HARRIS®

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RF-5800-RU

TACTICAL RETRANSMISSION UNIT

The Tactical Retransmission Unit (TRU) is a small, lightweight extension to the FALCON II® family of tactical radios that allows encrypted voice or data transmission range to be extended in a repeater or rebroadcast configuration.

The unit is a self-contained assembly designed for unattended operation. The unit does not require encryption/decryption capability, thus eliminating the need for physical site security. The user interface includes a password-protected screen blanking and keypad lock feature to avoid compromise of any communication plan details. The small size and weight of the TRU can be adapted to fixed-site, mobile, or manportable platforms.

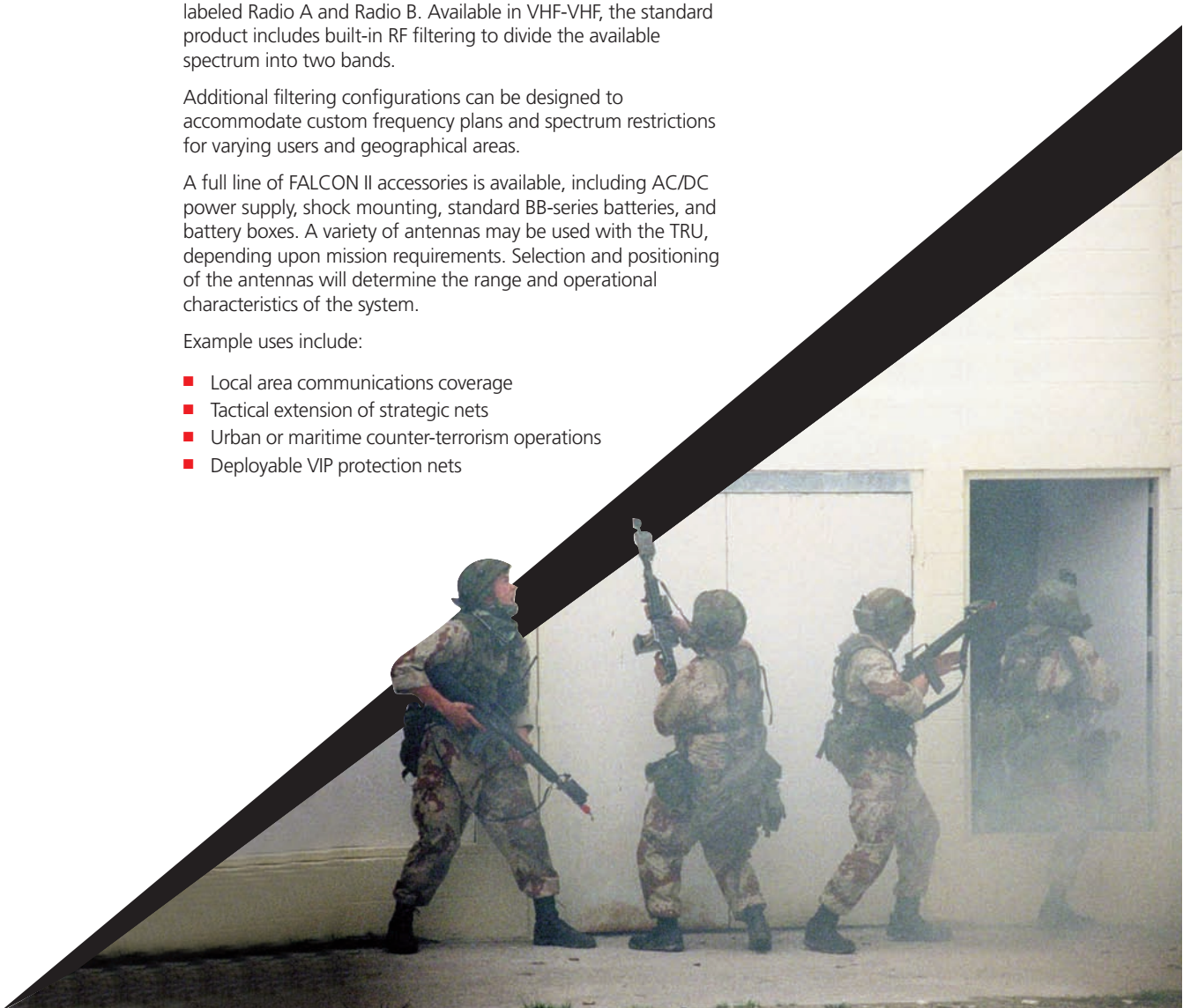
The TRU is configured as two frequency-independent radio units, labeled Radio A and Radio B. Available in VHF-VHF, the standard product includes built-in RF filtering to divide the available spectrum into two bands.

Additional filtering configurations can be designed to accommodate custom frequency plans and spectrum restrictions for varying users and geographical areas.

A full line of FALCON II accessories is available, including AC/DC power supply, shock mounting, standard BB-series batteries, and battery boxes. A variety of antennas may be used with the TRU, depending upon mission requirements. Selection and positioning of the antennas will determine the range and operational characteristics of the system.

Example uses include:

- Local area communications coverage
- Tactical extension of strategic nets
- Urban or maritime counter-terrorism operations
- Deployable VIP protection nets



Specifications for the RF-5800-RU

General

Frequency Range	30-50 MHz and 65-108 MHz
Net Presets	25
Transmission Modes	FM analog voice FSK 16 kbps CVSD voice FSK 16 kbps Data (synchronous)
RF Input/Output Impedance	50 Ohms nominal, unbalanced
Power Input	10.5 - 34.5 VDC
Size (maximum envelope)	3.2H x 10.5W x 9.6D inches (w/o battery case)
Weight	9.8 lbs. (w/o batteries or battery case)
Color/Finish	CARC green 383

Receiver

Sensitivity: FM	-114 dBm for 12 dB SINAD
Squelch	Selectable: noise/tone

Transmitter

Power Output	0.2, 1.5, and 4 Watts (user selectable)
Frequency Stability	5 ppm
Harmonic Suppression	Greater than -47 dBc (second and third), -57 dBc all others
Spurious Suppression	Greater than 50 dBc

Environmental

Operating Temperature	-20 to +60 C operation -31 to +60 C derated -31 to +70 C storage
Test Method	MIL-STD-810F
Immersion	3 feet (1 meter)
Altitude	Up to 15,000 ft. (4,500 m)

Standard Features

- Single package retransmission capability
- Rugged, small, and lightweight "Set-and-Forget" capability
- PIN-accessible keypad lock with screen blanking
- Lack of cryptographic content precludes the need for physical security
- FALCON II® family interoperability

Included with Retransmission Unit

- Battery Case
- Operator's Manual

Optional Accessories

- Deployable antenna masts with co-linear mounts
- RF-5211-VSM050 vehicular shock mount
- RF-5870-VM001 shock mount
- RF-5870-VM002 shock mount locking kit (for the RF-5870-VM001)
- RF-5850-PS001 battery eliminator
- BB series batteries
- RF-6550V radio programming application
- Solar power option

Specifications subject to change without notice.

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