

# VXR-9000E Series

## VHF/UHF Rack Mount Repeater/Base Station

### SPECIFICATION SHEET

### High Performance And Reliable Operation

The VXR-9000E is a 25-Watt repeater designed to ensure reliable service during peak spectrum congestion times. The slim-line design is crafted for easy installation and integration into most repeater sites.

### Large Channel Capacity With Priority Scan

The VXR-9000E 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-9000E 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-9000E 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-9000E. Fan operation may be programmed for three options: off, continuous or temperature-controlled, depending on the application. A malfunction alarm is also included.

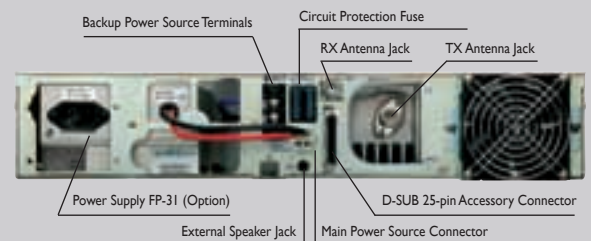
### Simplex / Duplex Capability

The VXR-9000E is designed for simplex mode with single-antenna operation or full-duplex mode with the optional VXD-60 duplexer when optimal communications is necessary at all times.



VXR-9000E

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



REAR PANEL



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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
- Comander 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
- FIF-9: 4-Wire line interface

## Option Boards

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

## Duplexer Options

- VXD-60VC: Duplexer VHF 148 - 160 MHz
- VXD-60UD: Duplexer UHF 440 - 470 MHz

## VX-9000E Series Specifications



	VHF	UHF
<b>General Specification</b>		
Frequency Range	134 - 160 MHz (A) 146 - 174 MHz (C)	400 - 430 MHz (A) 440 - 470 MHz (CS)
Number of Channels	32	
Power Supply Voltage	13.6 V DC ± 10%	
Channel Spacing	12.5 / 20 / 25 kHz	
PLL steps	2.5 / 5.0 / 6.25 kHz	
Operating Temperature Range	-30° C to +60° C	
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	
<b>Receiver Specification: measured by EN 300 086</b>		
Sensitivity 20 dB SINAD	-4 dBµV emf	
Selectivity	70 dB / 60 dB	
Intermodulation	70 dB	
Spurious and Image Rejection	70 dB	
Squelch Threshold	0.4 µV (adjustable)	
Audio Distortion	< 3 %	
Conducted Spurious	< -90 dB	
Hum and Noise	> 50 dB	
Audio Frequency Response	De-emphasis 6 dB/oct. (from 300 Hz to 3 kHz)	
Antenna Connector	BNC	
Audio Output	4W @ 4 Ohms	
<b>Transmitter Specification: measured by EN 300 086</b>		
RF Output	25 / 10 / 5 W	
Duty Cycle	50%	
Modulation	16K0F3E, 8K50F3E	
Modulation Limiting	±5.0 kHz / ±2.5 kHz	
Hum and Noise	> 50 dB (Wide), > 45 dB (Narrow)	
Microphone Sensitivity	5 mV	
Antenna Connector	Type-N	
Audio Distortion	< 2.5% @ 1kHz	
Spurious Emission	-36 dBm @ ≤ 1 GHz, -30 dBm @ > 1 GHz	

Specifications are subject to change without notice or obligation.

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