

RF-1912
HF FAN DIPOLE
ANTENNA

The RF-1912 family consists of three antennas: RF-1912E (radiating elements and feedline), RF-1912T (RF-1912E with transportable masts), and RF-1912B (RF-1912E with permanent masts).

The element length and height above ground has been designed to optimize take-off-angle for HF skywave propagation from NVIS to 2000 kms. The RF-1912 can also be configured as a top-loaded monopole for short-range ground wave or long-range skywave. Both antenna configurations achieve near 100% radiation efficiency because they do not contain any resistive loads. Broadband operation does require an antenna coupler.

The RF-1912 family is designed for use with transceivers operating at up to 1 kW RF output power. For broadband operation, from 1.6 to 30 MHz, the RF-1912 requires an RF-382, or RF-2601 Antenna Coupler and associated cables.

The RF-1912E comes with 100 foot of support rope to be installed on customer-supplied masts. The RF-1912T has lightweight aluminum mast sections that are easy to assembly and disassemble for tactical operations. The RF-1912B is designed for one-time permanent installing.



Stowed RF-1912E



Electrical

- **Frequency Range**
1.6 to 30 MHz with RF-382 or RF-2601 Couplers
- **RF Power Capacity**
1000 Watts PEP or average
- **Input Impedance**
Compatible with RF-382 or RF-2601 Couplers
- **Radiation Pattern**
See below
- **Polarization**
Fan dipole configuration: horizontal for short-to-medium range skywave; top-loaded monopole configuration: vertical for ground wave or long-range skywave
- **VSWR**
In accordance with RF-382 or RF-2601 Coupler specifications
- **Gain**
0 to 6 dBi depending on earth conditions and frequency

Environmental

- **Temperature**
Operating; -40° to +55°C (-40° to +131°F)
- **Relative Humidity**
0 to 100%

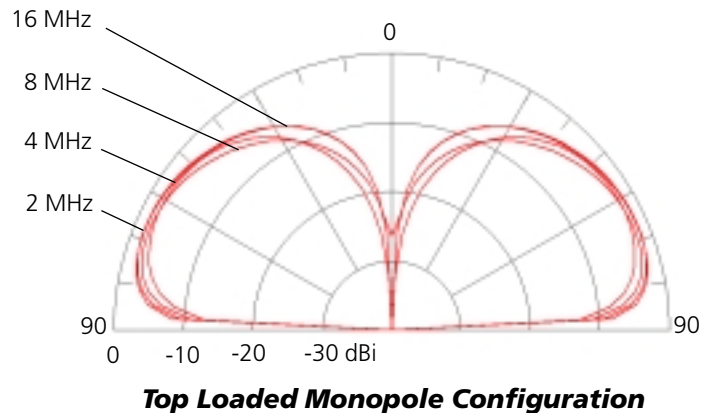
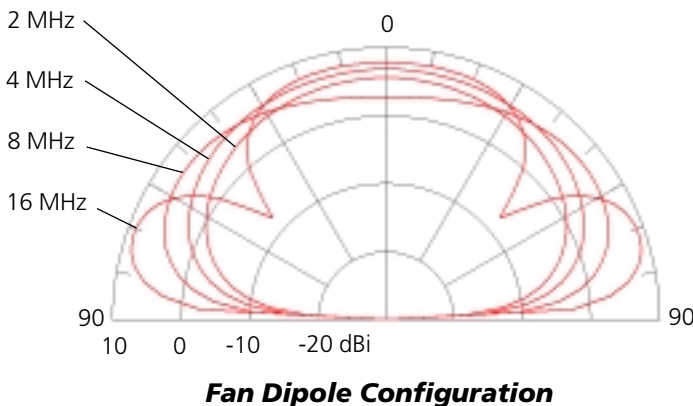
Mechanical

- **RF Connector**
Feed line terminal lugs connect directly to RF-382 or RF-2601 Coupler
- **Deployed Dimensions**
105 ft (32m) L, 26 ft.(7.9m)W, and 29 ft 10 in (9.09m) H
- **Weight**
RF-1912E – 7 lb (3.2 kg)
RF-1912T – 135 lb (60 kg)
- **Installation Time**
RF-1912E – 10 minutes for 2 people
RF-1912T – 30 minutes for 2 people

Features

- Full MIL-SPEC design
- Reconfigurable: fan dipole or top loaded monopole
- NVIS, medium skywave, long range skywave, and ground wave
- Kevlar guy lines for RF-1912B
- Nylon-coated radiating elements with Kevlar extensions
- Compact stowage on custom winder

Radiation Patterns Over Average Ground



Specifications are subject to change without notice.