

# VX-230 Series

VHF/UHF Portable Radios

**SPECIFICATION SHEET** 

# Compact Radio with Long-Lasting Li-Ion Battery

The Vertex Standard VX-231 provides wider band coverage, more signaling features and improved ergonomics\* that adds up to a better return on your investment.

#### **Improved Portability**

A radio that won't get in the way, the VX-231 is more compact and lightweight than the VX-160E series. A radio that is easier to carry with you on the job.

# **More Battery Power**

Designed to use powerful Li-Ion battery technology for longer battery life. Includes a 1150 mAh battery providing 9 hours of operation with the battery saver enabled.

#### Wide Band Coverage for Added Value

One radio designed to cover VHF and UHF bands, which provides expanded options in frequencies to use.

## **More Scanning Options**

While many radios provide 1 or 2 scanning options, the VX-231 radio gives you 4 additional scanning options for greater convenience and flexibility for the way you need your radios to perform. Options include: Priority, Dual Watch, Follow Me and Talk Around scan.

## **Exclusive Auto-Range Transponding 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.

\*Compared to VX-160E series.





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#### **Additional Features**

- 16 channel capacity
- Two programmable keys
- Flexible channel spacing: 12.5 kHz to 25 kHz
- · Battery power save option
- Emergency
- · Lone Worker
- DTMF ANI
- DTMF Speed Dial
- 5-Tone / 2-Tone Encode and Decode
- · CTCSS / DCS Encode and Decode
- · Manual squelch adjustment
- Radio-to-radio cloning

#### **Accessories**

- MH-450S: Speaker microphone
- MH-360S: Compact speaker microphone
- MH-45B4B: Noise cancelling speaker microphone
- MH-37A4B: Earpiece microphone
- VH-115S: Behind-the-head headset w/boom mic
- VH-215S: Over-the-head single-muff headset
- VC-25: Over-the-head VOX headset
- FNB-V104LI: 2000 mAh Li-lon battery
- FNB-V103LI: 1150 mAh Li-Ion battery
- FNB-V106: 1200 mAh Ni-MH battery
- VAC-300: Desktop rapid charger (Li-lon only)
- VAC-20: Desktop charger (FNB-V106)
- DCM-1: Desktop charger mounting adapter
- VCM-2: Vehicle charger mounting adapter (VAC-300)
- VCM-3: Vehicle charger mounting adapter (for VAC-20)
- VAC-6300: 6-Unit multi rapid charger (Li-lon only)
- VAC-6020 : 6-Unit charger (FNB-V106)
- LCC-350: Leather case
- LCC-350S: Leather case w/swivel belt clip
- · CLIP-18: Belt clip
- CLIP-17E: Swivel belt clip

	VHF		UHF		
General Specification					
Frequency Range	134 MHz - 174 MHz	2 22	400 - 478 MHz		
Number of Channels		16			
Power Supply Voltage	7.4 V DC±20%				
Channel Spacing	12.5/20/25 kHz				
PLL Steps	5 / 6.25 KHz				
Battery Life (5-5-90 duty) 1150 mAh FNB-V103LI 1200 mAh FNB-V106 With 2000 mAh FNB-V104LI	9.0 hours (7.3 hours w/o saver) 9.0 hours (7.3 hours w/o saver) 16.5 hours (13.5 hrs w/o saver)				
IP Rating		IP54			
Operating Temperature Range	-25	5° C to +60° C			
Frequency Stability		±2.5 ppm			
RF Input-Output Impedance		50 Ohms			
Dimension $(H \times W \times D)$	$110 \times 58 \times 30$ mm (w/ FNB-V103LI)				
Weight (Approx.)	285 g (w/FNB-V103LI,Antenna, Belt Clip)				
Receiver Specification meas	sured by <b>EN</b> 300 086				
Sensitivity 20 dB SINAD	- 3 dBµV emf				
Adjacent Channel Selectivity		70 dB			

65 dB

70 dB

#### 500mW @ 4 Ohms 5% THD Transmitter Specification measured by EN 300 086

VX-230 Series Specifications

Output Power Modulation Limiting ±5.0 kHz @ 25 kHz ±4.0 kHz @ 20 kHz ±2.5 kHz @ 12.5 kHz

Modulation 16K0F3E, 11K0F3E Spurious Emissions -36 dBm ≤ 1 GHz, -30 dBm > 1 GHz

FM Hum & Noise 45 / 40 dB 25 kHz / 12.5 kHz Audio Distortion < 3 % @1 kHz

## Applicable MIL-STD

Intermodulation

Audio Output

Spurious and Image Rejection

Standard	MIL 810C Methods/ Procedures	MIL 810D Methods/ Procedures	MIL 810E Methods/ Procedures	MIL 810F Methods/ Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure 1, II	500.4/Procedure I, II
High Temperature	501.1/Procedure I	501.2/Procedure I, II	501.3/Procedure 1, II	501.4/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I	502.3/Procedure I, II	502.4/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II
Solar Radiation	505.1/Procedure I	505.2/Procedure   Cat.A1	505.2/Procedure   Cat.Al	505.4/Procedure   Cat.Al
Rain	506.1/Procedure 1,11	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, II
Humidity	507.1/Procedure 1,11	507.2/Procedure II, III	507.3/Procedure 11, III	507.4/Procedure I
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4/Procedure I
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure 1, II
Vibration	514.2/Procedure X	514.3/Procedure   Cat. 10	514.4/Procedure   Cat. 10	514.4/Procedure 1 Cat. 24
Shock	516.2/Procedure 1, II,V	516.3/Procedure 1, IV	516.4/Procedure 1, IV	516.5/Procedure 1,V

Specifications are subject to change without notice or obligation.

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