HARRIS®

assuredcommunications™

RF-398-02/03

VHF LOW-BAND, VERTICAL DIPOLE ANTENNA SERIES

The RF-398-02/03 antenna series is a center-fed, EMP protected, broadband (30 to 90/108 MHz), vertically polarized whip antenna designed for permanent mounting on vehicles, shelters, towers, etc.

While providing a slightly lesser gain than the end-fed RF-388A (AS-3013/VRC) antenna, the RF-398-02/03 antenna series does not require a good ground plane for optimum performance, making this antenna ideal for vehicle, tower, or rooftop installations where good ground plane is not available. The RF-398-02/03 antenna series is rated at 100 watts, with a nominal impedance of 50 ohm. It maintains a VSWR of less than 3.5:1 over the entire frequency spectrum, without the need for tuners or band switching.

The unit consists of two fiberglass radiating sections, a mount with a flexible spring, and mounting hardware. Order the RF-292 Universal Antenna Mount for vehicular mounting or the RF-1584 Antenna Mast Mount for tower mounting.

General

Frequency Range
RF-398-02: 30 to 90 MHz
RF-398-03: 30 to 108 MHz

Polarization
Vertical

Impedance
50 ohms (nominal)

VSWR
Less than 3.5:1 (per MIL-A-49283)

Gain
30 MHz: -6.3 dB*
50 MHz: -1.2 dB*
90 MHz: -3.0 dB*

*reference to a 1/4 Quarter wave whip on ground plane

Power Rating
100 Watts

Matching Circuit
Passive, broadband

Radiation Pattern
Omnidirectional

Salt Spray
Salt spray resistant

Height
2.9 m (117 in)

Weight
4.3 kg (9.5 lb)

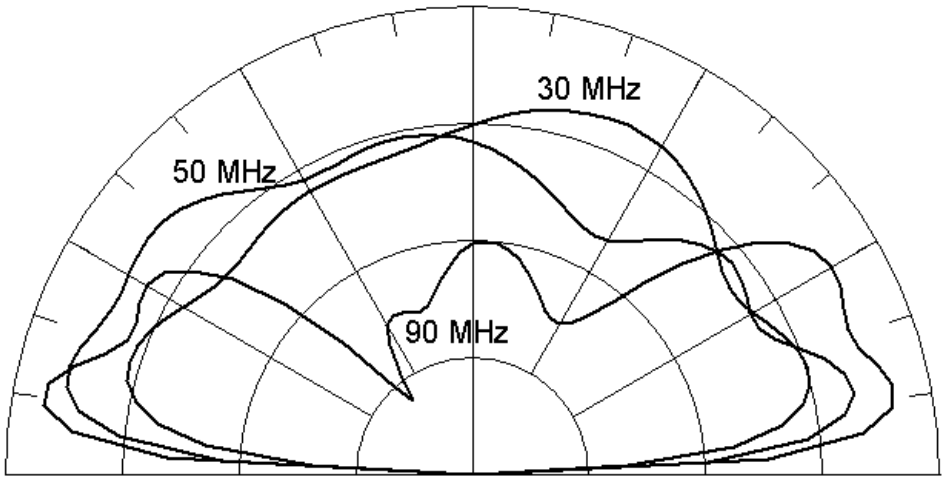
RF Connection
BNC female

Bolt-Hole Pattern
Four 0.437 inch holes spaced on a 4.5 inch bolt-hole circle

Construction
Color: MIL-STD-383, Military Green
Radome: G-10 Fiberglass
Spring: Stainless Steel with black oxide coating
Insulator: Polycarbonate

Features

- Center feed to reduce platform dependence
- Multi-section for easy assembly/ disassembly
- Standard NATO bolt pattern for easy mounting
- Instantaneous bandwidth, no tuning
- Feed through base with spring
- Provides EMP protection



Typical Elevation patterns for HMMWV mounting at 30, 50, and 90 MHz

Specifications are subject to change without notice.

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