

**RF-1944-AT020
20 WATT
MANPACK**

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BROADBAND INVERTED
VEE HF ANTENNA**



The RF-1944-AT020 antenna is a lightweight, manportable broadband dipole antenna that provides radiation patterns ideal for HF skywave communications from 0 to 500 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-AT020 antenna is an excellent choice when operating with frequency agile waveforms such as ALE and frequency hopping. The antenna does not require tuning by the transceiver antenna coupler.

The RF-1944-AT020 is used for up to 20 watts and weighs less than four pounds (1.8 kg). The antenna is comprised of a balun, two radiating elements with integral terminating loads, two ground stakes, a coaxial cable, a weighted throwing line, and a carrying bag. The coaxial cable has male BNC connectors for direct attachment to the balun. The RF-1944 AT020 antenna does not include a mast.



Electrical

- **Frequency Range**
1.6 to 30 MHz
- **RF Power Capacity**
20 Watts PEP and average
- **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; -40° to 55°C
Storage; -50° to 71°C
- **Relative Humidity**
0 to 100%

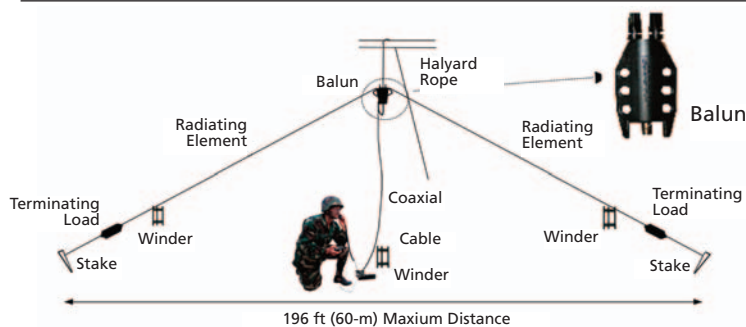
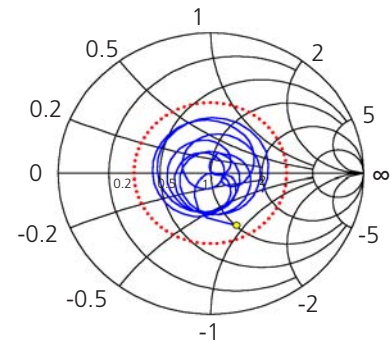
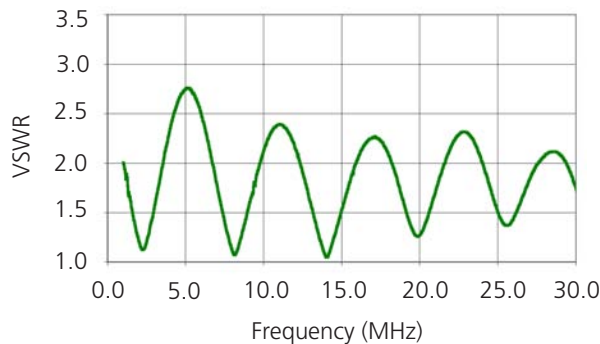
Mechanical

- **RF Connector**
BNC, male
- **RF Coaxial Cable**
RG-174 (10 meters)
- **Deployed Dimensions**
196 ft (60 meters)
- **Stowed Size**
12 H x 4 W x 3 D inches
30.5 W x 10 H x 7.5 D cm
- **Weight**
3 lbs. 10 oz. (1.6kg)
- **Color**
OD finish / Black
- **Setup time**
10 minutes for one person

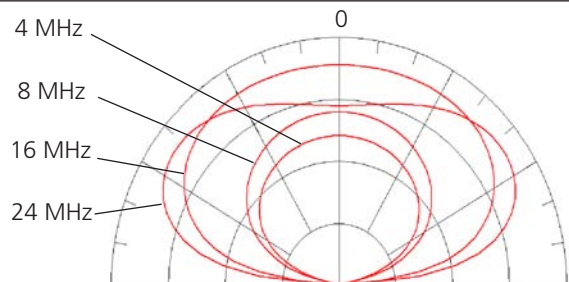
Features

- Broadband operation (instantaneous)
- Lightweight
- Small 3-piece package that can be stowed in the ruck-sack
- Robust design
- Encased terminations directly attached to radiating element

Typical RF-1944 VSWR and Impedance Plots



RF-1944-AT020 (12006-1802-01) Inverted Vee Broadband Antenna, 2-30 MHz, 20-Watts



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

Specifications are subject to change without notice.