Viper-100™
Viper-400™
Viper-900™

Narrowband IP Router for Licensed Spectrum

You no longer have to choose between wireless IP and secure, long range communications; The Viper Series delivers both! Using a Software Defined Radio, Viper-XXX is programmable for 25, 12.5, or 6.25 kHz channels. This robust communications link for UHF, VHF, and 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.

Each Viper features 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.

High Speed

Long Range

Ruggedized

Safe/Secure

Diversity

Connectivity

Key Benefits

- 1-10 Watts (1-8 W MAS) Continuous Duty; software selectable

- 10-30 VDC Wide Range Power Supply

- Advanced security and encryption designed to meet FIPS 140-2 requirements

- On/Off-line Diagnostics for Network Health & Status

- Simultaneous Communications via RS-232 ports and IP/Ethernet

- Easily Configured as a Bridge or Router

- Single Device Store and Forward for easy network expansion

- Embedded web server for Programming/Setup

- Route redundancy switches from primary to a secondary path when encountering system interference and link degradation

- RoHS Compliant

CalAmp ®

Viper Specifications

AIR SUPERIORITY

General

Frequency Range
- VHF: 136-174 MHz
- UHF: 406-512 MHz
- MAS: 928-960 MHz

Channel Bandwidth
- 6.25 kHz, 12.5 kHz; 25 kHz
- 6.25 KHz not available for MAS

Operating Mode
- Simplex or Half-Duplex

Size
- 5.50 x 2.125 x 4.25 inches
- 2.4 lbs.

Operating Temperature
- -30° to + 60°C

Supply Voltage
- 10-30 VDC

Cold Start
- 15 seconds (typical)

Emission Designators
- 3K55F1D (6.25 kHz)
- 8K30F1D (12.5 kHz)
- 16K8F1D (25 kHz)

Standards/Approvals
- FCC
- Industry Canada
- Designed to meet UL Class I Div II

Interface/Connectors

Power
- Power I/O Right-angle, 4 contacts (male)

Ethernet
- RJ-45 10/100 BaseT auto-MDIX

Serial (2)
- DE-9F Setup Port/Terminal Server

Antenna
- TNC Female

Network Management
- Web interface/SNMP

LEDs
- Power, Status, Link, Activity, Rx/Tx

Transmitter

Power Output
- 1-10 W Adjustable (UHF, VHF)
- 1-8 W Adjustable (MAS)

Frequency Tolerance
- +1.0 PPM

FM Hum and Noise
- Less than -45 dB @ 25 kHz

Duty Cycle
- 100%

Receiver

Sensitivity
- 25 kHz @10-6 Bit Error Rate:
  -114 dBm @ 16 kbps; -106 dBm @ 32 kbps
- 12.5 kHz @10-6 Bit Error Rate:
  -116 dBm @ 8 kbps; -109 dBm @ 16 kbps
- 6.25 kHz @10-6 Bit Error Rate:
  -115 dBm @ 4 kbps; -106 dBm @ 8 kbps

Selectivity
- > 75 dB @ 25 kHz Channel
- > 60 dB @ 12.5 kHz Channel
- > 45 dB @ 6.25 kHz Channel

Modem

Data Rates (User Selectable)
- 16 kbps, 32 kbps @ 25 kHz
- 8 kbps, 16 kbps @ 12.5 kHz
- 4 kbps, 16 kbps @ 6.25 kHz

Modulation
- 2FSK, 4FSK

Diagnostics
- Temperature, Voltage, Local/Remote RSSI, Forward/Reverse Power, Packet Error Rate

Encryption
- AES 128, 192, 256; Designed to meet FIPS 140-2 Requirements

CalAmp
299 Johnson Ave, Ste 110
Waseca, MN 56093

Tel 800.992.7774
Tel 507.833.8819
Fax 507.833.6748

www.calamp.com