

### **RF-5800V-HH**

#### **FALCON® II ADVANCED VHF TACTICAL HANDHELD RADIO**

*reliable secure tactical  
communications in a small  
rugged handheld*

The RF-5800V-HH is a small, lightweight VHF handheld that extends the outstanding performance of the Falcon II tactical radio family to the squad level. The RF-5800V-HH is interoperable with the other Falcon II radios: the RF-5800V-MP VHF manpack, the RF-5800H-MP HF/VHF manpack, the RF-5800M-MP Multiband manpack, and the RF-5800M-HH Multiband handheld.

Standard features of the RF-5800V-HH include Citadel® digital encryption, Quicklook 1A ECCM frequency hopping, wireless radio-to-radio fill, whisper operation and fixed frequency channel scanning.

The RF-5800V-HH provides data capability in fixed frequency and ECCM modes with automatic detection of incoming digital voice or data. The Quicklook 1A ECCM frequency hopping ensures reliable voice and data communications in a jammed environment.

The embedded Harris Citadel chip provides digital voice and data encryption, ensuring high-grade security for intra-squad communications and critical command and control message traffic. A customer-unique encryption algorithm for the Citadel is optional.

Advanced low-power circuitry and a high-capacity, rechargeable Lithium-ion battery provide superior mission life. The Lithium-ion battery has a quick twist mount for easy connect and disconnect. The 5-watt RF output power increases communication range and reliability. Other lower power settings (user-selectable) are available to accommodate mission needs.

Full operation of the RF-5800V-HH is available from the top of the unit, including on/off, net selection (for nets 1 through 5), and volume level. Configuration programming is available through the keypad/display. The keypad/ display provides operation very similar to the Falcon II VHF manpack, reducing training costs.

A 50-watt vehicle/base station adapter is available which allows the handheld radio to act as part of a high-power jerk and run radio system.



## General

<b>Frequency Range</b>	30 to 108 MHz
<b>Net Presets</b>	25
<b>Transmission Modes</b>	FM Analog Voice FSK 16 kbps CVSD Voice FSK 16 kbps Data
<b>RF Input/Output Impedance</b>	50 ohm nominal, unbalanced
<b>Power Input</b>	Battery or vehicle adapter
<b>Data Interface</b>	Synchronous (16 kbps) (RS-232; MIL-STD-188-114A)
<b>Dimensions</b>	2.5W x 8.8H x 1.6D inches (6.4W x 22.4H x 4.1D cm) including battery
<b>Radio Weight</b>	< 1 kg including battery
<b>Finish</b>	Green (per Fed Std 595B)

## Receiver

<b>Sensitivity: FM</b>	-116 dBm for 12 dB SINAD
<b>Audio Output</b>	9 mW at 1000 ohm to external handset
<b>Squelch</b>	Selectable: Off/Noise/Tone

## Transmitter

<b>Power Output</b>	250 mW, 2 and 5 watts (user selectable)
<b>Frequency Stability</b>	5 ppm
<b>Harmonic Suppression</b>	Greater than 47 dBc (2nd and 3rd) Greater than 57 dBc (all others)
<b>Spurious Suppression</b>	Greater than 50 dBc

## Environmental

<b>Operating Temperature</b>	-20°C to +60°C -31°C to +60°C (de-rated operation)
<b>Test Method Immersion</b>	MIL-STD-810F 3 feet (1 meter)

## Standard Features

- Citadel-based digital encryption (for digital voice/data)
- Quicklook 1A ECCM
- Fixed frequency channel scan
- Automatic whisper operation
- Wireless radio-to-radio fill capability
- Advanced power management and high capacity battery for long mission life
- Falcon II family interoperability
- High output power (5 watts)
- Rugged, small and lightweight
- Built-in speaker and microphone

## Included with Transceiver

- Small whip antenna
- Rechargeable Lithium-Ion Battery
- Operator's Card

## Optional Accessories

- H-250/U Handset
- Headset
- 1m Blade Antenna
- Additional Batteries
- Holster
- Single Bay Battery Charger
- 6-Bay Battery Charger
- RS-232 Serial Interface Data Cable
- Radio Programming Application for PC
- 50 W PA/Vehicle Mount