Viper SC™ Base Station

Digital Infrastructure for Viper Series

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

The Viper SC Base Station eliminates the tradeoffs between speed, range and reliability. The base station is available in a standard or redundant configuration using a Software Defined Radio programmable for 50, 25, 12.5 or 6.25 kHz channels. Each base station offers rugged packaging, simple installation and flexible management for VHF, UHF & MAS licensed networks. Housed in a rugged, 19" rack mountable, aluminum case and built for industrial applications in a variety of environments, the Viper SC Base Station operates over an extended temperature range and provides worry-free operation in the roughest environments.

The base station operates the MultiSpeed Rate Controller supporting speeds up to 128 kbps at a 50 kHz channel. MultiSpeed operation allows each remote Viper SC to communicate to a Viper SC Base Station at the fastest channel speed supported by a given signal strength. MultiSpeed results in an adaptive network which is optimized for performance and reliability.

Key Features:

- MultiSpeed Rate Controller supports speeds from 4 - 128 kbps
- Advanced security and encryption designed to meet FIPS 140-2 requirements
- Downloadable configuration file saved in xml format
- 8 pin alarm port
- 2 relays - the second relay can be configured to be 2 digital inputs instead of a relay
- Pin 7 can be configured for a digital input/output or an analog input
- Digital I/O can be configured to operate at 1.8V or 3.3V; Analog ADC is referenced to 3.3V
- Store and forward repeater mode

Viper SC Redundant Base Station Features:

- Primary and backup radios have identical RF and Ethernet MAC addresses
- Diagnostic monitoring of the health of the radio
- External power sensor
- Automatic ping utility
- Cold standby

High Speed

Long Range

Ruggedized

Safe/Secure

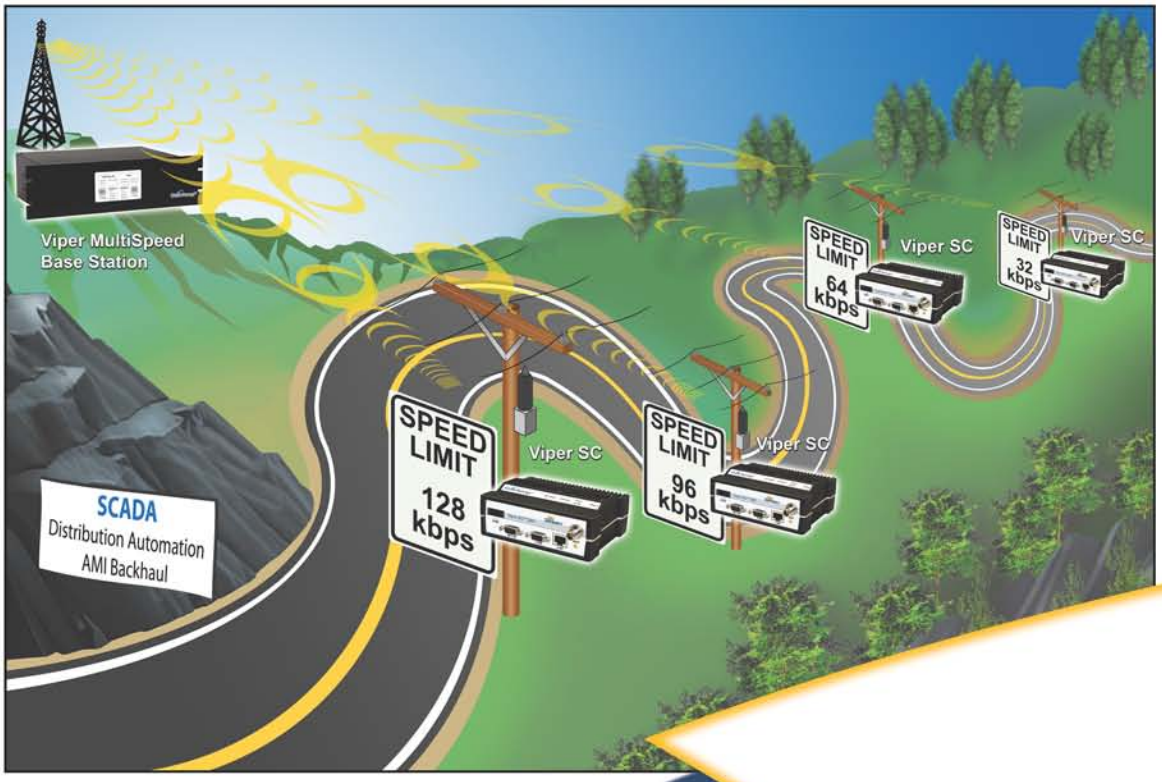
Diversity

Connectivity

CalAmp®

Viper SC Base Station Specifications

General				
Power Source	11-30 VDC, Negative GND			
RF Impedance	50 Ω			
Operating Temperature	-30° to +60° C			
Storage Temperature	-40° to +85° C			
Operating Humidity	5% to 95% non-condensing RH			
Rx Current Drain *(at 25°C with one Viper powered)*	Power Out	DC Input 11V	DC Input 20V	DC Input 30V
		1.7 A (max)	1.2 A (max)	760 mA (max)
	All Relays On	1.5 A (typ)	945 mA (typ)	646 mA (typ)
	All Relays Off	1.3 A (typ)	925 mA (typ)	622 mA (typ)
Tx Current Drain *(at 25°C with one Viper powered)*	Power Out	DC Input 11V	DC Input 20V	DC Input 30V
	Tx Power: Max	6.7 A (max)	4.7 A (max)	2.9 A (max)
	All Relays On	4.5 A (typ)	3.1 A (typ)	1.9 A (typ)
	All Relays Off	4.3 A (typ)	2.9 A (typ)	1.7 A (typ)
	Tx Power: 1W	2.6 A (max)	1.7 A (max)	1.1 A (max)
	All Relays On	2.1 A (typ)	1.4 A (typ)	880 mA (typ)
	All Relays Off	1.9 A (typ)	1.2 A (typ)	860 mA (typ)
Cold start	**60 seconds**			
Physical				
Nominal Dimensions	Chassis: 16" W x 4.75" H x 11.375" D (41 x 12 x 29 cm)			
	Front Panel: 19" W x 5.22" H x 0.25" D (48 x 13 x 0.6 cm)			
Shipping Weight	Standard: 11.5 lbs. (5.2 kg) Repeater/Redundant: 15 lbs. (6.8 kg)			
Mounting Options	19" Rack Mount			
Interface/Connectors				
Display (Standard)	Controller LEDs: Power, Status, Fan Error			
Display (Redundant)	Data LEDs: COM Data, Setup Data, Link/Act 1, Link/Act 2			
Connectors	N Female (Tx/Rx) Antenna Connector, DE-9F Serial Setup Port, DE-9F Serial Com Port, Two 10/100 BaseT auto-MDIX Ethernet (RJ-45), Main Power, Alarm - I/O, Internal Auxiliary Power			



MultiSpeed Illustration

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The Viper SC Base is a commercial off-the-shelf Information Technology component manufactured in the United States.

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