Viper SC™ Base Station
Digital Infrastructure for Viper SC Series

EXPERIENCE THE ADVANTAGE

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

• External power sensor and cold standby

• Downloadable configuration file saved in xml format

• 8 pin I/O alarm port and automatic ping utility

• 2 relays – second relay configurable as 2 digital inputs

• Digital I/O can be configured to operate at 1.8V or 3.3V

• Store and forward repeater mode

VERSITLE, SECURE COMMUNICATIONS WITH MULTISPEED FUNCTIONALITY

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. Redundant configuration features primary and backup radios with identical RF and Ethernet MAC addresses. The Viper SC Base is also approved for ETSI and ACMA operation.

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 50 kHz channel for FCC/IC and up to 48 kbps at 25 kHz channel for ETSI/ACMA operation. 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.

VIPER SC BASE STATION SPECIFICATIONS

GENERAL

Frequency Range (FCC/IC)	136-174 MHz, 215-240 MHz, 406.1-470 MHz, 450-512 MHz, 928-960 MHz
Frequency Range (ETSI/ACMA)	142-174 MHz, 406.1-470 MHz, 450-512 MHz
Channel Bandwidth (FCC/IC)	6.25 kHz (VHF/UHF only), 12.5 kHz, 25 kHz, 50 kHz
Channel Bandwidth (ETSI/ACMA)	12.5 kHz, 25 kHz
Output Impedance	50 Ω
Cold start	60 seconds

RECEIVER

Rx Current Drain (25° C, one unit 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 Max (25° C, one unit powered)

Power Out	DC Input 11V	DC Input 20V	DC Input 30V
	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 Current Drain, at 1W (25° C, one unit powered)

Power Out	DC Input 11V	DC Input 20V	DC Input 30V
	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)

Primary Power	11-30 VDC, negative GND

MECHANICAL

Dimensions
Chassis	16 W x 4.75 H x 11.375 D in, (41 x 12 x 29 cm)
Front Panel	19 W x 5.22 H x 0.25 D in, (48 x 13 x 0.6 cm)

Weight
Standard	11.5 lbs, (5.2 kg)
Repeater/Redundant	15 lbs, (6.8 kg)

Mounting Options	19" rack mount

ENVIRONMENTAL

Operating Temperature	-30° to +60° C, (-22° to +140° F)
Storage Temperature	-40° to +85° C, (-40° to +185° F)
Operating Humidity	5% to 95% Non-condensing RH

INTERFACES

Status Display
Controller LEDs	Power, Status, Fan Error
Data LEDs	COM Data, Setup Data, Link/Act 1, Link/Act 2
Radio LEDs	Tx, Power, Error, Link/Act
Other	Alarm Disabled, Manual Override (Redundant Models only)

Antenna	N female (Tx/Rx) connector
Serial SETUP	One RS-232, DE-9F port
Serial COM	One RS-232, DE-9F port
Ethernet	Two 10/100 BaseT auto-MDIX, RJ-45 port
I/O	8 pin alarm
Power	4 pin main 4 pin internal auxiliary