

# EVX-530 SERIES

## DIGITAL PORTABLE RADIOS

DMR Tier 2 Standard

**Vertex Standard**

eVerge™

SPECIFICATION SHEET - APAC

[www.vertexstandard.com/ap](http://www.vertexstandard.com/ap)

## 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 I; Groups C,D,E,F,G; Temp T3C hazardous locations.

### Site Search

Move between multiple sites seamlessly by using the Site Search functionality your EVX-530 series radio. Manually or automatically initiate Site Search 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.



**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 Search
- ▼ DTMF encode
- ▼ Escalart
- ▼ Remote Monitor
- ▼ 128 Record Contact List

## Accessories

- ▼ MH-81A4B: Over-the-head light duty VOX headset
- ▼ MH-37A4B-I Earpiece microphone
- ▼ MH-360S: Compact speaker microphone
- ▼ MH-450S: Speaker microphone
- ▼ MH-66A4B: IP 57 Submersible microphone
- ▼ FNB-VI33LI-UNI: 1380 mAh Li-Ion battery
- ▼ FNB-VI34LI-UNI: 2300 mAh Li-Ion battery
- ▼ FNB-VI34LIIS-UNI: 2300 mAh Li-Ion battery [IS]†
- ▼ FNB-VI36-UNI: 1200 mAh Ni-MH
- ▼ 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		
	VHF	UHF
Frequency Range	136 – 174 MHz	403 – 470 MHz 450 – 520 MHz 350 – 390 MHz (EVX-531 only)
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-vI34LIIS-UNI: 2300mAh Li-Ion FNB-VI34LI-UNI: 2300 mAh Li-Ion FNB-VI33LI-UNI: 1380 mAh Li-Ion	17.0 hrs (digital) / 14.0 hrs. (analog) 17.0 hrs (digital) / 14.0 hrs. (analog) 9.8 hrs (digital) / 8.1 hrs. (analog)	16.1 hrs (digital) / 13.6 hrs. (analog) 16.1 hrs (digital) / 13.6 hrs. (analog) 9.3 hrs (digital) / 8.0 hrs. (analog)
IP Rating	IP 57	
Operating Temperature Range	-22° F to +140° F (-30° C to +60° C)	
Storage Temperature Range	-40° F to +185° F (-40° C to +85° C)	
Dimension (H x W x D)	112.5 x 57.5 x 38 mm [with battery]	
Weight (Approx.) with Antenna, Belt Clip, EVX-531; EVX-534/539	315 g; 360 g w/FNB-VI34LI-UNI 276 g; 310 g w/FNB-VI33LI-UNI	
EVX-531; EVX-534/539		
measured by TIA/EIA 603C		
Sensitivity:	Analog 12 db SINAD: 0.25 uV Digital 1% BER: 0.28 uV	
Adjacent Channel Selectivity	TIA603: 70/60 dB TIA603B: 70/45 dB	
Intermodulation	65/60 dB	
Spurious Rejection	70 dB	
Audio Output	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	
Hum and Noise	40 dB	
Conducted Spurious Emission	-57 dBm	
Transmitter Specifications		
measured by TIA/EIA 603C		
Output Power	5.0/2.5/1.0/0.25W	
Emission Designator (Analog)	I6K0F3E/I4K0F3E/I1K0F3E	
Modulation Limiting	I6K0F3E/I1K0F3E	
Conducted Spurious Emission	70 dB below carrier	
Hum and Noise	45/40 dB	
Audio Distortion	3%	
Frequency Stability	±1.5 ppm	
4FSK Digital Modulation	Data: 7K60F1D/7K60FXD Voice: 7K60F1E/7K60FXE	
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