

RF-1950-AT001**1-KW INVERTED VEE
DIPOLE ANTENNA**

*a horizontal, polarized
antenna for
roof-top deployment*

The Harris RF-1950 Transmitting Inverted VEE Dipole Antenna is a horizontal polarized antenna for Near Vertical Incident Skywave (NVIS) to Medium Range Skywave. The RF-1950 incorporates a galvanized steel base (7'x7') and a 30 foot fiberglass mast which support two elements. Four galvanized bases (3'x3') allow up to four guy lines without any penetration through the roof top.

The RF-1950 antenna is designed to provide high angle radiation coverage at low frequencies (2 to 12 MHz). The addition of the direct and roof-top reflected wave results in omnidirectional high radiation angle coverage for ranges up to 500 km. This coverage is provided by ionospheric reflection propagation, yielding reliable Near Vertical Incident Skywave (NVIS) where vertical whip antenna are ineffective. Above 12 MHz, the radiation pattern is directional for broadside communications up to 2000 km.



Specifications for the RF-1950-AT001

Electrical

- **Frequency Range**
2 to 30 MHz (requires antenna coupler)
- **RF Power Capacity**
1000 Watts PEP or Average
- **Input Impedance:**
Compatible with RF-2601 and RF-382
Antenna Couplers
- **Gain**
4 to 8 dBi (function of mounting)
- **Radiation Patterns**
Elevation 2 to 12 MHz Single Lobed;
13 to 30 MHz Multi-lobed
Azimuth 2 to 12 MHz Omnidirectional;
13 to 30 "Figure 8" Broadside
- **Polarization**
Horizontal

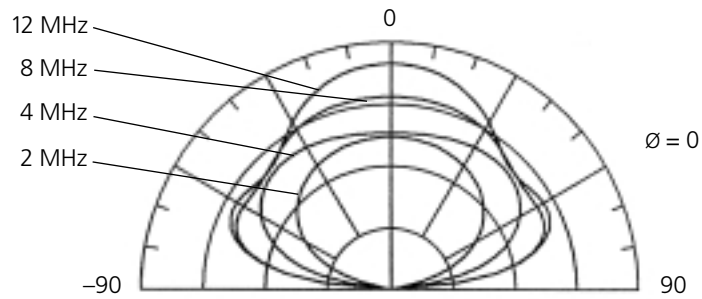
Mechanical

- **Input Connector**
Compatible with Antenna Coupler
- **Dimensions**
Length: 10 to 15 m
Width: 2 to 10 m
Height: 9.2 m
- **Installation Time**
60 minutes, 2 people

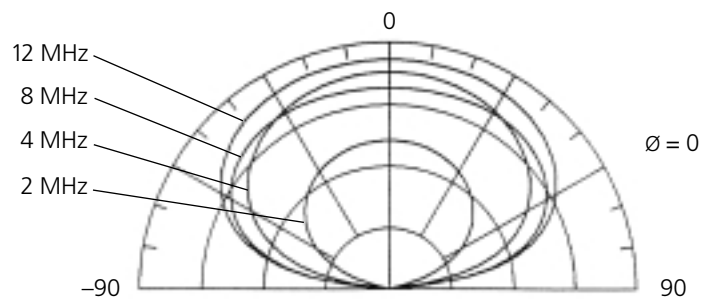
Features

- Non-penetrating mounting
- NVIS to medium range coverage
- Operation from 2 to 30 MHz (requires coupler)
- Transmission line with fiberglass mast
- Receiving and transmitting
- Adjustable footprint
- Galvanized steel bases

RF-1950 Radiation Patterns



Radiation Pattern on Metal Building 10m high



Radiation Pattern on Average Ground

Specifications are subject to change without notice.