Vanguard 3000™

Multicarrier 3G Cellular Router

SIMPLE, RELIABLE WIRELESS CONNECTIVITY WITHOUT LIMITATIONS

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 wireless data connectivity for up to two LAN and one serial device over public cellular networks at 3G speeds.

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 WLAN 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.

Experience The Advantage

> Multiple carriers for GSM and CDMA connectivity in one 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

> Internal expansion slot for embedded devices

> Optional local and remote GPS for AVL and local mapping

> Optional WLAN client and access point

GENERAL

Input Voltage	9 to 28 VDC
TX Power @13.8 VDC	350 mA (500 mA Mobile SKU)
RX Power @13.8 VDC	130 mA (240 mA Mobile SKU)
Diversity Support	Rx Diversity
Security	IPsec, GRE Tunneling, PPTP VPN RADIUS Client, HTTPS web server
Router	MAC Filtering, DMZ, Dynamic DNS
Device Management	SNMP, HTTP embedded web server
Certifications	MIL810 Thermal/Shock/Vibe/Humidity, Hazardous Env, UL Class I, Div II, RoHS

CONNECTORS/INTERFACE

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

MECHANICAL/ENVIRONMENTAL

Dimensions	4.5 (L)x6.0 (W)x1.9 (H) in, 11.4 x 15.2 x 4.8 cm
Weight	2.5lb, 1.13 kg
Temperature Range	-40º to +85º C, -40º to +185º F [1]
Humidity	5% to 95% non-condensing

CDMA TECHNOLOGY/BANDS

EVDO Rev A (IS-856-A)	800 MHz Cellular/1900 MHz PCS Downlink 3.1 Mbps; Uplink 1.8 Mbps
1xEVDO Rev0 (IS-856)	800 MHz Cellular/1900 MHz PCS Downlink 2.4 Mbps; Uplink 153.6 kbps
1xRTT (IS-2000)	800 MHz Cellular/1900 MHz PCS Downlink 153.6 kbps; Uplink 153.6 kbps

GSM TECHNOLOGY/BANDS

UMTS/HSPA	Tri-band 850/900/1900/2100 MHz Downlink 7.2 Mbps, Uplink 2.0 Mbps
EDGE/GPRS	Tri-band 850/900/1800/1900 MHz Downlink 236 kbps, Uplink 236 kbps
WLAN 802.11 b/g/n	2412-2462 MHz

[1] Ambient temperature (UL C1D2 range remains -30 to 70C)

DeviceOutlook™

DeviceOutlook Provides:

CONFIGURATION MANAGEMENT
- Track firmware versions
- Configure all devices simultaneously from a single location
- Schedule OTA firmware and ODP upgrades with account management options and user defined groups

REMOTE DEVICE MANAGEMENT AND TRACKING
- Locate and monitor the state, condition and utilization of mobile devices

FASTER DEPLOYMENTS & IMPROVED ROI
- Reduce costs
- Faster deployment
- Minimize infrastructure
- Reduce support
- Eliminate capital costs