EVX-530 SERIES

DIGITAL PORTABLE RADIOS

DMR Tier 2 Standard



eVerge

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 IIequipped 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-539

4.1" H x 2.3" W x 1.34" D





Option Board Expandability





EVX-530 SERIES

everge.vertexstandard.com

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
- Escalert
- 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-lon battery
- VAC-UNI: Single-unit charger
- CLIP-20: Belt clip
- Leather cases available

EVX-530 Series Specifications

Frequency RangeVHF:136 - 174 MHzUHF:403 - 470 MHz 450 - 512 MHzNumber of Channels and Groups32 / 2 (EVX-531); 512 / 32 (EVX-531/539)Power Supply Voltage7.5 V nominalChannel Spacing25*/20*/12.5 kHzBattery LifeUHF:[5-5-90 duty w/battery saver]VHF:FNB-V134LI-UNI: 2300 mAh Li-Ion3.7 hrs [digital] / 12.0 hrs [analog]J.FNB-V133LI-UNI: 1380 mAh Li-Ion9.7 hrs [digital] / 7.4 hrs. [analog]J.P RatingIP 57Operating 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-UNIWeight (Approx.)9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:Digital 1% BER: 0.28 uVAdjacent Channel SelectivityTIA603: 70/60 dBIntermodulation65 dBSpurious Rejection70 dBAudio Output350 mW @ 4 0hms [INT]Audio Output350 mW @ 4 0hms [INT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBConducted Spurious Emission70 dB below carrierHum and Noise40 dBConducted Spurious Emission70 dB below carrierHum and Noise	General Specifications				
Number of Channels and Groups32 / 2 (EVX-531); 512 / 32 (EVX-534); 539)Power Supply Voltage7.5 V nominalChannel Spacing25*/20*/12.5 kHzBattery LifeVHF:[S-5-90 duty w/battery saver]VHF:FNB-V134U:-UNI: 2300 mAh Li-Ion15.8 hrs (digital) / 12.0 hrs (analog)9.7 hrs (digital) / 12.0 hrs (analog)9.1 hrs (digital) / 7.4 hrs. (analog)9.1 hrs (digital) / 12.0 hrs (analog)9.1 hrs (digital) / 7.4 hrs. (analog)9.1 hrs (digital) / 2.0 hrs (analog)9.1 hrs (digital) / 7.4 hrs. (analog)9.1 hrs (digital) / 2.0 hrs (analog)9.1 hrs (digital) / 7.4 hrs. (analog)9.1 hrs (digital) / 2.0 hrs (analog)9.1 hrs (digital) / 7.4 hrs. (analog)9.1 hrs. (digital) / 7.4 hrs. (analog)10 hrs (hrs. (analog)9.1 hrs. (analog)11 keight (Approx.)9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V133LI-UNIWeight (Approx.)9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CAdjacent Channel SelectivityTIA6032.70/60 dBIntermodulation65 dBSpurious Rejection70	Frequency Range	VHF: 136 - 174 MHz			
Power Supply Voltage7.5 V nominalChannel Spacing25*/20*/12.5 kHzBattery LifeVHF:[5-5-90 duty w/battery saver]VHF:FNB-V134LI-UNI: 2300 mAh Li-Ion15.8 hrs (digital) / 12.0 hrs (analog)9.1 hrs (digital) / 12.0 hrs (analog)9.1 hrs (digital) / 7.0 hrs. (analog)IP RatingIP 57Operating 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-UNIWeight (Approx.)9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:Digital 1% BER: 0.28 uVTIA603: 70/60 dBTIA603: 70/60 dBIntermodulation65 dBSpurious Rejection70 dBAudio OutputS00 mW @ 4 0hms (INT)Audio OutputS00 mW @ 4 0hms (INT)Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1E					
Channel Spacing25*/20*/12.5 kHzBattery Life (S-5-90 duty w/battery saver)VHF: 15.8 hrs (digital) / 12.0 hrs (analog)UHF: 15.8 hrs (digital) / 12.0 hrs (analog)FNB-V134L1-UNI: 2300 mAh Li-lon15.8 hrs (digital) / 12.0 hrs (analog)9.1 hrs (digital) / 1.0 hrs. (analog)FNB-V133L1-UNI: 1380 mAh Li-lon9.7 hrs (digital) / 12.0 hrs (analog)9.1 hrs (digital) / 1.0 hrs. (analog)IP RatingIP 57Operating 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-UNIReceiver Specificationsmeasured by TIA/EIA 6030Sensitivity:Digital 1% BER: 0.28 uVAdjacent Channel SelectivityTIA603: 70/60 dBIntermodulation65 dBSpurious Rejection70 dBAudio Output3500 mW @ 4 0hms [INT]Audio Output3500 mW @ 4 0hms [EXT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 d8Audio Distortion<5% (3% typical)Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1D / 7K60F1E	Number of Channels and Groups	32/2(EVX-531);512/32(EVX-534/539)			
