

assured communications °

RF-310M-HH

SUITE B COMPATIBLE MULTIBAND HANDHELD RADIO

Secret and below

interoperable, non-CCI

communications for

U.S. DoD, NATO, and

coalition forces

The Falcon III® RF-310M-HH Suite B Compatible Multiband Handheld Radio is the first Suite B compatible radio, a non-CCI variant of Harris' widely-fielded NSA-certified Type-1 AN/PRC-152(C) multiband, multimission handheld. Featuring the same JTRS Software Communications Architecture (SCA) operating environment as the AN/PRC-152, the RF-310M-HH offers revolutionary Secret and below interoperability for U.S. Department of Defense (DoD), NATO and coalition forces.

Ideal for homeland security operations, the RF-310M-HH supports secure communications that bridge the gap between U.S DoD agencies, emergency first responders, and state and local agency personnel. A first for tactical radios, NATO customers can use the radio for both coalition interoperability and national needs through locally generated, independent sovereign key management.

The RF-310M-HH is secured with Suite B compatible cryptography and key management techniques, incorporating Harris Sierra IIB programmable encryption. The Advanced Encryption Standard (AES) and keying standards are used to handle voice and data traffic at the U.S. Secret level and below. Suite B cryptography provides a common set of cryptographic algorithms to meet the varying communications needs of U.S. government, NATO and coalition forces. The radio also features two independent key fill interfaces, a dedicated key fill/programming interface and an EKMS (DS-101) fill interface. Multiple mission fill files can be stored to extend the adaptability of fielded radios.

Covering the 30 to 512 MHz frequency range, the RF-310M-HH provides selectable RF output up to 5 watts. Current waveform support includes VHF/UHF AM and FM and APCO P25, with future upgrades to include SCIP (AES) NATO STANAG and the Quicklook VHF/UHF ECCM waveform.

An optional embedded GPS receiver displays local position and provides automatic position reporting for situational awareness in the field. AN/PRC-152(C) radio accessories are compatible with the RF-310M-HH.



HAS BEEN
SUBMITTED FOR NSA
CERTIFICATION
TESTING



Specifications for the RF-310M-HH

	General
Frequency Range	30-512 MHz
Presets	99 (standard); unlimited using multiple mission plan files
Transmission Modes	FM, AM, PSK, CPM, FSK
Tuning Resolution	10 Hz

Transmitter	
Output Power	250 mW to 5 W High Power Mode
Harmonic Suppression	–47 dBc
Frequency Stability	+/- 2.5 ppm

	Receiver
FM Sensitivity	-116 dBm (12 dB SINAD)
FM Deviation	5, 6.5 and 8 kHz
Adjacent Channel Rejection	Greater than 55 dB
Squelch	Selectable (tone, noise, CDCSS, CTCSS)

Interoperability	
Fill Devices	EKMS (DS-101)
Crypto Modes	AES
Radios	AN/PRC-152(C) Multiband Multimission Radio RF-1033M Land Mobile Radio
GPS	PLGR, DAGR

	Interfaces
External Data	RS-232, RS-422, MIL-STD-188-114A
Programming/Remote Control	USB/RS-232
Antenna	50 Ohm TNC
Audio	Six-pin standard

	Physical
Dimensions	$2.9~W \times 9.6~H \times 2.5~D$ in. (with battery and GPS)
Weight	2.7 lbs. (with battery)
Volume	42 in. ³ (with battery and GPS)

	Environmental
Temperature	Radio: -31° to $+60^{\circ}$ C Radio with Li Ion Battery: -20° to $+60^{\circ}$ C
Immersion	2 meters
Test Method	MIL-STD-810F
Finish	CARC Green

Key Features
Non-CCI device
SCA v2.2 compliant
Sierra IIB programmable crypto
Built-in speaker/mic
Full numeric keypad
NVG compatible display
Embedded GPS (optional)
MELP
Wireless cloning
Long-life internal Hold-up Battery (HUB)
Supports multiple mission plans

Waveforms
VHF/UHF AM and FM
APCO P25
VULOS 16K Retransmit
SCIP AES (Future release)

Accessories
30-512 MHz small whip antenna (included)
Rechargeable lithium-ion battery (included)
30-108 MHz 1 meter blade antenna (included)
Operator's manual (included)
Holster
RF-5912-PS001 Battery Eiminator
RF-5911-PS001 AA Battery Adapter
Audio headsets, H-250 handset
RF-300M-HV Vehicular Adapters
12041-3100-01 Lapel Speaker/Mic



RF-310M-HH with GPS option



