

# Vanguard 3000™

MULTICARRIER 3G CELLULAR ROUTER

CalAmp®



***Simple, reliable wireless connectivity without limitations - GSM and CDMA connectivity in a single device!***

Uniquely designed for operation on both GSM and CDMA networks, Vanguard 3000 offers more choice and redundancy in carrier networks. This single, flexible platform addresses a variety of wireless communications needs with serial to IP conversion, over-the-air configuration and system monitoring for optimal connectivity. This ready to deploy broadband router enables simultaneous wireless data connectivity for up to two local Ethernet devices, multiple Wi-Fi clients, and one serial device over public cellular networks at 3G speeds. An easy to use web-based management and configuration interface as well as comprehensive remote management facilities are included.

Equipped for a broad range of fixed applications, Vanguard 3000 provides reliable connectivity for Programmable Logic Controllers (PLCs), Remote Terminal Units (RTUs), Ethernet web cameras or any other Ethernet or serial device. For mobile applications, this intelligent broadband router incorporates an optional highly sensitive 16-channel GPS receiver and an intelligent algorithm that offers outstanding receive sensitivity and improved accuracy, integrity and availability of GPS signals – even when the vehicle is off. An optional, built-in Wi-Fi access point also allows your tethered devices to remain connected even when you leave the vehicle.

This widely deployed wireless solution delivers countless software capabilities. OEMs may tailor the Vanguard by loading their application on the Open Developer Platform (ODP) which allows a Linux application to run on a partition of the embedded Linux operation system.

[www.calamp.com](http://www.calamp.com)

## Experience *The Advantage*

- Multiple carriers in a single device
- Browser configuration, diagnostics and OTA updates
- Auto redial for always-on connection
- ODP partitioned flash and API for custom applications
- GRE tunneling, local IP, IPsec, VPN client and WAN gateways
- Optional local and remote GPS for AVL and local mapping
- Optional Wi-Fi client and access point



# Vanguard 3000 Specifications

## GENERAL

|                    |   |
|--------------------|---|
| Input Voltage      | 9 to 28 VDC   |
| TX Power @13.8 VDC | 350 mA (500 mA with Wi-Fi)  |
| RX Power @13.8 VDC | 130 mA (240 mA with Wi-Fi)  |
| Diversity Support  | Rx Diversity  |
| Security           | IPsec, GRE Tunneling, PPTP VPN, RADIUS Client   |
| Router             | MAC Filtering, DMZ, Dynamic DNS   |
| Device Management  | SNMP, HTTP embedded web server  |
| Certifications     | PTCRB Approval<br>Carrier certification on Verizon, ATT, Sprint,<br>Rogers and Vodafone<br>CE Mark<br>A-Tick<br>UL Class 1 Div 2 for Hazardous Environments |

## CONNECTORS/INTERFACE

|                      |   |
|----------------------|---|
| LED Indicators       | RSSI, SVC, NET, GPS, AUX  |
| Power                | 4-pin locking connector   |
| Ethernet             | Dual 10/100 Mbps RJ-45, auto MDIX,<br>auto-negotiate, & activity LED  |
| Serial<br>I/O        | EIA-232F DE9 Female DCE, up to 115Kbps<br>2 digital inputs/outputs, 2 analog inputs,<br>2 outputs (relay driven contact closures) |
| Primary Antenna      | 50 Ohm SMA Female   |
| RX Diversity Antenna | 50 Ohm SMA Female   |
| GPS Antenna          | 50 Ohm SMA Female (optional)  |
| Wi-Fi Antenna        | 50 Ohm RP-SMA Female (optional)   |

## MECHANICAL/ENVIRONMENTAL

|            |   |
|------------|---|
| Dimensions | 4.3 (L) x 6.0 (W) x 1.8 (H) in, 10.9 x 15.25 x 4.5 cm |
| Weight     | 2.5 lb, 1.13 kg                                       |

## CDMA TECHNOLOGY/BANDS

|                       |   |
|-----------------------|---|
| EVDO Rev A (IS-856-A) | 800 MHz Cellular/1900 MHz PCS/2100<br>Downlink 3.1 Mbps; Uplink 1.8 Mbps    |
| 1xEVDO Rev 0 (IS-856) | 800 MHz Cellular/1900 MHz PCS /2100<br>Downlink 2.4 Mbps; Uplink 153.6 kbps |
| 1xRTT (IS-2000)       | 800 MHz Cellular/1900 MHz PCS<br>Downlink 153.6 kbps; Uplink 153.6 kbps     |

## GSM TECHNOLOGY/BANDS

|           |   |
|-----------|---|
| UMTS/HSPA | Five-band 850/900/1900/2100/AWS<br>Downlink 7.2 Mbps, Uplink 2.0 Mbps |
| EDGE/GPRS | Quad-band 850/900/1800/1900 MHz<br>Downlink 236 kbps, Uplink 236 kbps |

