+38; B39+39; B39+39; B39+41; B40+40; B41+41; B66+66, 12, 29, 30, 5; B2+B14; B14+B30; B14+B66;</p> <p>DL 3×CA: DL inter-band 3CA: B1+3+5/7/8/19/20/28; B1+7+20; B2+4+5; B2+4+13, B2+5+30; B2+12+30; B2+29+30, B3+7+20, B3+7+28, B3+7+8, B4+5+30, B4+12+30, B4+29+30, B5+66+2, B13+66+2; B66+12+30; B66+29+30, B66+5+30; B2+B14+B66; DL 2 intra-band plus inter-band 3CA: B2+2+5; B2+2+13; B3+3+7; B3+7+7; B3+3+20; B3+3+28; B3+3+1; B4+4+5; B4+4+13; B7+7+28; B5+66+66; B13+66+66; B66+66+2; B39+B39+B41; B39+B41+B41; B14+B66+B66 DL 3 intra-band 3CA: B40+40+40; B41+41+41; B66+66+66</p> <p>UL 2×CA: B3+3; B41+41</p>	Network Protocols	IPv4, IPv6, TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, DNS, Serial over IP, Modbus Slave (TCP/Serial), MQTT
		Security	VPN, IPSec with IKE/ISAKMP; Multiple tunnel support (16); 3DES and up to 256-bit AES Encryption, Site to Site Tunneling, L2TP, GRE, Open VPN, SSH, HTTPS, RADIUS
		Firewall	NAT, NAT-T VPN tunneling, Port forwarding, VPN/GRE pass-through; Access control lists (IP/MAC filtering), Data origin / integrity Authentication, DMZ
		Management	Telnet, WebUI, SNMP V1/2/3, Wireless Upgrade (HTTP/FTP), RADIUS authentication, AT Command Interface (Serial/Telnet), Microhard NMS Support, Data Usage Alerts, SSH
		Diagnostics	RSSI, Ec/No, Voltage, Temperature, Remote diagnostics, Watchdog, UDP Event Reporting, SMS Alerts, Netflow
		Input Voltage	5 - 30VDC or Passive PoE on LAN Reverse polarity protection
Cellular Data Features*	<p>LTE-FDD: Max 600Mbps (DL), Max 150Mbps (UL) LTE-TDD: Max 430Mbps (DL), Max 30Mbps (UL) UMTS: DC-HSDPA: Max 42Mbps (DL) HSUPA: Max 5.76Mbps (UL) WCDMA: Max 384Kbps (DL), Max 384Kbps (UL)</p>	Connectors:	<p>Antenna 3x SMA Female (Cell, Diversity, GPS) Data RJ-45 (Ethernet) 4 PIN Interlock (Vin, I/O)) DB9 RS232 USB Micro-AB SIM Dual Nano (4FF)</p>
<small>*Module Standalone Laboratory Performance</small>		Environmental	<p>Operating Temperature -40°C to +85°C -40°F to +185°F Humidity 5-95%, non-condensing</p>
Serial Interface	RS232/485 Serial Data Port	Weight	Approx. 150 grams
Serial Baud Rate	300bps to 921kbps	Dimensions	Approx. 1.75" x 3.25" x 1.0" (45mm x 85mm x 25mm)
Serial Port Server	Extensive Serial Port Support: TCP Server/Client / UDP Server/Client / Modbus / SMTP	Approvals	FCC/IC PTCRB CE EN301908-1, EN301908-2, EN301908-13 EN303413, EN301489-1, EN301489-52 EN 62311, EN55032, EN55035, EN62368 RoHS 2 2011/65/EU Compliant REACH EC1907/2006 Compliant RCM: Australia & New Zealand UL Hazloc (C1D2) Carrier Specific Approvals
Ethernet	10/100/1000 BaseT, Auto - MDI/X IEEE 802.3		
I/O	2x Programmable Analog/Digital Inputs or 2x Digital Outputs		
USB	USB 2.0 USB (Device)		
GPS	TCP/UDP/Email Reporting, GpsGate, TAIP		
	<p>GNSS Systems GLONASS, BeiDou & Galileo 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</p>		
SMS	SMS to/from Ethernet via Telnet SMS Alerts SMS Remote Reboots		
Carrier Connection	ICMP Keep Alive, DDNS		

Order Options

Model BulletCAT12

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