

Viper SC™

IP ROUTER FOR LICENSED SPECTRUM

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

CalAmp®



Versatile, Secure Communications with MultiSpeed Functionality

This robust communications link for VHF, UHF & MAS 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.

Experience *The Advantage*

- Up to 128 kbps at 50 kHz channel
- Easily configured in bridge or router mode
- Advanced security and encryption designed to meet FIPS 140-2 requirements
- 1-10 Watts continuous duty; software selectable
- 10-30 VDC wide range power supply



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 ⁻⁶	
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 ⁻⁶	
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 kbps
Adjacent Channel	45 dB@6.25 kHz (VHF/UHF only); 60 dB@12.5 kHz; 70 dB@25 kHz; 75 dB@50 kHz

Transmitter

Frequency Stability	1.0 ppm
Carrier Output Power	1-10 Watts (VHF/UHF), 1-8 Watts (MAS)
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	-30° to +60° C
Operating Humidity	5% to 95% Non-condensing

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



CalAmp's industrial wireless solutions combine utility-class performance and the proven reliability needed for mission critical communications. Our ruggedized line of licensed, unlicensed, and cellular devices provide narrowband, wideband and broadband data connectivity for fixed and mobile applications.