Battery Life (S-S-90 duty w/battery saver)VHF: 15.8 hrs (digital) / 12.0 hrs (analog)UHF: 15.2 hrs (digital) / 11.5 hrs. (analog)FNB-V134L1-UNI: 2300 mAh Li-lon FNB-V131L1-UNI: 1380 mAh Li-lon 9.7 hrs (digital) / 7.4 hrs. (analog)9.1 hrs (digital) / 11.5 hrs. (analog)IP RatingIP S7Operating Temperature Range 0.1 transion (H x W x D)4.1 x 2.3 x 1.34 inches (106.7 x 58.5 x 34 mm) (w/FNB-V133L1-UNI)Weight (Approx.)9.9 oz (280 g) w/FNB-V133L1-UNI, 11.5 oz (325 g) w/FNB-V134L1-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:Digital 1% BER: 0.28 uVAdjacent Channel SelectivityTIA603: 70/60 dBIntermodulation65 dBSpurious Rejection70 dBAudio OutputS00 mW @ 4 0hms [INT]Audio Output500 mW @ 4 0hms [EXT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1D / 7K60F1E	Power Supply Voltage	7.5 V n	iominal		
[5-5-90 duty w/battery saver] FNB-V134LI-UNI: 2300 mAh Li-Ion FNB-V133LI-UNI: 1380 mAh Li-Ion FNB-V133LI-UNI: 1380 mAh Li-Ion FNB-V133LI-UNI: 1380 mAh Li-IonVHF: 15.8 hrs (digital) / 12.0 hrs (analog) 9.7 hrs (digital) / 7.4 hrs. (analog) 9.1 hrs (digital) / 7.0 hrs. (analog) 9.1 hrs (digital) / 7.0 hrs. (analog) 9.1 hrs (digital) / 7.0 hrs. (analog)IP RatingIP S7Operating Temperature Range22° 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) 9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNI Receiver SpecificationsWeight (Approx.)9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNI Receiver SpecificationsMalog 12 db SINAD: 0.25 uV Digital 1% BER: 0.28 uVAnalog 12 db SINAD: 0.25 uV Digital 1% BER: 0.28 uVAdjacent Channel SelectivityIntermodulation65 dBSpurious RejectionAudio OutputS000 mW @ 4 0hms (INT) 3500 mW @ 4 0hms (EXT)Hum and NoiseConducted Spurious EmissionTransmitter Specificationsmeasured by TIA/EIA 6030Output Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious EmissionTransmitter Specificationsmeasured by TIA/EIA 6030Output Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)	Channel Spacing	25*/20*/12.5 kHz			
FNB-V134LI-UNI: 2300 mAh Li-Ion FNB-V133LI-UNI: 1380 mAh Li-Ion15.8 hrs (digital) / 12.0 hrs (analog) 9.1 hrs (digital) / 7.0 hrs. (analog)IP RatingIP STOperating 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-UNIWeight (Approx.)9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:Digital 1% BER: 0.28 uVAdjacent Channel SelectivityTIA603: 70/45 dBIntermodulation65 dBSpurious Rejection70 dBAudio Output500 mW @ 4 0hms [INT] 350 mW @ 4 0hms [EXT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1E					
FNB-V133LI-UNI: 1380 mAh Li-Ion9.7 hrs (digital) / 7.4 hrs. (analog)9.1 hrs (digital) / 7.0 hrs. (analog)IP RatingIP 57Operating 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-UNIWeight (Approx.)9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:Digital 1% BER: 0.28 uVAdjacent Channel SelectivityTIA603: 70/60 dBIntermodulation65 dBSpurious Rejection70 dBAudio Output500 mW @ 4 0hms (INT)Audio Output350 mW @ 4 0hms (EXT)Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1E					
IP RatingIP 57Operating 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-UNIWeight (Approx.)9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:0.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:0.1 jital 1% BER: 0.28 uVJigital 1% BER: 0.28 uVTIA603: 70/60 dBAdjacent Channel SelectivityTIA603: 70/45 dBIntermodulation65 dBSpurious Rejection70 dBAudio OutputS00 mW @ 4 0hms (INT)Audio Output350 mW @ 4 0hms (EXT)Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1E					
