HARRIS®

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RF-1930CHD

HF SHIPBOARD WHIP ANTENNA

The RF-1930CHD HF shipboard whip antenna is ideally suited for military shipboard use, as well as for fixed stations. Consisting of a two- section, 24-foot (7.3-m), heavy-duty, military-grade fiberglass whip antenna; it has a power rating of 1 kW over the entire 1.6 to 30 MHz spectrum. It is supported by an integral mounting flange.

The RF-1930CHD antenna provides gain and near-instantaneous bandwidth performance over the 1.6 to 30 MHz spectrum when used with an antenna tuner (RF-382A or RF-2601/AC).

The unique fiberglass composite construction is designed to withstand the rigors of a military naval environment. The radiating elements are embedded within fiberglass to prevent corrosion. The anodized aluminum mounting flange is 6-inches in diameter. Four 5/16-inch bolts holes are equally spaced around a 5-inch diameter bolt circle.

The antenna provides low-angle gain in the vertical plane and omnidirection in the horizontal plane; the radiated energy is vertically polarized. The antenna tuner feeds the antenna by a side termination band with a 1/4 -20 threaded stud.



Electrical

- **Frequency Range**
  1.6 to 30 MHz (with antenna coupler)
- **Impedance**
  Compatible with RF-382A and RF-2601/AC Antenna Coupler
- **VSWR**
  In accordance with RF-382A and RF-2601/AC Antenna Coupler specifications
- **Gain**
  See radiation patterns below
- **Polarization**
  Vertical
- **Base Flashover**
  20,000 volts (wet)
- **Power Rating**
  1000 W. Continuous
- **Radiation Pattern**
  Azimuth: Omnidirectional

  Elevation: See radiation patterns below

Environmental

- **Temperature**
  -50°C to +65°C
- **Relative Humidity**
  0 to 100%
- **Wind**
  160 km

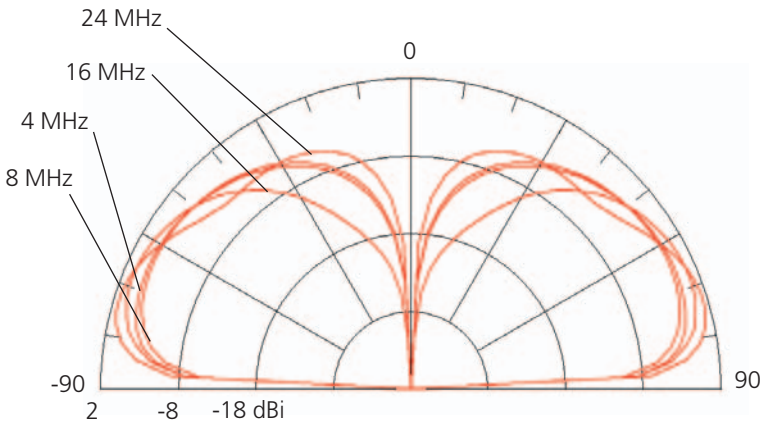
Mechanical

- **Height**
  7.3m
- **Upper section**
  2.84-m (solid fiberglass with polyester laminate)
- **Lower Section**
  4.11-m (tubular fiberglass with military grade epoxy)
- **Weight**
  3.4 kg (7.5 lb)
- **RF Connector**
  Side Feed
- **Color**
  White

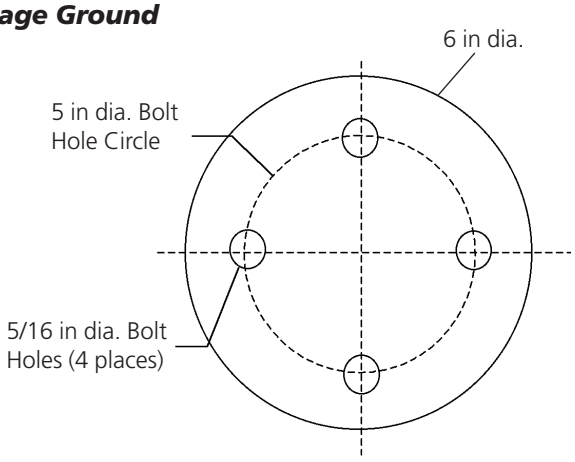
Features

- **Groundwave, LOS, and Skywave**
- **Side feed allows convenient connection to Antenna Coupler**
- **Fiberglass construction to prevent corrosion**
- **Designed for shipboard applications**
- **Light weight compared to many similar shipboard antennas**

Radiation Patterns Over Average Ground



RF-1930CHD Radiation Pattern over Finite Ground Plane



Mounting Pattern

Specifications are subject to change without notice.

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