

## FALCON III® RF-7800V-HH

### VHF Networking Handheld

The L3Harris RF-7800V-HH combines the small-profile portability of a handheld with the power and long-range performance of a manpack. Equipped with enhanced Falcon III narrowband capabilities, it is also interoperable with the L3Harris Falcon II® radio family.

The VHF Networking Handheld is ideal for traditional CNR missions, ground-to-air and company and below voice and data communications. When used with the optional L3Harris 50 W Power Amplifier, this handheld also plays a key role at the mid-tier level of any tactical network.

The RF-7800V-HH leverages the TDMA Networking Waveform family for true simultaneous voice and data services over narrowband and ECCM channels. This waveform family is also available in the Falcon III Multiband, airborne, and soldier radios, supporting seamless communications across the battlefield.

The large multilingual display and built-in WebUI applications deliver maximum mission flexibility. Now, capabilities such as text and file transfer can be accessed directly from the radio, further reducing soldier payload. The optional WebUI provides additional applications including friendly force tracking, video streaming, remote control and others, for use at all levels of the battlefield.



### LONG-RANGE, HIGH-SPEED, COMBAT NET RADIO (CNR)

#### KEY BENEFITS

- High-speed narrowband networking
- Secured with L3Harris Citadel™ and AES encryption
- Manpack performance in a handheld
- High-rate ECCM and Free Channel Search
- L3Harris Falcon II and Falcon III interoperability
- Software Defined Radio (SDR) architecture
- Available ARROW™ waveform enables resilient interoperability with L3Harris RF-7850M/A/D, AN/PRC-158, AN/PRC-163 and AN/PRC-167 radios.

GENERAL		ENVIRONMENTAL	
RT Nomenclature	RF-7800V-HH	Temperature	Operation: -30°C to +60°C (-22°F to +140°F) Storage: -40°C to +85°C (-40°F to +185°F)
Frequency Range	30-108 MHz	Immersion	5 meters
Channel Spacing/Bandwidth	25 kHz, 75 kHz*	MIL-STD 810G	Altitude storage Rapid decompression Solar radiation Humidity Sand and dust Vibration Transit drop Fungus
Net Presets	25 total/13 selectable from switch		Altitude operation Thermal shock Blowing rain Salt fog Explosive atmosphere Functional shock Icing/freezing rain
GPS	Internal GPS Accepts external GPS input		
Software Environment	Software Defined Radio		
TRANSMITTER		INTERFACES	
Power Output	Selectable .25, 1, 2, 5 watts High + Power-out mode 10 watts +1/-2db	Data	IP, USB RNDIS, Serial, PPP, WPAN
Harmonic Suppression	> -50 dBc typical	Audio	Standard 6-Pin, IP
Audio Output	Variable and fixed level	Antenna Port	TNC; 50 Ohms
Frequency Stability	+/- 1 parts per million	Programming	USB, Ethernet
RECEIVER		Remote Control	IP, Serial
Sensitivity	FM: -116dBm @ 12dB SINAD	Web UI	IP, Web Browser(Chrome, FireFox)
Squelch	Selectable: Off, noise, tone, digital		
IF Rejection	> 70 db		
POWER		STANDARD KIT INCLUDES	
Power Input	10V to 13V	Part Number	Description
Power Consumption	35 watts	12011-2600-01	Whip Antenna
		12041-2400-XX	High-Capacity Li-Ion Rechargeable Battery
		10515-0363-4100	Quick Reference Guide
SECURITY		*Indicates RF-7800V-SW002 software option Please visit l3harris.com for added information	
Encryption	128 & 256 bit L3Harris proprietary and AES Customer Algorithm Modification (CAM)		
MODES AND WAVEFORMS			
Voice and Data Modes	FM Analog Voice FSK MELP Voice FSK CVSD Voice		
ECCM	Quicklook 1A, 2, 3 and Quicklook-Wide*		
Narrowband Networking	TDMA Networking Waveform (TNW) 25K* and 75K*		
Optional Waveforms	SINCGARS with Pavilion encryption ARROW		
PHYSICAL			
Dimensions	9.71 H [10.6 with GPS] x 2.94 W x 2.77 D in (24.7 H [26.9 with GPS] x 7.5 W x 7 D cm)		
Weight	2.41 lbs (1.09 kg) with battery		
Color/Finish	Green (RF-7800V-HH101) Black (RF-7800V-HH102) Tan (RF-7800V-HH103)		

#### RF-7800V-HH VHF Networking Handheld

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