

# 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 2000mAh battery providing 16.5 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.

\*Compared to VX-160E series.



Side

Top

110mm (H) X 58mm (W) X 30mm (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.



Meets the following standards:  
AS/NZS4295, ISO9001 and  
ISO4001.

## Additional Features

- 16 channel capacity
- Two programmable keys
- Flexible channel spacing: 12.5kHz to 25kHz
- Battery power save option
- Emergency
- Lone Worker
- DTMF ANI
- DTMF Speed Dial
- 5-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-215S: Lightweight single speaker padded headset
- VH-225S: Dual ear headset w/boom mic
- VH-130S: 2-Wire earpiece w/palm mic and PTT switch
- VH-115S: Lightweight headset w/boom mic
- VC-25: Over-the-head VOX headset
- FNB-V103LI: 1150mAh Li-Ion battery
- FNB-V104LI: 2000mAh Li-Ion battery
- VAC-300: Desktop rapid charger (Li-Ion only)
- DCM-1: Desktop charger mounting adapter
- VCM-2: Vehicle charger mounting adapter
- VAC-6300: 6-Unit multi rapid charger
- LCC-350: Leather case
- LCC-350S: Leather case w/swivel belt clip
- CLIP-18: Belt clip
- CLIP-17E: Swivel belt clip
- CT-27: Cloning Cable

## VX-230 Series Specifications

|                                                          | VHF                                        | UHF                        |
|----------------------------------------------------------|--------------------------------------------|----------------------------|
| <b>General Specification</b>                             |                                            |                            |
| Frequency Range                                          | 134MHz – 174MHz                            | 400 – 470MHz, 450 – 520MHz |
| Number of Channels                                       | 16                                         |                            |
| Power Supply Voltage                                     | 7.4V DC±20%                                |                            |
| Channel Spacing                                          | 12.5/20/25kHz                              |                            |
| Battery Life (5-5-90 duty)                               | 9.0 hours (7.3 hours w/o saver)            |                            |
| 1150mAh FNB-V103LI                                       | 16.5 hours (13.5 hours w/o saver)          |                            |
| 2000mAh FNB-V104LI                                       |                                            |                            |
| Operating Temperature Range                              | -30°C to +60°C                             |                            |
| Frequency Stability                                      | ±2.5ppm                                    |                            |
| RF Input-Output Impedance                                | 50 Ohms                                    |                            |
| Dimension (H x W x D)                                    | 110mm x 58mm x 30mm (w/ FNB-V103LI)        |                            |
| Weight (Approx.)                                         | 285g<br>(w/FNB-V103LI, Antenna, Belt Clip) |                            |
| <b>Receiver Specification measured by TIA/EIA-603</b>    |                                            |                            |
| Sensitivity 12dB SINAD                                   | .25µV typical                              |                            |
| Adjacent Channel Selectivity                             | 65 / 60dB 25kHz / 12.5kHz                  |                            |
| Intermodulation                                          | 65 / 60dB 25kHz / 12.5kHz                  |                            |
| Spurious and Image Rejection                             | 65dB                                       |                            |
| Audio Output                                             | 500mW @ 4 Ohms 5% THD                      |                            |
| <b>Transmitter Specification measured by TIA/EIA-603</b> |                                            |                            |
| Output Power                                             | 5 / 1W                                     |                            |
| Modulation                                               | 16K0F3E, 11K0F3E                           |                            |
| Conducted Spurious Emissions                             | 65dB below carrier                         |                            |
| FM Hum & Noise                                           | 45 / 40dB 25kHz / 12.5kHz                  |                            |
| Audio Distortion                                         | < 3 % @ 1kHz                               |                            |

## Applicable MIL-STD

| Standard          | MIL 810C<br>Methods/<br>Procedures | MIL 810D<br>Methods/<br>Procedures | MIL 810E<br>Methods/<br>Procedures | MIL 810F<br>Methods/<br>Procedures |
|-------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Low Pressure      | 500.1/Procedure I                  | 500.2/Procedure I, II              | 500.3/Procedure I, II              | 500.4/Procedure I, II              |
| High Temperature  | 501.1/Procedure I                  | 501.2/Procedure I, II              | 501.3/Procedure I, 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 I Cat.AI           | 505.3/Procedure I Cat.AI           | 505.4/Procedure I Cat.AI           |
| Rain              | 506.1/Procedure I, II              | 506.2/Procedure I, II              | 506.3/Procedure I, II              | 506.4/Procedure I, III             |
| Humidity          | 507.1/Procedure I, II              | 507.2/Procedure II, III            | 507.3/Procedure II, 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 I, III             |
| Vibration         | 514.2/Procedure X                  | 514.3/Procedure I Cat. 10          | 514.4/Procedure I Cat. 10          | 514.4/Procedure I Cat. 24          |
| Shock             | 516.2/Procedure I, II, V           | 516.3/Procedure I, IV              | 516.4/Procedure I, IV              | 516.5/Procedure I, V               |

Specifications are subject to change without notice or obligation.

VERTEX STANDARD is registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Vertex Standard Co. Ltd.

08/2009\_BT/MA493

**Have a question about Vertex Standard radios?  
Contact your authorised Vertex Standard dealer today!**