

RF-9070

VHF/UHF BICONICAL HIGH-POWER ANTENNA

*a VHF/UHF passive,
high-power,
broadband, biconical-
dipole antenna*

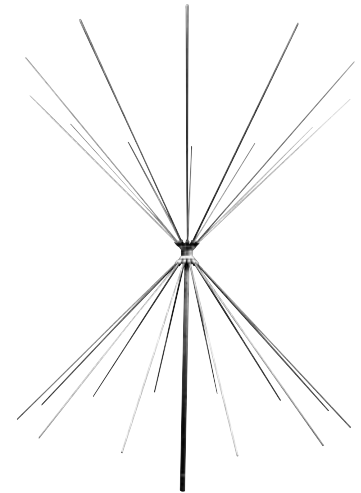
The RF-9070 is a militarized, vertically-polarized, omnidirectional transportable antenna designed for ground-to-air communication between 100 and 400 MHz. It is particularly useful for frequency-hopping systems due to its instantaneous broadband response and low VSWR.

The RF-9070 also operates in the frequency bands used by a large number of commercial services, such as air traffic control, fire, police, utilities, and emergency services.

The RF-9070 is supplied as a kit that includes the center hub assembly, 24 elements with threaded ends, 24 lock nuts, and a 10 foot coaxial cable. For corrosion resistance and durability the center hub and elements are made from lightweight aluminum alloy with E512 finish per MIL-F-14072. The center hub is constructed with two machined aluminum hubs that surround a center insulator machined from Delron 570. Within the hub assembly is a passive LC network that provides exceptional VSWR performance across the band.

Electrical connection is provided by a type N female connector on the center hub. The coaxial cable allows connection to a radio up to 10 feet away.

The RF-9070 antenna's center hub provides a threaded 1.3-inch (3.3-cm) diameter hole for a mast. The optional RF-9071 is a mast pipe specifically designed to mount the RF-9070 antenna.



Specifications for the RF-9070

Electrical

- **Frequency Range**
100 to 400 MHz (usable 90 to 470 MHz)
- **RF Power Capacity**
400 watts
- **Input Impedance**
50 ohm, nominal
- **Radiation Pattern**
Omnidirectional
- **Polarization**
Vertical
- **VSWR**
≤2.1 typical, 2.5:1 maximum
- **Gain**
>2 dBi

Environmental

- **Temperature**
Operating: -40° to +55° C (-40° to +131° F) Storage:
-60° to +70° C (-76° to +158° F)
- **Relative Humidity**
0 to 100%

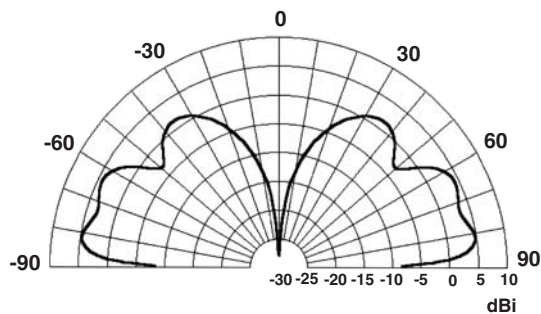
Mechanical

- **RF Connector**
Female, Type N
- **Deployed Dimensions**
76H x 60D in (193H x 152D cm)
- **Finish**
E512 per MIL-F-14072
- **Weight**
20 lb (9.1 kg)
- **Mounting Interface**
1.3 inch (3.3cm) threaded hole in center hub
- **Installation time**
10 minutes, 2 people

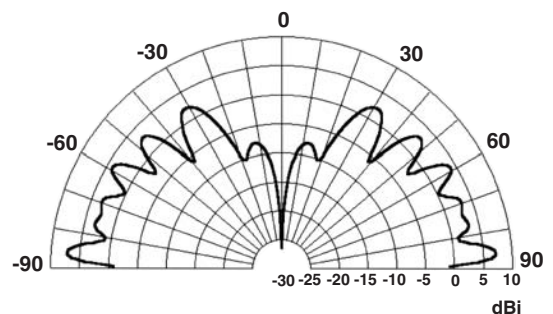
Options

- **RF-9071 Mounting Mast** — A 6.5-foot (2-m) length of 1.3-inch (3.3-cm) diameter mast complete with mounting clamps. The mast is threaded at one end with an 11-1/2 NPT thread to match the antenna hub.

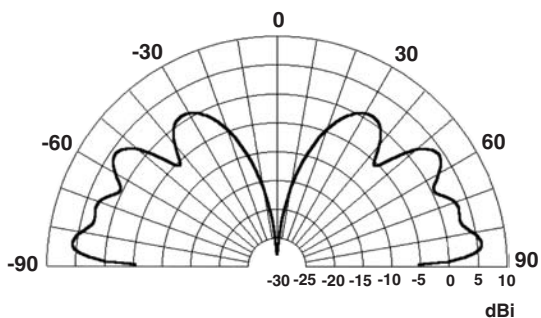
Radiation Patterns Over Average Ground



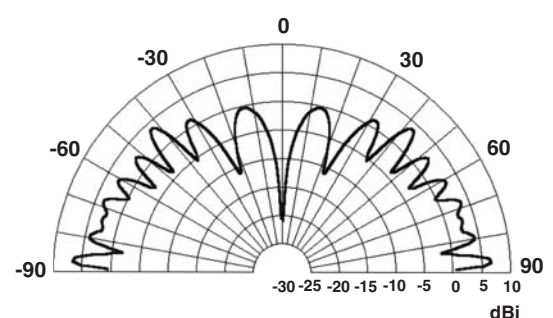
120 MHz



300 MHz



180 MHz



400 MHz

Specifications are subject to change without notice.



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