

**NORTH AMERICA**

# Vanguard 5530MC™

Multicarrier Broadband 4G LTE Cellular Router



## ONE RUGGED DEVICE. CLOUD READY. APPLICATION ENABLED.

The CalAmp Vanguard 5530MC provides multi-carrier availability featuring 4G LTE broadband and 3G fallback connectivity capabilities, with optional Wi-Fi, high-precision GPS and a broad array of I/O ports, to reliably support data intensive real-time applications. The Vanguard 5530MC includes CalAmp's proven multi-carrier feature to provide the carrier flexibility, speed and security ideal for a broad range fixed and mobile assets such as industrial remote monitoring and control, SCADA and telemetry applications as well as mobile data applications such as public safety, commuter transportation and connected car. This ready-to-deploy broadband router now includes a multi-carrier feature which provides more choice in carrier networks and delivers greater diversity including LTE with automatic fallback to 3G and 2G legacy GSM and CDMA networks to provide the most robust solution across the evolving carrier network topologies.

### Fast & Secure

The Vanguard 5530MC offers the fastest cellular broadband technology integrated with extensive routing capability, delivering robust connectivity and secure high speed data transfer for a broad array of devices and applications. The multi-carrier feature enables a single product to be deployed across different carriers to simplify device selection and offer a future-proof technology investment. It enables wireless data connectivity for up to two LANs and one serial device over public cellular networks at 4G speeds with strong, enterprise-grade security (IPSec, WPA-2) to protect against external threats.

### Flexible

The Vanguard 5530MC provides reliable connectivity for Programmable Logic Controllers (PLCs), Remote Terminal Units (RTUs) and any other Ethernet or serial device. This single, flexible platform addresses a variety of wireless communications needs with over-the-air configuration and system monitoring to reduce operating and support costs. In mobile environments, an optional, built-in secure WiFi access point allows up to 25 devices to remain connected outside the vehicle. With a straightforward interface and the powerful DeviceOutlook device management platform, this widely-deployed wireless solution delivers effective performance and rich, field-proven software capabilities out of the box.

### Intelligent

To extend the Vanguard 5530MC capabilities even further, OEMs and developers can build custom applications on the Open Developer Platform (ODP) designed to simplify the development and accelerate time-to-market of embedded M2M and Industrial IoT applications to facilitate distributed intelligence and local decision making at the edge of the network. ODP supports C, C++, Java and Linux programming environments and provides developers with a range of capabilities that includes control of serial and I/O ports, access to device GPS data and cellular modem status information, and direct control of the communication path used including SMS, cellular or Wi-Fi.



## Experience The Advantage

- Switch networks anytime with integrated multi-carrier capabilities
- Secure broadband LTE performance, with reliable 3G fallback for always-on connectivity
- Precision standalone GPS for accurate location reporting
- Cloud Ready for fast deployments and easy configuration with DeviceOutlook
- Multi-function, Cellular WAN, WLAN, multiport Ethernet and I/O in one package
- Ruggedized design for a long service life
- Open Developer Platform for custom applications to facilitate data-driven responsiveness
- Full array of I/O and serial ports for SCADA and industrial applications

# VANGUARD 5530MC SPECIFICATIONS - NORTH AMERICA

## GENERAL

Input Voltage	9 to 32 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	LTE DL MIMO; 3G Rx Diversity
Security	IPsec, GRE Tunneling, PPTP 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 2

## CONNECTORS/INTERFACE

LED Indicators	RSSI, SVC, NET, GPS, AUX
Power	4-pin locking connector
Ethernet	Dual 10/100 Mbps RJ-45, auto MDIX, auto-negotiation, & activity LED
Serial	EIA-232F DE9 Female DCE, up to 115Kbps
I/O	7 digital inputs, 5 digital outputs, 4 analog inputs, 2 1-wire bus interfaces
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	-40° to +85° C, -40° to +185° F <sup>[1]</sup>
Humidity	5% to 95% non-condensing

## MULTI-TECHNOLOGY/BANDS

### [LTE/CDMA MODE]

LTE CAT 3	Dual-Band 700/1700 MHz Downlink 100 Mbps; Uplink 50 Mbps
EVDO/CDMA 1x	800MHz Cellular/1900 MHz PCS EVDO Downlink 3.1 Mbps; Uplink 1.8 Mbps

### [LTE/HSPA MODE]

LTE CAT 3	Quad-band 700/850/AWS[1700/2100]/ 1900 MHz Downlink 100 Mbps; Uplink 50 Mbps
UMTS/HSPA	WCDMA 850/AWS(1700/2100)1900 MHz Downlink 7.2 Mbps, Uplink 2.0 Mbps
EDGE/GPRS	Quad-band 850/900/1800/1900 MHz Downlink 236 kbps, Uplink 236 kbps

## WLAN TECHNOLOGY/BANDS

WLAN 802.11 b/g/n	2412-2462 MHz
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[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

### About CalAmp

CalAmp (NASDAQ: CAMP) is a proven leader in providing wireless communications solutions to a broad array of vertical market applications and customers. CalAmp's extensive portfolio of intelligent communications devices, robust and scalable cloud service platform, and targeted software applications streamline otherwise complex machine-to-machine (M2M) deployments. These solutions enable customers to optimize their operations by collecting, monitoring and efficiently reporting business-critical data and desired intelligence from high-value remote assets. For more information, please visit [www.calamp.com](http://www.calamp.com).

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