



## WIDEBAND NETWORKING HANDHELD

# RF-7800M-HH

### FEATURES

- > Wideband networking
- > SCA platform
- > Interoperable with the RF-7800M-MP
- > Built-in speaker/microphone
- > Full numeric keypad
- > Night Vision Goggle compatible display
- > Internal GPS
- > Supports multiple mission plans

The FALCON III® RF-7800M-HH wideband networking radio provides voice, high speed networked data, and full-motion video services on the move. The single-channel voice and data-capable radio covers 30 to 512 MHz frequency range. The dual band radio can support narrowband and wideband waveforms and operates off a single standard battery, providing extended mission life. The radio can support narrowband (25 kHz or less) waveforms from 30 to 512 MHz, and wideband (1.2 MHz) waveforms from 225 to 450 MHz. The radio provides secure communication through the use of AES or Citadel encryption standards.

The RF-7800M-HH enables high speed networked data using the Harris Adaptive Networking Wideband Waveform (ANW2). ANW2 uses innovative intelligent protocols that do not require the presence of a designated network control station—each radio automatically discovers and joins an authorized network. Ad-hoc networking allows automatic and transparent relay through an available station while also healing the network if a station leaves, ensuring network reliability.

The RF-7800M-HH features the Software Communications Architecture (SCA) operating environment, providing the optimal transition to software defined radio technology. The SCA architecture enables loading of future waveforms. Built-in AES and Citadel encryption provide high-grade security for all transmissions using a 256-bit key. The Quicklook ECCM waveform also protects narrowband voice and data from hostile interference.

The RF-7800M-HH supports full interoperability with Harris' RF-7800M-MP wideband manpack, therefore allowing seamless communication from dismounted soldiers to upper-echelon networks. The radio quickly and efficiently transmits mission-critical voice, data and video in the most challenging urban communications environments.

The RF-7800M-HH is the wideband radio that can deliver IP-based mobile ad-hoc networking to warfighters at the tactical edge.



# SPECIFICATIONS FOR: RF-7800M-HH



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## GENERAL

<b>Frequency Range</b>	Narrowband: 30-512 MHz Wideband: 225-450 MHz
<b>Channel Spacing</b>	Narrowband: 12.5 kHz, 25 kHz Wideband: 1.2 MHz
<b>Presets</b>	99 (standard); unlimited using multiple mission plan files
<b>Tuning Resolution</b>	Tuning Resolution 10 Hz
<b>Software Environment</b>	SCA v2.2.2
<b>Frequency Stability</b>	+/- .5 ppm
<b>Output Power</b>	250 mw to 5W
<b>Encryption</b>	AES/Citadel

## SPECIFICATIONS

<b>Dimensions (GPS)</b>	2.9 W x 9.675 H x 2.5 D in. (with battery) 7.37 W x 24.38 H x 6.35 D cm with battery)
<b>Weight (GPS)</b>	2.7 lbs. (1.22 kg) (with battery and antenna)

## VOICE AND DATA

### WIDEBAND

<b>Voice Mode</b>	CNR Voice Mode
<b>Data Mode</b>	380 kbps to 1.2 Mbps PSK

### NARROWBAND

<b>Voice Mode</b>	AM/FM Line of Sight
<b>Data Mode</b>	16 kbps FSK/ASK
<b>ECCM</b>	Quicklook 1A, 2

## INTERFACE

<b>External DATA</b>	RS-232
<b>Programming Remote Control</b>	USB/RS-232
<b>Antenna</b>	50 Ohm TNC

## ENVIRONMENTAL

<b>Test Method</b>	MIL-STD-810G
<b>Vibration</b>	Loose cargo
<b>Immersion</b>	2 meter (20 meter option)
<b>Temperature</b>	-30°C to +60°C -20°C to -60°C Radio with Li Ion Battery

## STANDARD KIT

Blade Antenna
Rechargeable Lithium-Ion Battery
Operator's Manual
Electronic Pubs on CD (E-pub series)
Communications Programming Application

\* Initial release of the product will only contain Wideband and Narrowband capabilities outlined.

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