

# VX-P920 Series

## P25 VHF/UHF Portable Radios

### SPECIFICATION SHEET

### Ready-To-Respond With P25 Interoperability

The conventional VX-P920 Series is ready to respond when you are with APCO P25 interoperability, state-of-the-art engineering and a wide array of features, providing great value in its class.

### P25 Digital Mode Capabilities

**Expanded Signaling:** Supports selective calling, Talk Group IDs (TGID), Network Access Codes, Individual ID lists and Paging Group lists for flexible communications.

**Secure Communication (optional):** Options available to support both Advanced Encryption Standard (AES) and Data Encryption Standard (DES) as required by APCO Project 25. Additionally, multiple encryption keys can be stored in the radio as required.

**Mixed Mode:** Seamlessly switch between analog to P25 digital mode on each channel based on call type received and on programming for transmit.

**Enhanced Voice Quality:** Featuring the AMBE+2™ Vocoder, get exceptional voice quality in both digital P25 and narrow-band modes of operation.

**Connectivity Assurance:** The RSSI warning emits an audible alert when the receive signal strength drops to a level not suitable for reliable communications.

### Loud Audio For Noisy Environments

With 700 mW audio output, be assured of hearing critical information you need in most situations.

### Intrinsically Safe

The VX-P920 Series comes in intrinsically safe options that meet the SGS requirements of ANSI/UL913 6<sup>th</sup> Edition for Class I, Division I, Groups A-D, Class II, Groups E-G; and Class III for use in hazardous locations.

### Never Miss An Important Call

Includes flexible scanning features designed to optimize operation. Along with basic scan, get Priority, Dual Watch, Follow-me, Follow-me Dual Watch and Talk Around scanning with a programmable home channel function built-in.

### When Safety Counts – Never Be Alone

When help is needed, the VX-P920 Series has Emergency notification that will switch to a designated channel and send an emergency alert. The radios also include Remote Listen which turns the radio on remotely if needed to check out what is happening near the radio.



Top



VX-P929

VX-P924

5.3" (H) X 2.3" (W) X 1.5" (D)



### 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

- 512 Channel capacity
- Wide band coverage
- Field programmable (VX-P929)
- Ten programmable keys (VX-P929)
- Eight programmable keys (VX-P924)
- Programmable 3-position toggle key
- Direct channel recall
- 12-Character LCD
- Minimum volume control
- User set mode

### P25 Digital Mode Only

- Caller ID display
- BCLO and TOT

### Analog Mode Only

- RX/TX Battery power save
- DTMF ANI / DTMF Paging
- Lone Worker
- 2-Tone encode and multiple 2-tone decode
- CTCSS/DCS Encode and Decode
- BCLO/BTLO and TOT
- MDC1200® Encode (PTT ID, Emergency ID)
- Auto-Range Transpond System (ARTS™)
- Compander
- Clear voice and audio pitch control
- 7-Color LED call alert indicator
- User selectable tone
- Radio-to-radio cloning

### Accessories

- MH-50D7A: Public Safety speaker mic w/toggle
- MH-66A7A: Submersible noise cancelling speaker mic
- MH-66B7A: Submersible speaker mic w/PF key & toggle
- VH-121: 3-Wire mini lapel microphone surveillance kit
- VH-131: 2-Wire earpiece, palm mic. with PTT
- VH-111: Over-the-head dual-muff headset
- VH-115L: Behind-the-head headset w/bloom mic.
- VH-215L: Over-the-head single-muff headset
- FNB-V92LI: 3000 mAh Li-Ion battery
- FNB-V92LIIS: 3000 mAh Intrinsically safe Li-Ion battery
- FNB-V87LI: 2000 mAh Li-Ion battery
- FNB-V86LI: 1150 mAh Li-Ion battery
- FBA-34: Alkaline battery case (holds 6 AA batteries)
- VAC-921: Desktop rapid charger
- VAC-6920: 6-Unit rapid charger
- VCM-2: Vehicular charger kit
- LCC-920S: Leather case w/swivel belt clip

### VX-P920 Series Specifications

VHF		UHF
General Specification		
Frequency Range	134 – 174 MHz	380 – 450 MHz 400 – 470 MHz 450 – 512 MHz
Number of Channels and Groups	512 and 32 Groups	
Power Supply Voltage	7.4V DC ± 20%	
Channel Spacing	12.5 / 20 / 25 kHz	
PLL Steps	1.25 / 2.5 / 5 / 6.25 kHz	5 / 6.25 kHz
Battery Life (5-5-90 duty)		
3000 mAh FNB-V92LI	21 hrs (16 hrs w/o saver)	19.6 hours (15.1 hrs w/o saver)
2000 mAh FNB-V87LI	14 hrs (10.6 hrs w/o saver)	13.1 hrs (10.1 hrs w/o saver)
IP Rating	IP 57	
Operating Temperature Range	-22° F to +140° F (-30° C to +60° C)	
Frequency Stability	±2.5 ppm	
RF Input-Output Impedance	50 Ohms	
Dimension (H x W x D)	5.3 x 2.3 x 1.5 inches (133 x 57.5 x 37.5 mm) (w/FNB-V86LI)	
Weight (Approx.)	13.4 oz (380 g) (w/FNB-V86LI, ANT and Belt Clip)	
Receiver Specification: measured by TIA/EIA-603, TIA-102 CAAA (Digital)		
Sensitivity 12dB SINAD	0.25 µV	0.32 µV
Digital 5% BER	0.25 µV	0.32 µV
Digital 1% BER	0.35 µV	0.40 µV
Adjacent Channel Selectivity (W/N)	75 / 70 dB	
Intermodulation	75 / 70 dB	
Spurious and Image Rejection	80 dB	75 dB
Audio Output	700 mW @ 16 Ohms 5% THD	
Transmitter Specification: measured by TIA/EIA-603, TIA-102 CAAA (Digital)		
Output Power	5 / 2.5 / 1 / 0.25 W	
Modulation		
Analog	16K0F3E, 11K0F3E	
Digital	8K10F1D / 8K10F1E	
Spurious Emissions	70 dB	
FM Hum and Noise (W/N)	46 / 40 dB	
Audio Distortion	< 3% @ 1 kHz	

### Applicable MIL-STD

Standard	MIL 810C Methods/ Procedures	MIL 810D Methods/ Procedures	MIL 810E Methods/ Procedures	MIL 810F Methods/ Procedures
Low Pressure	500.1	500.2	500.3	500.4
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II
Low Temperature	502.1/Procedure I, II	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
Temperature Shock	-	503.2 / Procedure I	503.3 / Procedure I	503.4/Procedure I
Solar Radiation	505.1/Procedure I	505.2/Procedure II Cat. A I	505.3/Procedure II Cat. A I	505.4/Procedure I, II Cat. A I
Rain	506.1/Procedure I	506.2/Procedure I	506.3/Procedure I, II	506.4/Procedure I
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	-
Salt Fog	509.1	509.2	509.3	509.4
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III
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	516.3/Procedure I	516.4/Procedure I	516.5/Procedure I

Specifications are subject to change without notice or obligation.

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