

# VX-2100/2200 Series

## VHF/UHF Mobile Radios

### SPECIFICATION SHEET

### Wide Band Coverage And High-Power Performance

With 50W VHF/45W UHF power output for effective communications transmission, the VX-2100/2200 Series provides reliability, extensive signaling features and enhanced channel capacity for maximum return on your investment. Die-cast aluminum construction helps dissipate heat and absorbs vibration for durability.

### Expanded Frequency Options for Greater Coverage

Designed to cover the full band in the VHF and upper range of the UHF bands, get wide band coverage in one radio.

### Broad Channel Capacity

Get 8 channels for easy operation with the VX-2100 Series or 128 channels for large group communications in the VX-2200 Series to get the job done.

### More Scanning Options

Compared to other mobile two-way radios in its class, the VX-2100/2200 Series provides exceptional flexibility in scanning features that is designed to optimize operation for a wide variety of environments. In addition to basic scan, you also get Priority, Dual Watch, Follow-me, Follow-me Dual Watch and Talk Around scanning built-in.

### When Safety Counts

The VX-2100/2200 Series comes standard with built-in Emergency alert for enhanced driver safety. A panic button can be triggered by the front panel button to alert the dispatcher when problems arise.

### Easily Integrate with Existing MDC System

Add the optional VME-100 board to make VX-2100/2200 mobile radios compatible for use with the rest of your MDC-1200® fleet.

### Exclusive Auto-Range Transpond System – ARTS™

Only Vertex Standard radios are designed to inform you when you and another ARTS™-equipped station are within communication range. If out of range for more than 2 minutes, your radio senses no signal has been received and beeps to alert you. The base station can then alert the field unit to move back in range. A great solution to keep your workers coordinated.



### 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.



VX-2200



VX-2100



## Additional Features

- Six programmable keys
- 8-Character alphanumeric display (VX-2200)
- 1-Character numeric display (VX-2100)
- RSSI signal strength indicator
- 2-Tone encode and decode
- 5-Tone signaling
- CTCSS / DCS Encode and Decode
- BCLO, BTLO, TOT Functions
- DTMF Paging
- DTMF Speed Dial
- Stun / kill / revive (5-tone)
- Remote listen
- Lone Worker
- Minimum Programmable Volume
- D-Sub 15 Pin accessory connector
- Radio-to-radio cloning
- Public address / horn alert

## Accessories

- MH-67A8J: Standard microphone
- MH-75A8J: Keypad microphone (16 keys)
- MD-12A8J: Desktop microphone
- MLS-100: External speaker, 12W
- MLS-200: External speaker, 12W (indoor/outdoor use)
- LF-1: DC Line Filter
- FP-1023A: External power supply

## Option Boards

- FVP-25: Voice Inversion Encryption & DTMF Paging
- FVP-35: Rolling Code Encryption
- FVP-36: Voice Inversion Encryption only
- VME-100: MDC-1200® / GE-STAR® ANI Encode

## VX-2100/2200 Series Specifications

	VHF	UHF
<b>General Specification</b>		
Frequency Range	134 – 174 MHz	400 – 470 MHz; 450 – 512 MHz
Number of Channels and Groups	128 and 8 Groups (VX-2200) 8 and 1 Groups (VX-2100)	
Power Supply Voltage	13.6V DC ± 15%	
Channel Spacing	12.5 / 20 / 25 kHz	
PLL Steps	2.5 / 5 / 6.25 kHz	5 / 6.25 kHz
Current Consumption	TX: 11 A (50W, 45W), 6 A (25W) RX: 2.5 A, Standby: 200 mA	
Operating Temperature Range	-22° F to +140° F (-30° C to +60° C)	
Frequency Stability	Better than ±2.5 ppm	
RF Input-Output Impedance	50 Ohms	
Dimension (W x H x D)	6.5 x 1.8 x 6.1 inches (165 x 45 x 155mm)	
Weight (Approx.)	2.87 lbs (1.3 kg)	
<b>Receiver Specification: measured by TIA/EIA-603</b>		
Sensitivity 12dB SINAD	0.25 µV	
Adjacent Channel Selectivity	75 / 65 dB	73 / 65 dB
Intermodulation	73 / 70 dB	
Spurious and Image Rejection	90 dB	80 dB
Audio Output	Internal: 4W @ 18 Ohms, 5% THD External: 12W @ 4 Ohms, 5% THD	
<b>Transmitter Specification: measured by TIA/EIA-603</b>		
Output Power	50 / 25 / 10W (50W) 25 / 12.5 / 5 / 1W (25W)	45 / 25 / 10W (45W) 25 / 12.5 / 5 / 1W (25W)
Modulation	16K0F3E, 11K0F3E	
Maximum Deviation	±5.0 kHz / ±2.5 kHz	
Audio Distortion	< 3% @ 1kHz	
Conducted Spurious Emission	70 dB below carrier	

## Applicable MIL-STD

Standard	MIL 810C Methods/ Procedures	MIL 810D Methods/ Procedures	MIL 810E Methods/ Procedures	MIL 810F Methods/ Procedures
High Temperature	501.1/Procedure II	-	-	-
Low Temperature	502.1/Procedure I	-	-	-
Blowing Sand & Dust	-	-	510.3/Procedure I	-
Vibration	514.2/Procedure VIII, X	514.3/Procedure I Cat. 10	514.4/Procedure I Cat. 10	514.5/Procedure I Cat. 20, 24
Shock	516.2/Procedure I, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV, VI