

# EVX-530 SERIES

## DIGITAL PORTABLE RADIOS

DMR Tier 2 Standard

**Vertex Standard**

eVerge™

SPECIFICATION SHEET - APAC

## 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.

### Direct Mode

Direct Mode enables you to have two communication paths on a single frequency effectively doubling your call capacity without the need of a repeater.

### Transmit Interrupt

When seconds matter, transmit interrupt allows an operator to halt or “interrupt” any current transmission, in favor of a priority message. Transmit Interrupt functionality ensures your critical messages will connect.

### 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 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 for Hazardous Locations

Intrinsically safe models are SGS certified to the requirements of ANSI/UL913 5th Edition for use in Class I, II, III, Division 1; Groups C,D,E,F,G; Temp T3C hazardous locations.

### Site Roaming

Move between multiple sites seamlessly by using the Site Roaming functionality your EVX-530 series radio. Manually or automatically initiate Site Roaming to identify the signal of the closest site with the strongest signal strength. The EVX-530 portable will dynamically change its pre-programmed home site to the site with the strongest signal in range. Great for operations with multiple locations or multiple floor buildings.

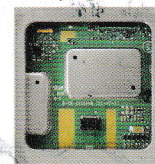


EVX-531

EVX-534

EVX-533

106.7 x 58.5 x 34 mm



Option Board  
Expandability



IP 57

**DMR**  
DIGITAL MOBILE RADIO ASSOCIATION

## Additional Features

- ▶ 9 Programmable keys [EVX-539]
- ▶ 7 Programmable keys [EVX-534]
- ▶ 3 programmable keys [EVX-531]
- ▶ ARTS™ & ARTS II™
- ▶ Programmable tri-color LED custom call alert
- ▶ Internal VOX
- ▶ RSSI Indicator [EVX-534/539]
- ▶ Voice inversion encryption [EVX-534/539]
- ▶ Lone worker alert
- ▶ Emergency alert
- ▶ Key lock
- ▶ Voice channel announce
- ▶ DTMF Telephone Interconnect/ANI
- ▶ Multiple scan options [Priority, Dual Watch, Follow-me]
- ▶ Nuisance channel delete
- ▶ Radio-to-radio cloning
- ▶ Option board expandable [EVX-534/539]

## Analog Mode Features

- ▶ Voice compander
- ▶ Whisper mode
- ▶ CTCSS/DCS encode/decode
- ▶ MDC-1200® encode/decode
- ▶ 2-Tone encode/decode
- ▶ 5-Tone encode/decode
- ▶ DTMF Telephone Interconnect/ANI
- ▶ DTMF Paging [EVX-534/539]
- ▶ Remote stun/kill/revive

## Digital Mode Features

- ▶ All Call/Group Call/Individual Call
- ▶ Text Messaging
- ▶ Direct/Dual Capacity Mode
- ▶ Transmit Interrupt
- ▶ PTT ID encode [EVX-531] encode/decode [EVX-534/539]
- ▶ Basic/Enhanced Privacy
- ▶ 256b AES encryption [EVX-534/539]
- ▶ Mixed Mode Scan
- ▶ Site Roaming
- ▶ DTMF encode
- ▶ Escalart
- ▶ Remote Monitor
- ▶ 128 Record Contact List

## Accessories

- ▶ MH-81A4B: Over-the-head light duty VOX headset
- ▶ MH-37A4B-1 Earpiece microphone
- ▶ 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
- ▶ FNB-V134LIIS-UNI: 2300 mAh Li-Ion battery [IS]†
- ▶ VAC-UNI: Single-unit charger
- ▶ VAC-6058: Multi-unit charger
- ▶ FBA-41: 6AA Battery case
- ▶ CLIP-20: Belt clip
- ▶ Leather cases available

## EVX-530 Series Specifications

General Specifications		
<b>Frequency Range</b>	<b>VHF:</b> 136 – 174 MHz	<b>UHF:</b> 403 – 470 MHz 450 – 520 MHz 350 – 390 MHz [EVX-531 only]
<b>Number of Channels and Groups</b>	32/2 [EVX-531]; 512/32 [EVX-534/539]	
<b>Power Supply Voltage</b>	7.5 V nominal	
<b>Channel Spacing</b>	25/20/12.5 kHz	
<b>Battery Life</b> [5-5-90 duty w/battery saver]	<b>VHF:</b> FNB-V134LIIS-UNI: 2300mAh Li-Ion FNB-V134LI-UNI: 2300 mAh Li-Ion FNB-V133LI-UNI: 1380 mAh Li-Ion	<b>UHF:</b> 16.1 hrs [digital] / 13.6 hrs. [analog] 16.1 hrs [digital] / 13.6 hrs. [analog] 9.3 hrs [digital] / 8.0 hrs. [analog]
<b>IP Rating</b>	IP 57	
<b>Operating Temperature Range</b>	-22° F to +140° F [-30° C to +60° C]	
<b>Storage Temperature Range</b>	-40° F to +185° F [-40° C to +85° C]	
<b>Dimension [H x W x D]</b>	112.5 x 57.5 x 38 mm [with battery]	
<b>Weight [Approx.] with Antenna, Belt Clip, EVX-531; EVX-534/539</b>	315 g; 360 g w/FNB-V134LI-UNI 276 g; 310 g w/FNB-V133LI-UNI	
EVX-531; EVX-534/539 <span style="float: right;">measured by TIA/EIA 603C</span>		
<b>Sensitivity:</b>	Analog 12 db SINAD: 0.25 uV Digital 1% BER: 0.28 uV	
<b>Adjacent Channel Selectivity</b>	TIA603: 70/60 dB TIA603B: 70/45 dB	
<b>Intermodulation</b>	65/60 dB	
<b>Spurious Rejection</b>	70 dB	
<b>Audio Output</b>	EVX-531: 500 mW @ 4 Ohms [INT] / 350 mW @ 4 Ohms [EXT] EVX-534/539: 700 mW @ 16 Ohms [INT] / 350 mW @ 4 Ohms [EXT] EVX-531	
<b>Hum and Noise</b>	40 dB	
<b>Conducted Spurious Emission</b>	-57 dBm	
Transmitter Specifications <span style="float: right;">measured by TIA/EIA 603C</span>		
<b>Output Power</b>	5.0/2.5/1.0/0.25W	
<b>Emission Designator (Analog)</b>	16K0F3E/14K0F3E/11K0F3E	
<b>Modulation Limiting</b>	16K0F3E/11K0F3E	
<b>Conducted Spurious Emission</b>	70 dB below carrier	
<b>Hum and Noise</b>	45/40 dB	
<b>Audio Distortion</b>	3%	
<b>Frequency Stability</b>	±1.5 ppm	
<b>4FSK Digital Modulation</b>	Data: 7K60F1D/7K60FXD Voice: 7K60F1E/7K60FXE	
<b>Digital Protocol</b>	ETSI TS 102 361-1, -2, -3	

## Applicable MIL-STD

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