

## BulletCAT1 - IoT 10Mbps CAT1 LTE Gateway

The BulletCAT1 was engineered specifically for the small size, low cost, and low power requirements of the IoT & M2M applications that are booming across the globe. The BulletCAT1 provides robust and reliable CAT1 LTE connections with speeds of up to 10 Mbps. The BulletCAT1 features Ethernet, RS232/485 Serial Data, and Tunneling Capabilities all while retaining ultra low power consumption.

*CAT1 - 10 Mbps LTE*

*Low Power Usage*

*Low Cost!*

*Ethernet Port*

*IPv6 & IPv4 Support*

*RS232/485 Serial Port*



## Features

- 5-30VDC Input Voltage or USB Powered (5V, 1.5A)
- Fast & Robust CAT1 LTE Operation
- Engineered for IoT Applications
- Low Cost & Ultra Low Power Consumption
- Up to 10 Mbps Downlink / 5 Mbps Uplink Over Air
- Data Usage & Systems Alerts (Email, SMS)
- Firewall with ACL Security, DMZ & Port Forwarding
- IPSec, GRE / VPN Tunneling
- RS232/485 Serial Console/Data Port
- 10/100 Ethernet
- Full IPv6 & IPv4 Support
- MQTT Support
- Wide Operating Temperature (-40°C to +85°C)
- User interface via SSH or HTTP/HTTPS web browser
- Microhard NMS Support



Can be USB powered!

# BulletCAT1

# Specifications

(Hardware Rev.B)

<b>Supported Bands</b> North America / AT&T / T-Mobile Verizon	LTE CAT1: Bands 2,4,5,12 UMTS/HSPA: Bands 2,5 LTE CAT1: Bands 4,13	<b>Current Consumption</b> (@12VDC)	Typical: 40mA ~ 120mA
<b>Cellular Data Features*</b> <small>*Module Standalone Laboratory Performance</small>	LTE CAT1: DL Up to 10Mbps, UL Up to 5Mbps	<b>Input Voltage</b>	5 - 30VDC Or USB powered: 5V(1.5A)
<b>Serial Interface</b>	RS232/485 Serial Data Port (Selectable)	<b>Connectors:</b>	Antenna 2x SMA Female (Main, Diversity) Data RJ-45 (Ethernet) 4 PIN Interlock (Vin) DB9 RS232 USB Micro-AB SIM Nano (4FF) 1.8 / 3.0V
<b>Serial Baud Rate</b>	300bps to 921kbps	<b>Environmental</b>	Operating Temperature -40°C to +85°C -40°F to +185°F Humidity 5-95%, non-condensing
<b>Serial Port Server</b>	Extensive Serial Port Support: TCP Server/ Client / UDP Server/Client / Modbus / SMTP	<b>Weight</b>	Approx. 135 grams
<b>Ethernet</b>	10/100 BaseT, Auto - MDI/X IEEE 802.3	<b>Dimensions</b>	Approx. 1.75" x 3.25" x 1.0" (45mm x 85mm x 25mm)
<b>USB</b>	USB 2.0 USB (Device)	<b>Approvals</b>	FCC/IC PTCRB Carrier Specific Approvals
<b>SMS</b>	SMS to/from Ethernet via Telnet SMS Alerts SMS Remote Reboots	<b>Order Options</b>	
<b>Carrier Connection</b>	ICMP Keep Alive, DDNS	<b>MHK117610</b>	BulletCAT1-AT1
<b>Network Protocols</b>	IPv4, IPv6, TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, DNS, Serial over IP, Modbus Slave (TCP/Serial), MQTT	<b>MHK117612</b>	BulletCAT1-AT1 Kit
<b>Security</b>	VPN, IPSec with IKE/ISAKMP; Multiple tun- nel support (16); 3DES and up to 256-bit AES Encryption, Site to Site Tunneling, L2TP, Open VPN), GRE, HTTPS, RADIUS	<b>MHK117615</b>	BulletCAT1-VZ1
<b>Firewall</b>	NAT, NAT-T VPN tunneling, Port forwarding, VPN/GRE pass-through; Access control lists (IP/MAC filtering), Data origin / integrity Au- thentication, DMZ	<b>MHK117617</b>	BulletCAT1-VZ1 Kit
<b>Management</b>	Telnet, WebUI, SNMP V1/2/3, Wireless Up- grade (HTTP/FTP), RADIUS authentication, AT Command Interface (Serial/Telnet), Mi- crohard NMS Support, Data Usage Alerts, SSH		
<b>Diagnostics</b>	RSSI, Ec/No, Temperature, Remote diag- nostics, Watchdog, UDP Event Reporting, SMS Alerts, Netflow		

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