HARRIS®

assuredcommunications™

RF-1944 SERIES

BROADBAND INVERTED VEE HF ANTENNA



The RF-1944 antenna series are lightweight, transportable broadband dipole antennas that provide radiation patterns ideal for HF skywave communications from 0 to 1500 miles. The rugged, yet simple design allows quick installation into its primary Inverted Vee configuration. The termination loads provide instantaneous bandwidth performance over the entire 1.6 to 30 MHz frequency range. The RF-1944 antenna is an excellent choice when operating with frequency agile waveforms because an antenna coupler is not required.

The RF-1944 antenna series consists of two antennas designed for two power levels.

- The RF-1944-AT150 (shown above) is for up to 150 Watts and weighs 9 lbs (4.1 kg).
- The RF-1944-AT400 is for up to 400 Watts and weighs 11 lbs (5 kg). It is slightly larger than the 150-Watt version.

The antenna is comprised of a balun, two dipole radiating elements, two terminating loads, two ground rods, two ground stakes, coaxial cable, weighted throwing line and carrying bag. The coaxial cable has male BNC connectors for direct attachment to the balun and radio or power amplifier. The RF-1944 antenna does not include a mast.



Electrical

- **Frequency Range**
  1.6 to 30 MHz
- **RF Power Capacity**
  150 and 400 Watts
- **Input Impedance**
  50 ohms (nominal)
- **Radiation Pattern**
  See plot below
- **Polarization**
  Primarily Horizontal
- **VSWR**
  See plot below
- **Gain**
  -16 dBi at 2 MHz
  -2 dBi at 30 MHz

Environmental

- **Temperature**
  Operating; -25° to 55°C

  Storage; -40° to 70°C
- **Relative Humidity**
  0 to 100%

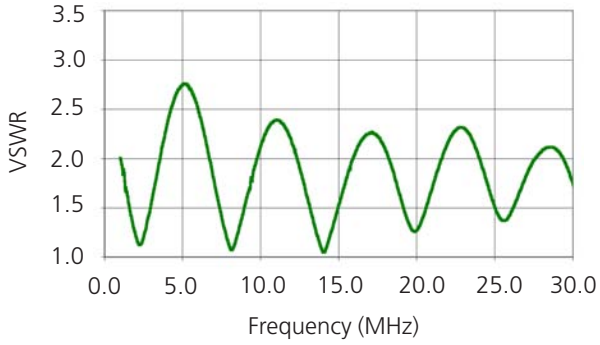
Mechanical

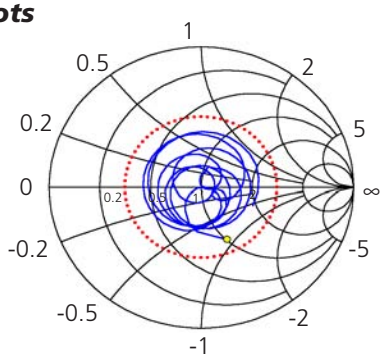
- **RF Connector**
  BNC, male
- **RF Coaxial Cable**
  RG-58 (10 meters)
- **Deployed Dimensions**
  164 ft (50 meters)
- **Stowed Size (AT150)**
  16 W x 13 H x 3 D inches
  40.6 W x 33 H x 7.6 D cm
- **Weight**
  AT150 - 9 lbs (4.1 Kg)
  AT400 - 11 lbs (5 Kg)
- **Color**
  OD finish / Black
- **Erection time**
  10 minutes for 2 people

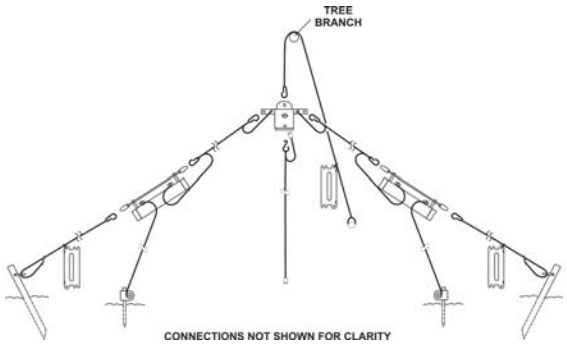
Features

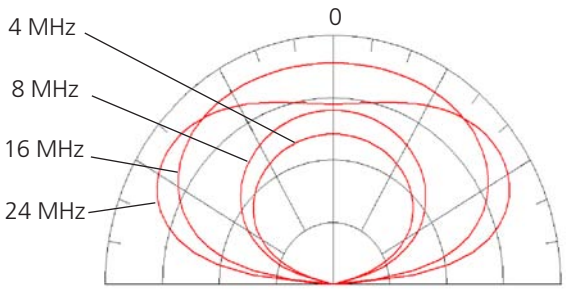
- Broadband Operation
- Lightweight
- Robust Design
- Encased Terminations
- Small Carry Bag

RF-1944 VSWR and Impedance Plots









RF-1944 Radiation Patterns for 4, 8, 16 and 24 MHz

Specifications are subject to change without notice.

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