Derating 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-UNIWeight (Approx.)9.9 oz [280 g] w/FNB-V133LI-UNI, 11.5 oz [325 g] w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:Analog 12 db SINAD: 0.25 uVBigital 1% BER: 0.28 uVTIA603: 70/60 dBAdjacent Channel SelectivityTIA603: 70/45 dBIntermodulation65 dBSpurious Rejection70 dBAudio OutputS00 mW @ 4 0hms [INT]350 mW @ 4 0hms [EXT]Hum and NoiseUtput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAddia Distortion5% [3% typical]Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1D / 7K60F1E	FNB-V133LI-UNI: 1380 mAh Li-Ion	9.7 hrs (digital) / 7.4 hrs. (analog)	9.1 hrs (digital) / 7.0 hrs. (analog)		
Dimension (Hx Wx D)4.1 x 2.3 x 1.34 inches [106.7 x 58.5 x 34 mm] [w/FNB-V133LI-UNIWeight (Approx.)9.9 oz [280 g] w/FNB-V133LI-UNI, 11.5 oz [325 g] w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:Analog 12 db SINAD: 0.25 uVDigital 1% BER: 0.28 uVAdjacent Channel SelectivityTIA603: 70/60 dBIntermodulation65 dBSpurious Rejection70 dBAudio Output500 mW @ 4 0hms [INT]Audio Output500 mW @ 4 0hms [EXT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBConducted Spurious Emission70 KB below carrierHum and Noise40 dBConducted Spurious Emission70 KB below carrierHum and Noise40 CBConducted Spurious Emission70 CB CB CONCENCEConducted Spurious Emissio	IP Rating	IP 57			
Weight (Approx.)9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNIReceiver Specificationsmeasured by TIA/EIA 603CSensitivity:Analog 12 db SINAD: 0.25 uVDigital 1% BER: 0.28 uVDigital 1% BER: 0.28 uVAdjacent Channel SelectivityTIA603: 70/60 dBIntermodulation65 dBSpurious Rejection70 dBAudio Output500 mW @ 4 0hms [INT]Audio Output500 mW @ 4 0hms [EXT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBConducted Spurious Emission70 dB below carrierHur and Noise40 dBAudio Distortion<5% (3% typical)	Operating Temperature Range	-22° F to +140° F (-30° C to +60° C)			
Receiver Specifications measured by TIA/EIA 603C Sensitivity: Analog 12 db SINAD: 0.25 uV Digital 1% BER: 0.28 uV Digital 1% BER: 0.28 uV Adjacent Channel Selectivity TIA603: 70/60 dB Intermodulation 65 dB Spurious Rejection 70 dB Audio Output 500 mW @ 4 0hms [INT] 350 mW @ 4 0hms [EXT] 40 dB Conducted Spurious Emission -57 dBm Transmitter Specifications measured by TIA/EIA 603C 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 Conducted Spurious Emission 70 dB below carrier Hum and Noise 40 dB 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 7K60F1E	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			
Analog 12 db SINAD: 0.25 uVBensitivity:Digital 1% BER: 0.28 uVAdjacent Channel SelectivityTIA603: 70/60 dBIntermodulation65 dBSpurious Rejection70 dBAudio Output500 mW @ 4 0hms [INT]Audio Output350 mW @ 4 0hms [EXT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBExample40 dBConducted Spurious Emission5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1E	Weight (Approx.)	9.9 oz (280 g) w/FNB-V133LI-UNI, 11.5 oz (325 g) w/FNB-V134LI-UNI			
Sensitivity: Digital 1% BER: 0.28 uV Adjacent Channel Selectivity TIA603: 70/60 dB Intermodulation 65 dB Spurious Rejection 70 dB Audio Output 500 mW @ 4 0hms [INT] 350 mW @ 4 0hms [EXT] Hum and Noise 40 dB Conducted Spurious Emission -57 dBm Transmitter Specifications measured by TIA/EIA 6030 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 Conducted Spurious Emission 70 dB below carrier Hum and Noise 40 dB 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 7K60F1E	Receiver Specifications	-	measured by TIA/EIA 603C		
Digital 1% BER: 0.28 uVAdjacent Channel SelectivityTIA603: 70/60 dBIntermodulation65 dBSpurious Rejection70 dBAudio Output500 mW @ 4 0hms [INT] 350 mW @ 4 0hms [EXT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBFrequency Stability±1.5 ppm4FSK Digital Modulation7K60F1E	Sensitivity:	Analog 12 db SINAD: 0.25 uV			
