

Tactical Radio Product

SHR-900

Advanced VHF-FH
Handheld Radio

High-Speed Hopping
1000 hops/s



The SHR-900 is a small, lightweight VHF-FH handheld radio including ground-to-ground communication and close-in air support for the quad and individual soldier. Also it can be used in other types of radio links: ship-to-ship, ship-to-shore, air-to-air communication, and so on.

5W output power and continuous coverage in the **225 MHz to 260 MHz** frequency band ensure that it can provide reliable, secure voice and data communications. The SHR-900 has user-selectable RF power output settings 0.2, 2, 5W and uses a rechargeable lithium-ion battery pack.

The SHR-900 supports powerful ECCM capability that protects communications from hostile jamming using **FASTFLEA frequency hopping**. FASTFLEA algorithms are designed to provide reliable communications in a jamming environment, even under the stress of battle.

The optional **MIRAGE-II based encryption** provides digital encryption for either voice (CVSD) or data traffic and can be customized as required.

Secure **Voice Communications** are provided by the built-in speaker/microphone, or through the 6-pin audio connector. Selectable voice modes are analog voice and digital CVSD.

Secure **Data Communications** are built-in short message and accepted data from the external terminal using 16 Kbps FSK modem.

The radio's **easy-to-use design** incorporates a full-function keypad and display (compatible with night vision equipment). Advanced low-power circuitry and a high-capacity, rechargeable lithium-ion battery provide **superior mission life**. The battery has a quick twist mount for easy connect and disconnect.



Specifications for the SHR-900

General

Frequency range	225 – 260 MHz
Frequency Stability	Better than 1 ppm
Modulation	FM, FSK
Data Interface	Synchronous (16 Kbps)
RF Interface	50 ohm nominal, unbalanced
Power input	Battery, Lithium Ion Rechargeable AC/DC adapter
Dimensions	69W × 190H × 39D mm without battery
Weight	< 1 kg including battery

Transmitter & Receiver

Power Output	0.25, 2 and 5 watts
Spurious Output	Greater than 50 dB
Harmonic Suppression	Greater than 47 dB
Sensitivity	-116 dBm for 12 dB SINAD
Image and IF Rejection	Greater than 65 dB
Squelch	Noise, Tone, CTCSS

Environmental

Test Method	MIL-STD-810F
Immersion	3 feet (1 meter)
Operating Temperature	-20°C to +60°C
Humidity	90% at 50°C

Standard Features

- MIRAGE-II encryption
- FASTFLEA ECCM (1000 hops/s)
- Built-In Speaker and Microphone
- Built-In Test
- Scan mode

Subsystem Component

- SHR-901 Headset
- SHR-902 Battery Charger
- SHR-904 RS-232 Interface cable
- SHR-910 Vehicle Charger Mount

Specifications are subject to change without notice.

SHR radio family



The SHR radio family has an expansive frequency range covering 1.6 – 512 MHz. This comprehensive coverage includes frequency bands and mandatory modulation modes for combat net radio operations, ground-to-ground, ground-to-air, ship-to-shore, ship-to-ship communications, and so on.

The multiband radios of the SHR family are one of the most advanced software-based radios in the world today. In the SHR radio family, the hardware can be reconfigured and software reprogrammed to optimize performance and add capabilities without opening the radio. Our SHR radios with easily reprogrammable features allow user demand to satisfy wonderfully.