

EVX-530 SERIES

DIGITAL PORTABLE RADIOS

DMR Tier 2 Standard

Vertex Standard

eVerge™

SPECIFICATION SHEET

Evolve to Better Communication and Value

You can afford to enhance your communications with the digital performance of eVerge™ two-way radios. eVerge™ radios are compact and precision-engineered to deliver value without sacrificing quality — giving you more capabilities and the flexibility you need to communicate at your best.

Conversion Made Easy with Analog Integration

eVerge™ radios operate in both analog and digital modes and can be used with any existing analog two-way radios.

Do Digital Right: Stay Compatible and Maximize Efficiency

eVerge™ digital radios operate using the TDMA protocol for spectrum and power efficiency and lower total equipment cost compared to FDMA.

Better Radio Call Quality

Digital eliminates noise and static from voice transmit to only deliver the intended voice message crisply and clearly. eVerge™ digital radios feature the AMBE+2™ vocoder for enhanced voice quality.

Better Battery Life

Using eVerge™ radios in digital mode can operate up to 40% longer than typical analog mode as a result of the TDMA protocol and reduces overall battery consumption per call.

Better Message Control and Privacy

Control who you call and who gets your message in digital mode. Digital radios each have a unique ID enabling users to select who they need to call or send a text message without including others.

Better Coverage and Connection Monitoring with ARTS II™

Get ultra-clear audio right up to the edge of the transmit range. And, with Vertex Standard's exclusive Auto-Range Transpond System [ARTS II], you will always know when you are in or out of range with another ARTS II-equipped radio.

Submersible and Weatherproof

Meets international standard IP 57 for dust and water protection where fresh water does not harm the radio when submersed to 3 feet for up to 30 minutes.

Intrinsically Safe Option

Available as a future release: will meet SGS intrinsically safe requirements for use in hazardous situations.

Option Board Expandable for Additional Applications

The EVX-530 series is designed for future feature expansion and supporting third-party application development such as location tracking with GPS, rolling code encryption, etc.

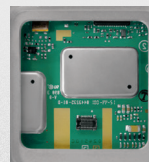


EVX-531

EVX-534

EVX-533

4.1" H x 2.3" W x 1.34" D



Option Board
Expandability



SPECIFICATION SHEET

Additional Features

- ▶ 9 Programmable keys [EVX-539]
- ▶ 7 Programmable keys [EVX-534]
- ▶ 3 programmable keys [EVX-531]
- ▶ 8-Character alpha numeric display [EVX-534/539]
- ▶ Programmable tri-color LED custom call alert
- ▶ Voice compander
- ▶ Internal VOX
- ▶ Whisper mode
- ▶ RSSI Indicator [EVX-534/539]
- ▶ Voice inversion encryption [EVX-534/539]
- ▶ CTCSS/DCS encode/decode
- ▶ MDC-1200® encode/decode
- ▶ 2-Tone encode/decode
- ▶ 5-Tone encode/decode [EVX-534/539]
- ▶ Lone worker alert
- ▶ Emergency alert
- ▶ DTMF Telephone Interconnect/ANI
- ▶ DTMF Paging [EVX-534/539]
- ▶ Remote stun/kill/revive [EVX-534/539]
- ▶ Key lock
- ▶ Voice channel announce
- ▶ Priority scan
- ▶ Dual Watch scan
- ▶ Follow-me scan
- ▶ Nuisance channel delete
- ▶ Radio-to-radio cloning [EVX-534/539]

Digital Mode Features

- ▶ Enhanced privacy [EVX-534/539]
- ▶ Text messaging [EVX-534/539]
- ▶ All call, Group call, Individual call
- ▶ Escalart
- ▶ Remote monitor
- ▶ PTT ID encode [EVX-531]
- ▶ PTT ID encode/decode [EVX-534/539]
- ▶ Mixed mode scan
- ▶ One touch access [EVX-534/539]
- ▶ 128 Record contact list [EVX-534/539]

Accessories

- ▶ MH-37A4B: Earpiece microphone [RX/TX]
- ▶ MH-81A4B: Over-the-head light duty VOX headset
- ▶ MH-360S: Compact speaker microphone
- ▶ MH-450S: Speaker microphone
- ▶ MH-66A4B: IP 57 Submersible microphone
- ▶ FNB-V133LI-UNI: 1380 mAh Li-Ion battery
- ▶ FNB-V134LI-UNI: 2300 mAh Li-Ion battery
- ▶ VAC-UNI: Single-unit charger
- ▶ CLIP-20: Belt clip
- ▶ Leather cases available