Adjacent Channel Selectivity TIA603C: 70/45 dB Intermodulation 65 dB Spurious Rejection 70 dB Audio Output 500 mW @ 4 0hms [INT] 350 mW @ 4 0hms [EXT] 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 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 7K60F1E		Digital 1% BER: 0.28 uV			
TIA603C: 70/45 dBIntermodulation65 dBSpurious Rejection70 dBAudio Output500 mW @ 4 0hms [INT] 350 mW @ 4 0hms [EXT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBGuitput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1E	Adjacent Channel Selectivity	TIA603: 70/60 dB			
Spurious Rejection70 dBAudio Output500 mW @ 4 0hms [INT] 350 mW @ 4 0hms [EXT]Hum and Noise40 dBConducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)		TIA603C: 70/45 dB			
Audio Output 500 mW @ 4 0hms [INT] 350 mW @ 4 0hms [EXT] 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 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 7K60F1E	Intermodulation	65 dB			
Audio Dutput 350 mW @ 4 0hms [EXT) 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 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 7K60F1E	Spurious Rejection	70 dB			
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 Modulation Limiting 16K0F3E / 11K0F3E Conducted Spurious Emission 70 dB below carrier Hum and Noise 40 dB Audio Distortion <5% (3% typical)	Audio Output	500 mW @ 4 0hms (INT)			
Conducted Spurious Emission-57 dBmTransmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)		350 mW @ 4 0hms (EXT)			
Transmitter Specificationsmeasured by TIA/EIA 603COutput Power5.0/2.5/1.0/0.25WModulation Limiting16K0F3E / 11K0F3EConducted Spurious Emission70 dB below carrierHum and Noise40 dBAudio Distortion<5% (3% typical)Frequency Stability±1.5 ppm4FSK Digital Modulation7K60F1E	Hum and Noise	40 dB			
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 7K60F1E	Conducted Spurious Emission	-57 dBm			
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 7K60F1E	Transmitter Specifications	-	measured by TIA/EIA 603C		
Conducted Spurious Emission 70 dB below carrier Hum and Noise 40 dB Audio Distortion <5% (3% typical)	Output Power	5.0/2.5/1.0/0.25W			
Hum and Noise 40 dB Audio Distortion <5% (3% typical) Frequency Stability ±1.5 ppm 4FSK Digital Modulation 7K60F1D / 7K60F1E	Modulation Limiting	16KOF3E/11KOF3E			
Audio Distortion <5% (3% typical) Frequency Stability ±1.5 ppm 4FSK Digital Modulation 7K60F1D / 7K60F1E	Conducted Spurious Emission	70 dB below carrier			
Frequency Stability ±1.5 ppm 4FSK Digital Modulation 7K60F1D / 7K60F1E	Hum and Noise	40 dB			
4FSK Digital Modulation 7K60F1E	Audio Distortion	<5% (3% typical)			
	Frequency Stability	±1.5 ppm			
Digital Protocol ETSI TS 102 361-1, -2, -3	4FSK Digital Modulation	7K60F1D / 7K60F1E			
	Digital Protocol	ETSI TS 102 361-1, -2, -3			

Applicable MIL-STD

	Methods/Procedures				
Standard	MIL 810C	MIL 810D	MIL 810E	MIL 810F	MIL 810G
Low Pressure	500.1/I	500.2/1,11	500.3/I,II	500.4/1, 11	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. Al	505.3/II Cat. Al	505.4/I, II Cat. Al	-
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	507.4/111	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

Specifications are subject to change without notice or obligation. *25 kHz will not be available on new equipment in the U.S.A. after 1/1/2013. VERTEX STANDARD is a trademark of Vertex Standard LMR, Inc. All other trademarks are the property of their respective owners. © Vertex Standard LMR, Inc. 2013

NSS_530_01/2013

Magnum Electronics, Inc. 927 Horsepond Road, Dover, DE 19901 Phone: 302-734-9250 www.magnumelectronics.com

