

# VXR-9000 Series

## VHF/UHF Rack Mount Repeater/Base Station

### SPECIFICATION SHEET

### High Power Output For Exceptional Reach And Performance

Available in 50W or 100W 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 3+ inches 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.

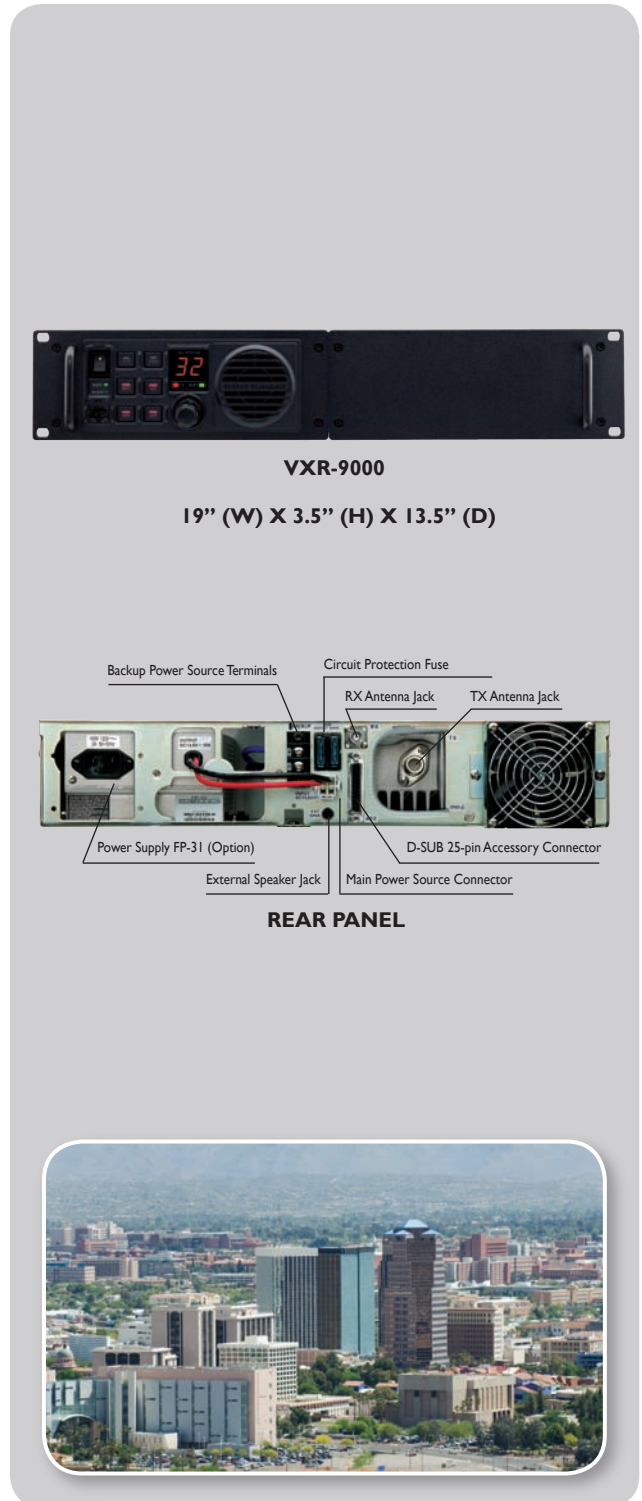
### Simplex / Duplex Capability

The VXR-9000 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.



### The Vertex Standard Difference

Our number one goal is achieving superior customer satisfaction by delivering products and services that exceed your expectations. Vertex Standard radios are built to last and are backed by an industry-leading 3 year warranty – another great reason to choose Vertex Standard. Ask your Dealer for more details.



### 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 (for 50W)
- VPA-9000: 100W Internal power amplifier unit
- FIF-9: 4-Wire line interface

### Option Boards

- FVP-25: Voice inversion encryption & DTMF paging
- FVP-35: Rolling code encryption

### Duplexer Options

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

### VXR-9000 Series Specifications

|   | VHF  | UHF   |
|---|--|---|
| <b>General Specification</b>                              |  |   |
| Frequency Range   | 134 - 160 MHz (A)<br>148 - 174 MHz (C)     | 400 - 430 MHz (A)<br>450 - 480 MHz (D)<br>480 - 512 MHz (F) |
| Number of Channels  | 32   |   |
| Power Supply Voltage                                      | 13.6V DC ± 10%                             |   |
| Channel Spacing   | 12.5 / 20 / 25 kHz                         |   |
| Operating Temperature Range                               | -22° F to +140° F (-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)                                     | 19 x 3.5 x 13.5 inches (483 x 88 x 343 mm) |   |
| Weight (Approx.)  | 21.4 lbs (9.7 kg) (50W model)              |   |
| <b>Receiver Specification: measured by TIA/EIA-603</b>    |  |   |
| Sensitivity 12dB SINAD                                    | 0.25 µV                                    | 0.3 µV  |
| Adjacent Channel Selectivity                              | 85 dB / 79 dB                              | 84 dB / 77 dB   |
| Intermodulation   | 83 dB / 81 dB                              | 82 dB / 80 dB   |
| Spurious and Image Rejection                              | 90 dB                                      |   |
| Audio Output  | 4W @ 4 Ohms                                |   |
| <b>Transmitter Specification: measured by TIA/EIA-603</b> |  |   |
| Output Power  | 50 / 25 / 10W (100W optional)              |   |
| Duty Cycle  | 50%  |   |
| Modulation  | 16K0F3E, 11K0F3E                           |   |
| Maximum Deviation   | ±5.0 kHz / ±2.5 kHz                        |   |
| Audio Distortion  | < 2.5% @ 1kHz                              |   |
| Conducted Spurious Emission                               | 80 dB below carrier                        |   |