



assuredcommunications®

RF-7800V-HH

Handheld VHF Radio

High-Speed Data

*Direct Connection to
Tactical Peripherals*

BMS-Ready

Software-Defined

With the new Falcon III® RF-7800V-HH, your forces get a solution that gives them the ability to communicate more information, with greater speed and reliability—all crucial to achieving information superiority on the battlefield. Meanwhile, commanders get access to advanced real-time situational information that enables them to make faster, more informed decisions. The RF-7800V-HH combines performance and flexibility unlike any other VHF combat net radio available—handheld or manpack—in a platform that's highly portable and easy to use.

The RF-7800V-HH provides continuous coverage in the 30 to 108 MHz frequency band at 5 watts of power and up to 10 watts with a unique boost mode capability. Built-in transmission and communications security include Harris Corporation's Quicklook waveforms and embedded Citadel® II cryptographic technology provides 256-bit military grade and AES encryption for voice and data transmissions. Unique encryption algorithms, customer modified algorithms and customer-defined keys are also available.

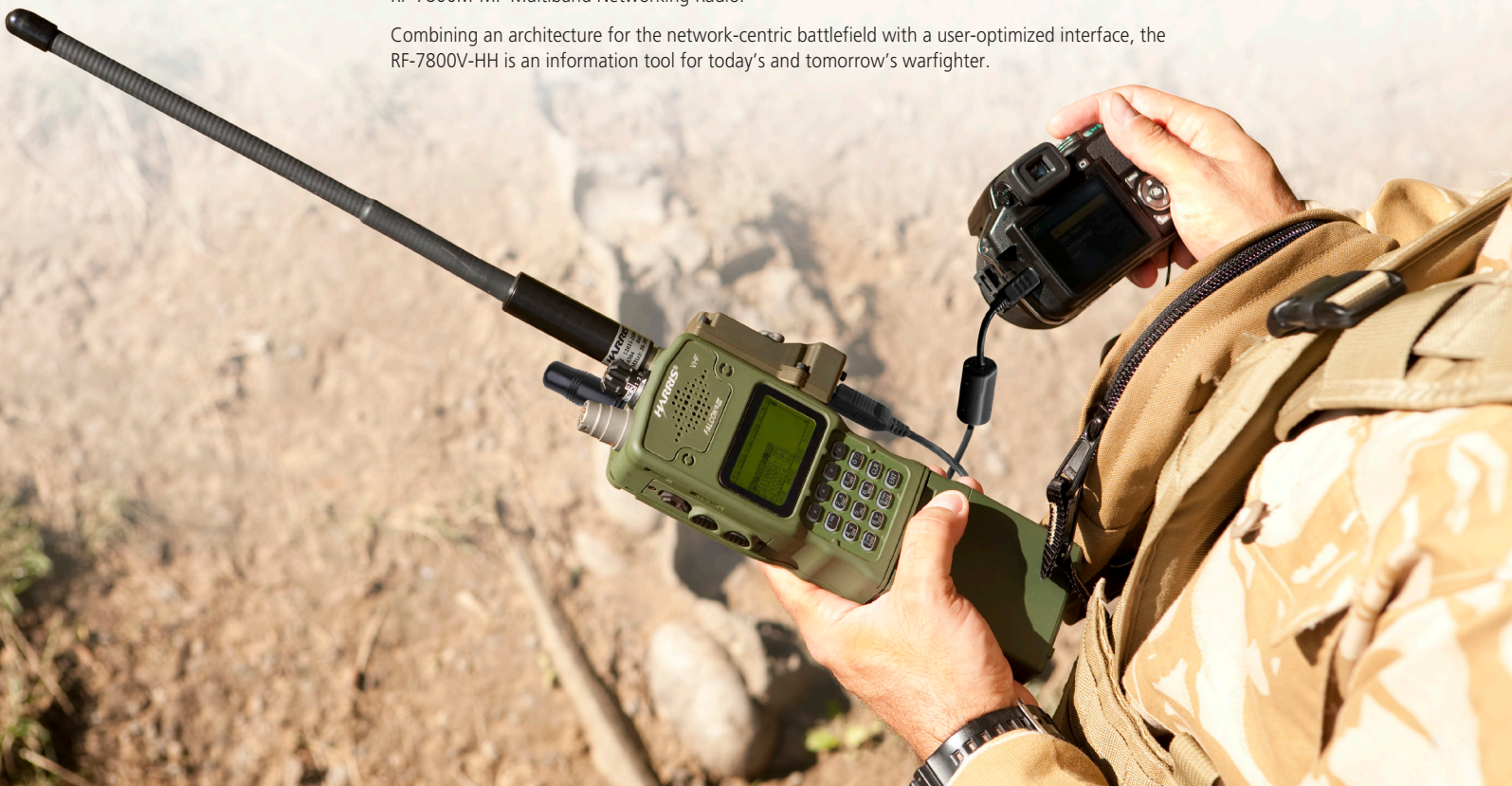
Built for battlefield voice and data networking, the RF-7800V-HH provides high-speed data connectivity up to 192 Kbps, making it the fastest VHF combat net radio available. Integrated Ethernet, USB, RS-232 or RS-485 connections allow tactical peripherals, such as digital cameras, to be plugged directly into the radio for uploading data. Additionally, Harris' embedded TacChat IP application provides an intuitive interface for sending files and text messages over the air. Combined, these features make field-based use of multimedia technology, such as video and high-resolution file sharing a reality, while eliminating the cost and complexity of in-field PCs.

