

# 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<sup>TM</sup>-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





80 dB

SPECIFICATION SHEET vertexstandard.com

VX-2100/2200 Series Specifications

### **Additional Features**

- Six programmable keys
- 8-Character alphanumeric display (VX-2200)
- I-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-12A8]: Desktop microphone
- MLS-100: External speaker, 12W
- MLS-200: External speaker, I2W (indoor/outdoor use)
- LF-I: 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

	VHF	UHF		
General Specification				
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	13.6 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 (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)			
Receiver Specification: mea	asured by TIA/EIA-603			
Sensitivity 12dB SINAD	0.25 μV			
Adjacent Channel Selectivity	75 / 65 dB	73 / 65 dB		
Intermodulation	73 / 70 dB			

Transmitter Specification: measured by TIA/EIA-603						
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% @ IkHz					
Conducted Spurious Emission	70 dB below carrier					

Internal: 4 W @ 18 Ohms, 5% THD

External: 12 W @ 4 Ohms, 5% THD

90 dB

# **Applicable MIL-STD**

Spurious and Image Rejection

Audio Output

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