

# VX-2100/2200 Series

## VHF/UHF Mobile Radios

### SPECIFICATION SHEET – NORTH AMERICA

#### Compact, Full-Featured Performance for Maximum Value

With 50 W VHF and 45 W 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.

#### Compact, Durable Construction

Installs easily in small spaces. Die-cast aluminum construction helps dissipate heat and absorbs vibration for durability.

#### 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.

#### More Scanning Options

Compared to other mobile two-way radios in its class, the VX-2100/2200 Series provides scanning features designed to optimize operation. Built-in scan options: Basic, Priority, Dual Watch, Follow-me, Follow-me Dual Watch and Talk Around.

#### When Safety Counts

The VX-2100/2200 Series includes built-in Emergency and Lone Worker alerts for enhanced driver safety. A panic button can be triggered from the front panel 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™

Always know your connection status. Only Vertex Standard radios are designed to inform you when you and another ARTS™-equipped radio are within communication range. If out of range, your radio senses no signal has been received and beeps to alert you. A great solution to keep workers coordinated.



VX-2200



VX-2100



#### 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.

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www.vertexstandard.com/lmr

## 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
- ▶ Programmable minimum volume
- ▶ D-Sub 15 Pin accessory connector
- ▶ Public address / horn alert
- ▶ Radio-to-radio cloning

## Accessories

- ▶ MH-67A8J: Standard microphone
- ▶ MH-75A8J: Keypad microphone (16 keys)
- ▶ MD-12A8J: Desktop microphone
- ▶ MLS-100: External speaker, 12 W
- ▶ MLS-200: Waterproof external speaker, 12 W
- ▶ LF-1: DC Line Filter
- ▶ SEC-1223: External power supply

## Option Boards

- ▶ FVP-25: Voice Inversion Encryption and 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 Group (VX-2100)	
Power Supply Voltage	13.6 V 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 (50 W, 45 W), 6 A (25 W) 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 (H x W x D)	1.8 x 6.5 x 6.1 inches (45 x 165 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 dB / 65 dB	73 dB / 65 dB
Intermodulation	73 dB / 70 dB	
Spurious and Image Rejection	90 dB	80 dB
Audio Output	Internal: 4 W @ 18 Ohms, 5% THD External: 12 W @ 4 Ohms, 5% THD	
<b>Transmitter Specification: measured by TIA/EIA-603</b>		
Output Power	50 / 25 / 10 W (50 W) 25 / 12.5 / 5 / 1 W (25 W)	45 / 25 / 10 W (45 W) 25 / 12.5 / 5 / 1 W (25 W)
Modulation	16K0F3E, 11K0F3E	
Maximum Deviation	± 5.0 kHz / ± 2.5 kHz	
Audio Distortion	< 3 % @1 kHz	
Conducted Spurious Emission	70 dB below carrier	

## Applicable MIL-STD

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