

EVX5400-EGY SERIES

DIGITAL PORTABLE RADIOS

DMR Tier 2 Standard

Vertex Standard

eVerge™

SPECIFICATION SHEET - EGYPT

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 favour 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

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.

Worker Safety Features

As with all Vertex Standard mobile radios, eVerge™ mobile radios include Emergency alert for enhanced driver safety.

Operators can activate the Lone Worker function when leaving equipment or a vehicle temporarily. If a problem arises while away, the radio switches to Emergency mode to alert help.

Site Search

Move between multiple sites seamlessly by using the Site Search functionality your EVX5400-EGY series provide. Manually or automatically initiate Site Search to identify the signal of the closest site with the strongest signal strength. The EVX5400-EGY mobiles will dynamically change its pre-programmed home site to the site with the strongest signal in range.



EVX5400-EGY



Back

165 x 45 x 155 mm



Additional Features

- ▶ 6 Programmable keys
- ▶ 8-Character alpha numeric display
- ▶ Programmable tri-color LED
- ▶ Voice compander
- ▶ Minimum volume control
- ▶ RSSI Indicator
- ▶ Direct channel entry
- ▶ CTCSS/DCS encode/decode
- ▶ MDC-1200® encode/decode
- ▶ 2-Tone encode/decode
- ▶ 5-Tone encode/decode
- ▶ Lone worker alert
- ▶ Emergency alert
- ▶ DTMF Speed dial
- ▶ DTMF Paging
- ▶ Remote stun/kill/revive
- ▶ Priority scan
- ▶ Follow-me scan
- ▶ Dual watch
- ▶ Public address/horn alert
- ▶ D-Sub 15-pin accessory connector
- ▶ Radio-to-radio cloning

Digital Mode Features

- ▶ Text messaging
- ▶ All call, Group call, Individual call
- ▶ Escalart
- ▶ Remote monitor
- ▶ PTT ID encode
- ▶ Mixed mode scan
- ▶ One touch access
- ▶ 128 Record contact list

Accessories

- ▶ MH-67A8J: Standard microphone
- ▶ MH-75A8J: Keypad microphone [16 keys]
- ▶ MD-12A8J: Desktop microphone
- ▶ MLS-100: External speaker, 12W
- ▶ LF-6: DC Line filter

EVX5400-EGY Series Specifications

| General Specifications | |
|--|---|
| Frequency Range | VHF: 136 - 174 MHz |
| Number of Channels and Groups | 512/32 [EVX-5400] |
| Power Supply Voltage | DC 13.6V +/- 20% |
| Channel Spacing | 25* / 12.5 kHz |
| Current Consumption | TX: 10A, RX: 2.5A, Standby: 0.4A |
| Operating Temperature Range | -22° F to +140° F [-30° C to +60° C] |
| Dimension (H x W x D) | 165 x 45 x 155 mm |
| Weight (Approx.) | 2.2 kg |
| Receiver Specifications Measured by TIA/EIA 603C | |
| Sensitivity: | Analog 12 db SINAD: 0.25 uV |
| | Digital 1% BER: 0.28 uV |
| Adjacent Channel Selectivity | TIA603: 60 dB @ 12.5 kHz, 70 dB @ 25 kHz |
| | TIA603C: 45 dB @ 12.5 kHz, 70 dB @ 25 kHz |
| Intermodulation | 70 dB |
| Spurious Rejection | 65 dB |
| Audio Output | Internal: 4 W @ 20 Ohms External: 12 W @ 4 Ohms < 5% THD |
| Hum and Noise | -40 dB @ 12.5 kHz, -45 dB @ 25 kHz |
| Conducted Spurious Emission | -57 dBm |
| Transmitter Specifications Measured by TIA/EIA 603C | |
| Output Power | VHF: 50 / 25 / 12.5 / 5 W |
| Modulation (Analog) | 16K0F3E/11K0F3E |
| Modulation Limiting | Analog +/- 5.0 kHz @ 25* kHz, +/- 2.5 kHz @ 12.5 kHz |
| | Digital: +/- 2.5 kHz |
| Conducted Spurious Emission | 70 dB below carrier |
| Hum and Noise | -40 dB @ 12.5 kHz, -45 dB @ 25 kHz |
| Audio Distortion | < 5% [3% typical] |
| 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 | - | 500.2/I | 500.3/I | 500.4/I | 500.5/I |
| High Temperature | 501.1/I,II | 501.2/I | 501.3/I | 501.4/I | 501.5/I |
| 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/II | 503.3/I | - | - |
| Solar Radiation | - | - | 505.3/II | 505.4/I | - |
| Rain | 506.1/II | 506.2/II | 506.3/II | 506.4/III | 506.5/I, III |
| Humidity | 507.1/II | 507.2/II | 507.3/II | - | - |
| Salt Fog | - | 509.2/I | 509.3/I | 509.4 / I | 509.5/I |
| Dust | - | - | 510.3/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 |