

## LTE高级载波汇聚450Mbps CAT9网关与基于802.11ac的WiFi

*BulletPlusAC-CAT9*是一种工业强度的蜂窝解决方案，采用LTE先进的载波聚合技术，用于关键数据应用。该*BulletPlusAC-CAT9*提供快速CAT9 3CA LTE连接，高达450Mbps的速率应付今天数据密集型的应用。该*BulletPlusAC-CAT9*产品具有：4个千兆局域网端口、2个独立的千兆广域网端口、双SIM实时蜂窝网络故障转移的冗余、802.11ac WiFi、双RS232串行数据接口、2个可编程I/O和独立GPS。

CAT9 - 450 Mbps LTE

蜂窝线路汇聚

独立的双WAN口

6个千兆以太网口

802.11b/g/n/ac WIFI

双RS232串口



## Features

- 极速CAT9 LTE运作
- 高达450Mbps下行/50Mbps上行的空中速率
- 支持双SIM卡与故障线路转移/冗余
- 支持802.11b/g/n/ac标准的设备(高达1.3Gbps的速率)
- ACL安全防火墙, DMZ和端口转发
- 2路模拟/数字输入, 或者2路数字输出
- IPSec, GRE / VPN隧道
- RS232串行数据/控制口
- 6个10/100/1000M以太网口(带PoE), (6LAN/2WAN)
- 支出IPv6和IPv4
- 独立的GPS (TCP/UDP/SMTP)
- 宽温度工作范围(-40℃~+85℃)
- 数据使用异常警报 (Email, SMS短信)
- 通过SSH、HTTPS Web接口进行配置
- Microhard NMS软件整合支持