EVX-530 Series Specifications

| General Specifications | | |
|---|---|--|
| Frequency Range | VHF: 136 – 174 MHz | UHF: 403 – 470 MHz 450 – 512 MHz |
| Number of Channels and Groups | 32 / 2 (EVX-531); 512 / 32 (EVX-534/539) | |
| Power Supply Voltage | 7.5 V nominal | |
| Channel Spacing | 25*/20*/12.5 kHz | |
| Battery Life (5-5-90 duty w/battery saver) FNB-V134LI-UNI: 2300 mAh Li-Ion FNB-V133LI-UNI: 1380 mAh Li-Ion | VHF: 15.8 hrs [digital] / 12.0 hrs [analog] 9.7 hrs [digital] / 7.4 hrs. [analog] | UHF: 15.2 hrs [digital] / 11.5 hrs. [analog] 9.1 hrs [digital] / 7.0 hrs. [analog] |
| IP Rating | IP 57 | |
| Operating Temperature Range | -22° F to +140° F [-30° C to +60° C] | |
| Dimension (H x W x D) | 4.1 x 2.3 x 1.34 inches [106.7 x 58.5 x 34 mm] (w/FNB-V133LI-UNI) | |
| Weight (Approx.) | 9.9 oz [280 g] w/FNB-V133LI-UNI, 11.5 oz [325 g] w/FNB-V134LI-UNI | |
| Receiver Specifications <small>measured by TIA/EIA 603C</small> | | |
| Sensitivity: | Analog 12 db SINAD: 0.25 uV Digital 1% BER: 0.28 uV | |
| Adjacent Channel Selectivity | TIA603: 70/60 dB TIA603C: 70/45 dB | |
| Intermodulation | 65 dB | |
| Spurious Rejection | 70 dB | |
| Audio Output | 500 mW @ 4 Ohms (INT) 350 mW @ 4 Ohms (EXT) | |
| Hum and Noise | 40 dB | |
| Conducted Spurious Emission | -57 dBm | |
| Transmitter Specifications <small>measured by TIA/EIA 603C</small> | | |
| Output Power | 5.0/2.5/1.0/0.25W | |
| Modulation Limiting | 16K0F3E / 11K0F3E | |
| Conducted Spurious Emission | 70 dB below carrier | |
| Hum and Noise | 40 dB | |
| Audio Distortion | <5% [3% typical] | |
| Frequency Stability | ±1.5 ppm | |
| 4FSK Digital Modulation | 7K60F1D / 7K60F1E | |
| Digital Protocol | ETSI TS 102 361-1, -2, -3 | |

Applicable MIL-STD

| Standard | Methods/Procedures | | | | |
|-------------------|--------------------|------------------|------------------|---------------------|--------------------|
| | MIL 810C | MIL 810D | MIL 810E | MIL 810F | MIL 810G |
| Low Pressure | 500.1/I | 500.2/I,II | 500.3/I,II | 500.4/I, II | 500.5/I, II |
| High Temperature | 501.1/I,II | 501.2/I, II | 501.3/I, II | 501.4/I, II | 501.5/I, II |
| Low Temperature | 502.1/I | 502.2/I, II | 502.3/I, II | 502.4/I, II | 502.5/I, II |
| Temperature Shock | 503.1/I | 503.2/I | 503.3/I | 503.4/I | - |
| Solar Radiation | 505.1/I,II | 505.2/II Cat. AI | 505.3/II Cat. AI | 505.4/I, II Cat. AI | - |
| Rain | 506.1/I, II | 506.2/I, II | 506.3/I, II | 506.4/I, III | 506.5/I, II |
| Humidity | 507.1/I,II | 507.2/II, III | 507.3/II, III | 507.4/III | 507.5/I, III |
| Salt Fog | 509.1/I | 509.2/I | 509.3/I | 509.4 / I | 509.5/I |
| Dust | 510.1/I | 510.2/I | 510.3/I | 510.4/I, III | 510.5/I |
| Vibration | 514.2/VIII, X | 514.3/Cat. 10 | 514.4/Cat. 10 | 514.5/ Cat. 20, 24 | 514.6/ Cat. 20, 24 |
| Shock | 516.2/I, III, V | 516.3/I, IV | 516.4/I, IV | 516.5/I, IV | 516.6/I, IV |