VXR-1000
16 Channel 5 W
VHF/UHF Vehicular Repeaters

vertex RADIO COMMUNICATIONS

Designed to enhance Public Safety and Industrial Communications Systems, the VXR-1000 Multi-Channel Cross-Band Vehicular Repeater provides dependable portable coverage throughout your system without the costly addition of site equipment. The VXR-1000 is a sophisticated, yet extremely simple to operate, addition to your mobile fleet to allow complete portable coverage utilizing the high output power of your mobiles. With a long list of built-in features, the VXR-1000 sets the standard for a cost effective way to optimize your system performance. Extremely small in size, and with a built-in DB-9 connector, the VXR-1000 will interface with most all brands of mobile radios in the market today. Let the VXR-1000 enhance your system now, and into the next century.

- Frequency Range:
  VHF: 150~174 MHz
  UHF: 450~470 MHz
- 16 Channel Capacity
- 5 Watts Power Output (Selectable 2.5,1 and 0.5 W Low Power Levels)
- 12.5/25 kHz Bandwidth (Programmable By Channel)
- CTCSS/DCS Encode + Decode
- ARTS (Auto Range Transpond)
- Command Control (Allows VXR-1000 To Talk Directly With Portable)
- Built In Voice Inversion Encryption (Allows Secure Voice Between VXR-1000 and Portable
- Local Volume Control (Requires External Speaker)
- First on Scene Logic With Priority Sampling
- Works With Most Popular Trunking Protocols
- Works With Most Low Band, VHF and UHF Systems
- PC Programmable
- MIL-STD 810 C/D/E

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Specifications

General Specifications	VHF	UHF
Number of Channels	16 Channel	
Frequency Range	150-174 MHz	450-470 MHz
Crystal or Synthesized	Synthesized	
Channel Spacing	15 /30 kHz	12.5/25 kHz
Power Supply Voltage	13.8 VDC	
Ambient Temperature Range	-30°C to +60°C	
Frequency Stability	± 2.5 ppm	
RF Input-Output Impedance	50 ohms	
Audio Output Impedance	8 ohms	
Dimensions	1.0" (H) x 4.4" (W) x 5.4" (D) (25.4 x 111 x 136 mm)	
Weight	14.1 oz. (400 g)	

Receiver Specifications	Measurements made per EIA standard TIA/EIA-204D	
Circuit Type	Double Conversion Superheterodyne	
Sensitivity		
EIA 12 dB SINAD	0.30 µV	0.35 µV
20 dB Quieting	0.40 µV	0.45 µV
Threshold Squelch	0.25 µV to 2 uV	
Adjacent Channel Selectivity	60 dB	
Intermodulation	60 dB	
Spurious and Image Rejection	60 dB	
Conducted Spurious Emissions	-57 dBm	
Audio Response	+3/-8 dB from the 6 dB/oct. De-emphasis curve	
Audio Output	1 W into8 ohms w/ <5% THD	
Hum and Noise	40 dB	

Transmitter Specifications	Measurement made per EIA standard TIA/EIA-152-C
RF Power Output	5 / 2.5 / 1 / 0.5 W (HI/M2/M1/LO)
Modulation	16K0F3E/11K0F3E
Maximum Deviation	± 5 kHz / ± 2.5 kHz
Conducted Spurious Emissions	60 dBc
FM Hum and Noise	40 dB
Audio Response	+1/-3 dB from the 6 dB/oct. Pre-emphasis curve
Audio Distortion	<5.0%

Standard	MIL-810C Method/Procedures	MIL-810D Methods/Procedures	MIL-810E Methods/Procedures
Dust	510.1/ Procedure 1	510.2/Procedure 1	510.3/ Procedure 1
Vibration	514.2/Procedure 8,10	514.3/Procedure 1	514.4/Procedure 1
Shock	516.2/Procedure 1, 2, 3, 5	516.3/Procedure 1, 3, 4, 5, 6	516.4/Procedure 1, 3, 4, 5, 6

The Vertex Warranty *
Vertex Radio Communications equipment includes an industry-leading 3- Year Limited Warranty on all transceivers and a 1-Year Warranty on all accessory items.
* U.S. and Canada

Accessories & Options

MLS-100	External Speaker (12 Watt)
MH-25A8J	Microphone
VPL-1	Radio to Computer Programming Cable
FRB-4	Alignment Interface Box
T9101411	Cloning Cable (set to set clone)

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Measurements per EIA standards unless noted above. Specifications subject to change without notice or obligation.
Various accessories listed may not be available in some countries.

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