



# Viper SC™

IP Router for Licensed Spectrum



136-174 MHz | 215-240 MHz | 406-512 MHz | 928-960 MHz

## EXPERIENCE THE ADVANTAGE

- Advanced Multi-Level Modulation allows up to 128 kbps in a 50 KHz channel
- 1-10 Watts output Power, software selectable
- Multi - Hop store and forward routing to avoid obstructions and extend range
- FIPS 140-2 compliant providing AES 128/256 encryption, Radius authentication, and Multiple VPNs
- Viper functions as an IP Bridge or IP Router
- Viper supports Terminal Services allowing IP to Serial Conversion

## VERSATILE, SECURE COMMUNICATIONS WITH MULTISPEED FUNCTIONALITY

This robust communications link for VHF, UHF & 900 licensed networks features an internal web browser with a familiar interface for IT and network administrators to set up and view device information, configure network parameters and deploy unit upgrades from any location. Using a Software Defined Radio, Viper SC is programmable for 50, 25, 12.5, or 6.25 kHz channels.

Each Viper SC features single device store and forward and route redundancy for extended range and easy network expansion. With advanced diagnostic capabilities, over the air firmware upgrades, channel migration and RoHS compliance, you can bet your investment today is protected well into the future.

MultiSpeed operation allows each remote Viper SC to communicate to a Viper SC Base Station at the fastest speed supported by a given signal strength. MultiSpeed operation results in an adaptive network which is optimized for performance and reliability.

# VIPER SC SPECIFICATIONS

## GENERAL

Frequency Range	136-174 MHz, 215-240 MHz, 406-512 MHz, 928-960 MHz
Channel Bandwidth	6.25 kHz (VHF/UHF only), 12.5 kHz, 25 kHz, 50 kHz
Modes of Operation	Simplex, Half-Duplex
Modulation	2FSK, 4FSK, 8FSK, 16FSK
Certifications	FCC, IC, UL

## RECEIVER

### VHF/UHF BER @ 1x10<sup>-6</sup>

6.25 kHz	-115@4 kbps; -106@8 kbps; -100@12 kbps
12.5 kHz	-116@8 kbps; -109@16 kbps; -102@24 kbps; -95@32 kbps
25 kHz	-114@16 kbps; -106@32 kbps; -100@48 kbps; -92@64 kbps
50 kHz	-111@32 kbps; -104@64 kbps; -97@96 kbps; -88@128 kbps

### MAS BER @ 1x10<sup>-6</sup>

12.5 kHz	-112@8 kbps; -106@16 kbps; -99@24 kbps; -90@32 kbps
25 kHz	-111@16 kbps; -104@32 kbps; -97@48 kbps; -89@64 kbps
50 kHz	-108@32 kbps; -101@64 kbps; -94@96 kbps; -85@128

Adjacent Channel	45 dB@6.25 kHz (VHF/UHF only); 60 dB@12.5 kHz; 70 dB@25 kHz; 75 dB@50 kHz
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## INTERFACES

Ethernet	10 BaseT Auto-MDIX RJ-45
Serial COM 1, COM 2	RS-232 DB-9
Antenna	TNC Female (Tx/Rx), SMA Female (Rx)-Dual port models only

## TRANSMITTER

Frequency Stability	1.0 ppm
Carrier Output Power	1-10 Watts (VHF/UHF), 1-8 Watts (900)
Duty Cycle	100% (Power Foldback for High Temps)
Output Impedance	50 Ω

## ELECTRICAL

Tx Current	1.2-3.6A@10V; 0.6-1.8A@20V; 0.4-1.2A@30V
Rx Current	450mA@10V; 240mA@20V; 170mA@30V
Primary Power	10-30 VDC

## MECHANICAL

Nominal Dimensions	5.50 W x 2.125 H x 4.25" D, (13.97 x 5.40 x 10.8 cm)
Shipping Weight	2.4 lbs, 1.1 kg

## ENVIRONMENTAL

Operating Temperature	-40° to +70° C
Specified Temperature	-30° to +60° C
Operating Humidity	5% to 95% Non-condensing

## FEATURES

- QoS
- Bridge and Router Modes
- Secure VPN Tunnels
- MultiSpeeds

## About CalAmp

CalAmp Corp. (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).

