

assuredcommunications™

RF-390 MULTIBAND VEHICULAR ANTENNA SERIES

for tactical, C3I, or battlefield

conditions using new

broadband antenna

technology

The RF-390 multiband vehicular whip antenna series is designed for tactical, C3I, or battlefield conditions using new broadband antenna technology. Its design provides maximum performance for the latest in multimission military radios; the AN/PRC-117F, RF-5800M, RF-5800V, and RF-5800U. Now, a single antenna can provide exceptional gain and instantaneous bandwidth performance over the 30 to 512 MHz spectrum. This unique electrical design puts the power pattern on the horizon allowing exceptional LOS and BLOS communications even in the harshest conditions

The bandwidth is achieved by distributive passive components avoiding lumps to provide a mechanically strong but flexible structure. Being passive, there is no need for an antenna tuner, bandswitching, or operator intervention. The RF-390 is designed to meet and exceed the rigors of MIL-STD-810 tests for both mechanical and environmental characteristics, as well as SINCGARS standards for tactical survivability along with high-voltage power line protection.

The RF-390 is the ideal choice for multiband radios because it reduces the vertical signature by replacing multiple antennas with a single antenna. Its feed through spring base mounts directly to a NATO standard 4.5" bolt circle or Harris RF-292 Universal Antenna Mount.

Specifications for the RF-390

Electrical

■ Frequency Range: 30 to 512 MHz

■ Polarization: Vertical

■ Impedance: 50 Ω (nominal)

VSWR: 3.5:1 (30-90), 2.5:1 (90-512)

■ Gain: -6 dB to +1 dB ref 1/4 Wave radiator

on 10'x10'x10' Ground Plane

■ Power Rating: 50 W continuous

■ Matching: Passive, distributive

■ Radiation Pattern: Omnidirectional

Features

■ Instantaneous bandwidth for ECCM waveforms

■ Dual or single port

Multi-sectional

■ Standard NATO bolt pattern

■ Feed through base with spring

■ High voltage protection

Models

Antenna	Connector	Color Matrix
RF-390-AT001	Dual BNC port	CARC Green 383
RF-390-AT002	Dual BNC port	CARC Tan
RF-390-AT003	Single Type N port	CARC Green 383
RF-390-AT004	Single Type N port	CARC Tan
RF-390-AT005	Single BNC port	CARC Green 383
RF-390-AT006	Single BNC port	CARC Tan

Mechanical

■ **Height:** 2.8 m (110 in)

■ **Weight:** 3.5 kg

RF Connector: BNC female or Type NColor: CARC 383 Green or CARC Tan

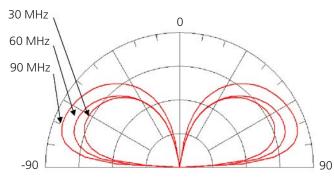
Wind Rating: 70 mphHV Protection: 20 kV RMS

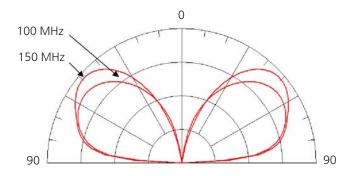
■ Mounting: Four 0.5 in holes spaced on 4.5" BHC

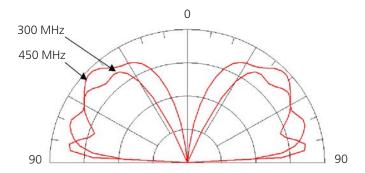
(Hardware included)

Bolts directly to RF-292 (not included)

Radiation Patterns Over Average Ground







Specifications are subject to change without notice.

