Vertex Standard

VXR-9000 Series

VHF/UHF Rack Mount Repeater/Base Station

SPECIFICATION SHEET

High Power Output For Exceptional Reach And Performance

Available in 50 W or 100 W options, the VXR-9000 delivers the reliable performance and extended range needed. The slim-line design is crafted for easy installation and integration into most repeater sites.

Large Channel Capacity With Priority Scan

The VXR-9000 may be programmed with up to 32 channels over a wide frequency range and can perform in repeater or base station mode, depending on the application. Includes Priority Channel scanning capability for efficient communications monitoring.

Power Supply Backup With Alert

Should DC power fail at the repeater site, the VXR-9000 will automatically revert to a backup DC power source, if connected. Under backup DC power, the repeater will transmit an alert message to notify the operator that immediate attention is required at the repeater site.

Flexible, Automatic Command Sequence Configuration

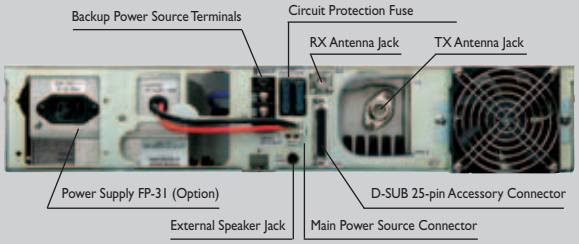
The VXR-9000 may be programmed to perform a five-step sequence of commands for certain operating events. For example, during a DC power failure and the repeater switches to a backup power supply, the repeater can be programmed to switch to low power and send a CW ID advising of the situation, etc.

Designed For High Reliability

The cooling fan diameter is 8 cm and thermostatically controlled to ensure a stable temperature environment for the VXR-9000. Fan operation may be programmed for three options: off, continuous or temperature-controlled, depending on the application. A malfunction alarm is also included.

VXR-9000

483 (W) X 88 (H) X 343 (D) mm



REAR PANEL

The Vertex Standard Difference

Our number one goal is achieving superior customer satisfaction by delivering products and services that exceed your expectations. Count on Vertex Standard for radios that are built to last and designed to provide more features for a better return on your investment. Ask your Dealer for more details.

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Additional Features

- 6 Dual-function programmable keys
- 47 CTCSS tones / 108 DCS codes encode & decode
- Multi-tone decode
- CW ID Transmitter
- CW Message
- Compander per channel
- D-sub 25 pin accessory connector
- Automatic DC backup switching w/alert
- EIA rack mount size

Accessories

- MH-67A8J: Standard microphone
- MD-12A8J: Desktop microphone
- FP-31: Internal power supply unit
- VPA-9000: 100 W Internal power amplifier unit
- FIF-9: 4-Wire line interface

Option Boards

- FVP-25: Voice inversion encryption
- FVP-35: Rolling code encryption

VXR-9000 Series Specifications

	VHF	UHF
General Specification		
Frequency Range	134 - 160 MHz (A) 146 - 174 MHz (C)	400 - 430 MHz (A) 450 - 490 MHz (D)
Number of Channels	32	
Power Supply Voltage	13.6 V DC ± 10%	
Current Drain	12 A Maximum (50 W) / 30 A Maximum (100 W)	
Channel Spacing	12.5 / 20 / 25 kHz	
PLL steps	2.5 / 5.0 / 6.25 kHz	
Operating Temperature Range	-30° C to +60° C	
Duty Cycle	RX: 100%, TX: 100% @ 25 W output	
Frequency Stability	1.5 ppm, 1.0 ppm (30 min. after wake up)	
RF Input-Output Impedance	50 Ohms	
Dimension (W X H X D)	483 x 88 x 343 mm	
Weight (Approx.)	9.7 kg (50 W model)	
Receiver Specification: measured by TIA/EIA-603		
Antenna Impedance	50 Ohms	
Antenna Connector	BNC	
Receiver Type	Double-Conversion Superheterodyne	
Sensitivity 12 dB SINAD	0.25 µV 0.35 µV (20 dB Noise Quieting)	0.3 µV 0.45 µV (20 dB Noise Quieting)
Selectivity	84 dB / 77 dB	
Intermodulation	82 dB/ 80 dB	
Spurious and Image Rejection	90 dB	
Squelch Threshold	0.4 µV (adjustable)	
Audio Distortion	< 3 %	
Hum and Noise	> 50 dB	
Audio Frequency Response	De-emphasis 6 dB/oct (from 300 Hz to 3 kHz)	
Audio Output	4 W @ 4 Ohms	
Transmitter Specification: measured by TIA/EIA-603		
Output Power	50 / 25 / 10 W (100 W optional)	
Antenna Impedance	50 Ohms	
Antenna Connector	Type-N	
Duty Cycle	50%	
Modulation	16K0F3E, 11K0F3E	
System Deviation	±5.0 kHz / ±2.5 kHz	
Hum and Noise	> 50 dB (Wide), > 45 dB (Narrow)	
Audio Frequency Response	Pre-emphasis: 6 dB/oct (from 300 Hz to 3 kHz)	
Microphone Sensitivity	5 mV	
Microphone Impedance	600 Ohms	
Audio Distortion	< 2.5% @ 1kHz	
Spurious Emission	80 dB below carrier	