# BulletPlusAC-CAT9 Specifications

<b>蜂窝支持频段</b>	LTE FDD Bands: 1, 2, 3, 4, 5, 7, 8, 11, 12, 13, 17, 18, 19, 20, 21, 26, 28, 29, 30, 66 LTE TDD Bands: 38, 39, 40, 41 HSPA+ Bands: 1, 2, 4, 5, 8  <b>LTE 2DL 载波汇聚的组合</b> 北美 1+3, 5, 8, 18, 19, 20, 21, 26; 2+2+4, 5, 12, 13, 17, 29, 30, 66; 3+3; 3+5, 7, 8, 19, 20, 28; 4+4; 4+5, 12, 13, 17, 29, 30; 5+7, 30, 66; 7+7; 7+20, 28; 12+30; 13+66; 29+30; 40+40; 41+41  <b>LTE 3DL 载波汇聚的组合</b> 北美 2+2+5, 2+2+13, 3+3+7, 3+7+7, 3+3+20, 4+4+5, 4+4+1, 3, 5+66+66, 13+66+66, 66+66+2, 66+66+66, 1+3+7, 1+3+19, 1+3+20, 1+19+21, 2+4+5, 2+4+13, 2+5+30, 2+12+30, 2+29+30, 3+7+20, 3+7+28, 4+5+30, 4+12+30, 4+29+30, 5+66+2, 13+66+2	<b>SMS短信</b>	SMS 通过Telnet访问以太网 SMS 报警 SMS 远程重启																																																																				
<b>蜂窝数据特性*</b>	LTE FDD: 450Mbps下行, 50Mbps上行 LTE TDD: 347Mbps下行, 30Mbps上行 HSPA+: 下行/上行 42/5.76 Mbps	<b>蜂窝网络连接</b>	持续在线, DDNS, IP透传, 故障转移, 负载均衡																																																																				
<b>WiFi 特性</b>	802.11b/g/n (2.4GHz), 802.11a/n/ac (5.8 GHz)	<b>网络协议</b>	IPv4, IPv6, TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, DNS, Serial over IP, Modbus Slave (TCP/Serial), 负载均衡																																																																				
<b>WiFi 性能 (3X3 MIMO)</b>	<table border="1"> <thead> <tr> <th>Rate</th> <th>Mode</th> <th>Tx(dBm)*</th> <th>Rx(dBm)</th> </tr> </thead> <tbody> <tr><td>6 Mbps</td><td>a</td><td>26</td><td>-94 ± 2</td></tr> <tr><td>54 Mbps</td><td>a</td><td>26</td><td>-80 ± 2</td></tr> <tr><td>1 Mbps</td><td>b</td><td>26</td><td>-95 ± 2</td></tr> <tr><td>11 Mbps</td><td>b</td><td>26</td><td>-90 ± 2</td></tr> <tr><td>6 Mbps</td><td>g</td><td>26</td><td>-94 ± 2</td></tr> <tr><td>54 Mbps</td><td>g</td><td>26</td><td>-80 ± 2</td></tr> <tr><td>MCS0</td><td>n (HT20)</td><td>26</td><td>-94 ± 2</td></tr> <tr><td>MCS7</td><td>n (HT20)</td><td>26</td><td>-76 ± 2</td></tr> <tr><td>MCS0</td><td>n (HT40)</td><td>26</td><td>-92 ± 2</td></tr> <tr><td>MCS7</td><td>n (HT40)</td><td>26</td><td>-73 ± 2</td></tr> <tr><td>MCS0</td><td>ac (VHT20)</td><td>26</td><td>-93 ± 2</td></tr> <tr><td>MCS8</td><td>ac (VHT20)</td><td>26</td><td>-71 ± 2</td></tr> <tr><td>MCS0</td><td>ac (VHT40)</td><td>26</td><td>-90 ± 2</td></tr> <tr><td>MCS9</td><td>ac (VHT40)</td><td>26</td><td>-67 ± 2</td></tr> <tr><td>MCS0</td><td>ac (VHT80)</td><td>26</td><td>-88 ± 2</td></tr> <tr><td>MCS9</td><td>ac (VHT80)</td><td>26</td><td>-66 ± 2</td></tr> </tbody> </table>	Rate	Mode	Tx(dBm)*	Rx(dBm)	6 Mbps	a	26	-94 ± 2	54 Mbps	a	26	-80 ± 2	1 Mbps	b	26	-95 ± 2	11 Mbps	b	26	-90 ± 2	6 Mbps	g	26	-94 ± 2	54 Mbps	g	26	-80 ± 2	MCS0	n (HT20)	26	-94 ± 2	MCS7	n (HT20)	26	-76 ± 2	MCS0	n (HT40)	26	-92 ± 2	MCS7	n (HT40)	26	-73 ± 2	MCS0	ac (VHT20)	26	-93 ± 2	MCS8	ac (VHT20)	26	-71 ± 2	MCS0	ac (VHT40)	26	-90 ± 2	MCS9	ac (VHT40)	26	-67 ± 2	MCS0	ac (VHT80)	26	-88 ± 2	MCS9	ac (VHT80)	26	-66 ± 2	<b>安全</b>	VPN, IPSec with IKE/ISAKMP; 多通道支持 (最大16通道); 3DES和最大256位AES加密, VPN隧道, L2TP, GRE, Open VPN, HTTPS, RADIUS
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<b>WiFi 性能 (3X3 MIMO)</b>		<b>防火墙</b>	NAT, NAT-T VPN隧道, 端口转发, VPN/GRE透传; 访问控制列表, DMZ																																																																				
<b>*模组在实验室独立测试的性能</b>		<b>管理</b>	Telnet, WebUI, SNMP V1/2/3, 无线升级 (HTTP/FTP), AT命令界面 (Serial/Telnet), Microhard NMS软件支持, 数据异常警报, SSH																																																																				
<b>WiFi 性能 (3X3 MIMO)</b>		<b>诊断</b>	RSSI, Ec/No, 电压, 温度, 远程诊断, UDP 报表, SMS短信报警, 流量分析																																																																				
<b>*3条链路的TX总功率dbm值</b>		<b>输入电压</b>	7 - 30VDC 在WAN上受PoE供电 (可选) 极性反接保护																																																																				
<b>串行接口</b>	RS232 串行数据口 RS232 串行控制/数据口	<b>接口:</b>	<b>天线</b> 2x SMA Female (Cell, Diversity/GPS) <b>数据</b> 3x RPSMA Female (WiFi) 6x RJ-45 (Ethernet) 4 PIN Interlock (Vin, I/O) 2x DB9 RS232 <b>USB</b> Type A <b>SIM</b> Dual SIM (Failover)																																																																				
<b>串口速率</b>	300bps to 921kbps	<b>环境</b>	<b>工作温度</b> -40°C to +85°C <b>湿度</b> 5-95%, 无凝结																																																																				
<b>串口服务</b>	广泛的串口支持: TCP Server/Client / UDP Server/Client / Modbus / SMTP	<b>重量</b>	大约350克																																																																				
<b>以太网</b>	4x LAN 10/100/1000M, Auto - MDI/X IEEE 802.3 2x WAN 10/100/1000M, Auto - MDI/X IEEE 802.3	<b>尺寸</b>	大约5.05" x 3.0" x 1.2" (128mm x 76mm x 30mm)																																																																				
<b>I/O输入输出</b>	2路可编程模拟/数字输入, 或者 2路数字输出	<b>认证</b>	FCC / IC PTCRB																																																																				
<b>USB</b>	Type A USB 2.0	<b>Order Options</b>																																																																					
<b>GPS</b>	TCP/UDP/电子邮件报告, GpsGate, TAIP	<b>型号</b>	BulletPlusAC-CAT9																																																																				
	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																																																																						

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