The RF-7800V-HH is designed to support Battle Management System applications. An integrated TDMA waveform enables time critical situational awareness data communication to occur simultaneously across up to 64 radios, while embedded GPS delivers automated location tracking and identification.

Featuring Dual Push-to-Talk (PTT), operators can access two discrete channels, enabling simplified multi-echelon communications. Voice communications are available through the built-in speaker / microphone, or a variety of personal audio products. Automatic whisper sensitivity ensures clear communications in situations requiring operators to be quiet.

The RF-7800V-HH is interoperable with the Harris Falcon II® family of HF, VHF and Multiband radios including the RF-5800V-HH, RF-5800H-MP, RF-5800M-HH, and RF-5800M-MP, as well as the Falcon III RF-7800M-MP Multiband Networking Radio.

Combining an architecture for the network-centric battlefield with a user-optimized interface, the RF-7800V-HH is an information tool for today's and tomorrow's warfighter.



Specifications for the RF-7800V-HH

General

Frequency Range	30-108 MHz
Net Presets	25 total / 13 Selectable from switch
RF Input/Output Impedance	50 Ohms
RF-7800V-HH001 Standard Transmission Modes	FM Analog Voice FSK 2.4 kbps MELP Voice FSK 16 kbps CVSD Voice FSK/TCM up to 64k IP and DTE Data
RF-7800V-SW002 Additional Transmission Modes	FSK/TCM up to 192 kbps IP Data BMS Waveform 10W Boost Mode
Dimensions	9.71H x 2.94W x 2.43D in. (24.6 x 7.4 x 6.1 cm)
Weight	<0.7 kg (<1.1 kg with battery)
Future Proof	Software-defined radio
Color (All with CARC Finish)	Green (RF-7800V-HH001) Black (RF-7800V-HH002) Tan (RF-7800V-HH003)

Transmit

Output Power	0.25, 1, 2 and 5 Watts 10 watts with optional Boost Mode
Frequency Stability	± 1 ppm
Harmonics	-50 dBc
Spurious	-50 dBc

Receive

FM Sensitivity	-116dB @ 12dB SINAD
Adjacent Channel Rejection	50 dB
Squelch	Selectable: off/noise/tone/digital
IF Rejection	75 dB

Environmental (per MIL-STD-810F)

Operating Temperature	-30° to +60°C -25° to +60°C (with battery)
Shock	Drop
Immersion	5 m
Humidity	0.95
Vibration	Loose cargo

Features

ECCM	Quicklook 1A, Quicklook 2
Data Communications	Up to 64 kbps IP and DTE Up to 192 kbps IP (option)
TDMA	BMS Waveform (option)
Bandwidth	25 kHz 75 kHz (option)
COMSEC	Citadel® I & II and AES 128 & 256
GPS	12-Channel Internal
Data Interface	USB 2.0, Sync, Async and Ethernet
	Simultaneous Voice and Data
	Dual Net PTT
	Embedded TacChat IP Application

RF-7800-HH Standard Kit Contents

13 in. Whip Antenna	12001-2600-01
Operator Card	10515-0363-4100
User Manual	10515-0363-4200
High-Capacity Li-Ion Rechargeable Battery	12041-2100-OX
Radio Programming Software	10518-2930-01
GPS Antenna	12041-6550-01

Accessories

Remote KDU	12113-1000-0x
Battery Charger	1, 2, 6-bay chargers/conditioners
Data Cables	<ul style="list-style-type: none"> • 12067-7180-A006 PPP Cable • 12067-7210-A006 Sync Data Cable, 25-pin • 12067-5250-01 Retrans Cable • 12067-5220-01 Ethernet with RJ-45
Data Adapters	<ul style="list-style-type: none"> • 12067-5600-01 USB Type A • 12067-5700-01 USB Type Mini A-B • 12067-5200-01 Ethernet with RJ-45
Vehicular Power Amplifier/Adapter	<ul style="list-style-type: none"> • RF-7800V-V501 (Green) • RF-7800V-V502 (Black) • RF-7800V-V503 (Tan)
High-Capacity Li-Ion Batteries	12041-2100-OX
Antennas	Blade, Whip and Dismount Options—consult catalog for details and part numbers
Headset	Numerous types—consult catalog for details and part numbers
Handset	H-250 style
Holster	Mollie/web compatible—consult catalog for details and part numbers
Tactical Accessory Bag	12041-1595-01



RF Communications | 1680 University Ave. | Rochester, NY USA 14610 | 585.244.5830 | www.harris.com

Get quotes real-time at eHarris. Order parts online at: <https://premier.harris.com/rfcommsales>