

VX-4100/4200 Series

VHF/UHF Mobile Radios

SPECIFICATION SHEET

High Capacity, Enhanced Mobile Communications

The durable VX-4100/4200 Series gives you extensive signaling and expanded customization to help you maximize your communications investment.

Memory for Enhanced Group Communications

For group communications, get the radio that best serves your needs with 501 programmable channels in the VX-4200 Series. In addition to 501 channels, the VX-4200 keeps operations easy with Direct Channel Access. For smaller operations, consider the 8-channel VX-4100 Series option.

Wide Band Coverage For Expanded Frequency Options

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

Dual-Band Receive For Interoperability

When full situational awareness at all times is a must, add the receiver option to get dual-band receive capability for greater flexibility and multi-agency interoperability. Single VHF or UHF transmit combined with dual-band receive better coordinates Public Safety operations.

When Safety Counts

As with all Vertex Standard mobile radios, the VX-4100/4200 Series comes standard with built-in Emergency alert for enhanced driver safety. A panic button can be triggered by the front panel button or remotely to alert the dispatcher when problems arise.

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.



VX-4200



VX-4100



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

- Five programmable keys (VX-4200)
- Three programmable keys (VX-4100)
- 12-Character alphanumeric display (VX-4200)
- RSSI signal strength indicator
- DTMFANI
- CTCSS / DCS Encode and Decode
- BCLO / BTLO and TOT Functions
- MDC1200® ANI encode
- Componder
- Internal emergency microphone (front panel)
- Priority scan
- Dual Watch scan
- Follow-me scan
- Follow-me Dual Watch scan
- Talk Around scan
- Group scan (VX-4200)
- D-sub 15 pin accessory connector
- Public address / horn alert
- User-selectable tones (VX-4200)
- Radio-to-radio cloning

Accessories

- MH-67A8J: Standard microphone
- MH-53A8J: Noise cancelling microphone
- MH-75A8J: Keypad microphone (16 keys)
- MD-12A8J: Desktop microphone
- MLS-100: External speaker, square, 12W
- MLS-200: External speaker, 12W (indoor/outdoor use)
- FP-1023A: External power supply
- MMB-85: Mobile mounting bracket
- LF-1: DC Line filter

Option Boards

- FVP-25: Voice inversion encryption & DTMF paging
- FVP-35: Rolling code encryption
- FVP-36: Voice inversion encryption only
- DVS-5: Digital voice storage unit
- VME-100: MDC-1200® / GE-STAR® ANI Encode
- VMDE-200: MDC-1200® / GE-STAR® ANI Enc./Dec.
- SRX-1: Dual-band Rx unit (adds UHF Rx)
- SRX-2: Dual-band Rx unit (adds VHF Rx)

VX-4100/4200 Series Specifications

	VHF	UHF
General Specification		
Frequency Range	134 – 174 MHz	400 – 470 MHz; 450 – 512 MHz
Number of Channels and Groups	501 and 32 Groups (VX-4200) 8 and 1 Groups (VX-4100)	
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, RX: 2.5 A, Standby: 0.3 A	
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 1.7 x 6.1 inches (165 x 43 x 155mm)	
Weight (Approx.)	3.1 lbs (1.4 kg)	
Receiver Specification: measured by TIA/EIA-603		
Sensitivity 12dB SINAD	0.25 µV	
Adjacent Channel Selectivity	85 / 75 dB	78 / 70 dB
Intermodulation	80 / 75 dB	
Spurious and Image Rejection	90 dB	80 dB
Audio Output	Internal: 2W @ 32 Ohms, 5% THD External: 12W @ 4 Ohms, 5% THD	
Transmitter Specification: measured by TIA/EIA-603		
Output Power	50 / 25 / 10W	45 / 25 / 10W
Modulation	16K0F3E, 11K0F3E	
Maximum Deviation	±5.0 kHz / ±2.5 kHz	
Audio Distortion	< 3% @ 1kHz	
Conducted Spurious Emission	75 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	514.3/Procedure I Cat. 10, 8	514.3/Procedure I Cat. 10	514.4/Procedure I Cat. 10	514.5/Procedure I Cat. 20, 24
Shock	516.2/Procedure I	516.3/Procedure I, IV	516.4/Procedure I, IV, VI	516.5/Procedure I, IV, VI