



L3HARRIS™
FAST. FORWARD.

RF-5382H-CUXXX

Fast-Tune Automatic Antenna Coupler

GENERAL	
Primary Power Requirements	16 to 40 VDC
Remote Capability	Up to 250 feet separation between transceiver and coupler
HIGH VOLTAGE ANTENNA PORT	
Rated RF Input	Up to 150 watts PEP and Average
Tuning Capability (1.6 to 30 MHz)	8 to 35 foot whips 25 to 150 foot long wires 40 to 100 foot dipoles (including RF-1912 and RF-1936)
Tuning Accuracy	Automatically tunes to 50 ohms to within a VSWR of 2:1
Memory Tuning Time	150 milliseconds
New Frequency Tuning Time	4 seconds maximum, typically less than .5 seconds
Efficiency	Efficiency depends on frequency, antenna length and ground plane
50-OHM ANTENNA PORT	
Rated RF Input	Up to 150 watts PEP and Average
Antennas	Broadband and dipole resonant fixed frequency antennas that remain 50-ohm resistive
VHF Operation	Automatically switches output to 50-ohm port (N-connector)
ELECTRICAL	
Channel Capability	500 channel independent memory for each output port
Collocation Rejection	Operates in collocated installations with 5% frequency separation
Protection Features	Protection from high VSWR, high temperature, RF over-voltage and over-current Lighting surge protection on all control lines and RF single path Antenna static bleed drain; can tune or key into open or short without damage
HF Bypass	Automatic and manually controlled transmit and receive bypass
VHF Bypass	Automatic transmit and receive through 50-ohm antenna port
BIT	Fault isolation to module level



The RF-5382H automatically matches the output of the Falcon II® and Falcon III® series of HF transceivers to a variety of whip, dipole and long-wire antennas over the 1.6 to 30 MHz frequency range. The coupler's tuning time from memory is less than 150 milliseconds, supporting advanced waveforms and network protocols requiring rapid, reliable frequency changes in severe environmental conditions.

Ruggedized for use in vehicular, transportable, shipboard and fixed-station applications, the RF-5382H-XXX features a frequency selective discriminator, providing precision tuning in difficult cosite installations in highly mobile tactical platforms. The antenna coupler is fully compatible with Falcon II and Falcon III MIL-STD-188-141B and STANAG-4358 Automatic Link Establishment protocols.

ENVIRONMENTAL

Test Method	Per MIL-STD-810F
Shock and Vibration	Ground mobile (with RF-5384VM-01 Shock Mount)
Immersion	3 feet (0.9 m) of water
Operating Temperature	-40°C to +70°C

PHYSICAL

Dimensions	6.8 H x 9.3 W x 14.7 D in (including projections) 17.3 H x 23.6 W x 17.3 D cm (including projections)
Weight	17.5 lbs (8 kg)
Color	RF-5382H-XXX is CARC Green 383 RF-5382H-CU071 is CARC Tan RF-5382H-CU002 is Navy Gray RF-5382H-CU051 is NATO Green

ACCESSORIES AND CABLES

Accessories Supplied	Coupler mounting hardware, installation material and safety shield
Cables	Control: 12020-1460 Coax: 10181-9824 for 100, 125 and 150 W systems; 10369-7211 for 20 W systems
Shock Mounts	RF-5384VM-01 (tracked and wheeled vehicles)
Sun Shield	12020-1194-01
Siting Kits	RF-5351-AT Series
Transit Case System	RF-5382H-TM001

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