

## Spearhead<sup>®</sup> VHF Radio

Provides the dismounted Soldier with secure voice/data communications and situational awareness in a lightweight VHF handheld radio.



# Spearhead® VHF Radio

The Exelis Spearhead VHF portable, handheld tactical radio provides dismounted Soldiers secure, frequency hopping voice and packet data with integrated GPS in a small, lightweight package.

Supporting full interoperability with the Exelis SINGARS RT-1702 communications system, the software-programmable advantage of Spearhead VHF allows rapid deployment to specific customers who require varying features with different functional and operational needs. Spearhead VHF employs proven Exelis transmission and encryption security. This provides any country the ability to enforce their own unique, secure communications.

Voice operations are supported using an internal speaker and microphone or through the use of a range of attached audio ancillaries including a variety of headsets and handsets.

IP-based data communications allow operation with a wide range of data ancillaries and provide full access to the Tactical Internet.

The integrated GPS function includes local position displays, transparent secure position reporting to all net members, and display of received net member's location. Position reports can also be automatically provided to attached data systems.

## ACCESSORIES



GPS, 1 and 1/2 meter blade antennas



Handset



Ruggedized, multi-bay battery charger



Headsets



Desktop, single-bay battery charger



Ruggedized, single-bay battery charger pack



## SPECIFICATIONS

### System Characteristics

Frequency Range	30-88 MHz
Channels	2320
Preset Channels	8; Selectable via selector switch
Frequency Hopping Presets	6; Power-on default orthogonal hopsets provided
Data Interface	RS-232, standard PPP, in accordance with MIL-STD-220A, for local data devices
Operations	MIL-STD-188-220C with the Tactical Internet
Country Specific Security	Proven Exelis transmission and encryption security

### Operating Modes

Single Channel	Clear or secure (STANAG 4204 compliant)
Frequency Hopping	Clear or secure; full or partial band
Fill	Power-on default FH/CT Managed via AFD/A with CMS 7 or remote Over the Air

### GPS

Integrated Receiver	Standard internal 12 channel receiver
Antenna Interface	Passive or active; standard SMA connector
Local Position Display	Standard
Net Member Position Display	Grid coordinate or relative position (range and azimuth from own location)
Over the Air Position Reporting	Embedded within secure transmissions

### Receiver/Transmitter Characteristics

Receiver Sensitivity	-118 dBm (at 10 dB SINAD); increased comms range and connection reliability
Transmitter Power	100 mW, 2 W, 5 W

### Environmental

Operating Temperature	-20°C to +60°C
Testing	MIL-STD-810F; including immersion to 1 meter MIL-STD-461E

### Physical Characteristics

Size	76 mm wide x 53 mm deep x 218 mm high including battery (3 in wide x 2.08 in deep x 8.58 in high including battery)
Weight	<1.2 Kg (< 2.65 lbs), including battery and antenna (VHF + GPS)
Color	Two-tone; green and black or tan and black
Display	Multi-language monochrome graphics display

### Accessories

VHF Antenna	1 meter* or 1/2 meter blade; optional gooseneck 1/2 meter Helical; no gooseneck
GPS Antenna	Passive, quadrafilar helical*
Battery	Li-Ion rechargeable*; plastic or metal case
Battery Charger	Desktop or ruggedized; single** or multi-bay
Belt Clip	Rear mount; for handheld deployment
Pouch	MOLLE/ALICE compatible; for wearable deployment
Thermal Sleeve	Solar load comforter
Handset	H-250
Headsets; Data/Headset Cables	Consult factory for various available styles, configurations and length

\* Included in standard configuration

\*\* AC/DC, vehicle, and solar inputs available

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