

RF-3161-AT001**Broadband Body-Worn Dipole
Antenna (30-108 MHz)***superior performance**lightweight**versatile*

The Harris RF-3161 is an omnidirectional, vertically polarized antenna designed for operation while directly attached to the operator's vest or rucksack. Using this antenna, a 1-kg handheld radio can achieve similar range performance as a traditional 3-5 kg manpack radio with integrated blade antenna. The RF-3161 has three parts: a flexible antenna body, 1-m blade antenna, and a coaxial cable. The blade allows the operator the flexibility to be folded (over the shoulder for example) to remain below helmet level. The flexible antenna body attaches to the soldier's outerware at two points, normally the belt and shoulder loop, and adjusts to body shape or movement to remain comfortable. A short coaxial cable connects the antenna to the radio, allowing the radio to be carried in a holster, pocket, or vest pouch. This allows the communication operator to remove their ruck sack while retaining communication capability.

The RF-3161 is ground-independent, so it can easily be deployed in a variety of configurations to gain additional height and therefore line-of-sight range. For example, a portable elevation kit may be used or the antenna simply hoisted over a tree limb while the radio itself remains at ground level.

The antenna is optimized for modern soldier data transmission and minimizes the effects of electromagnetic interference from handheld or laptop computers. When used with high-performance radios such as the Harris Falcon® II series, the RF-3161 becomes part of an exceptionally capable, yet lightweight secure digital soldier radio system.



Specifications for the RF-3161-AT001

RF Performance

Frequency Range 30-108 MHz
Polarization Vertical
Impedance 50 ohms (nominal)
VSWR <3.5:1

Power Rating 8 W Continuous
Matching Passive network
Radiation Pattern Omnidirectional
Gain -10 dBi (30 MHz) to 0 dBi (108 MHz)

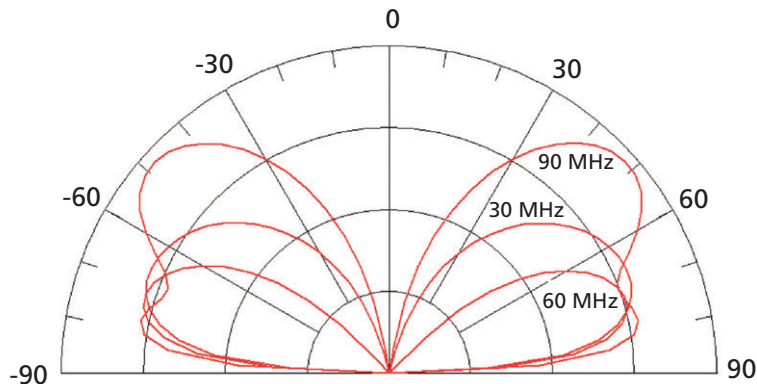
Mechanical

Height 1.75 m (5.74-ft)
Diameter 2.88 cm (1.13-in)
Weight 1.36 kg (3 lb)
RF Connector BNC

RF Cable length 0.9 m (3 ft.)
Color Black
Environment Tested to MIL-STD-810F

Features

- Wide instantaneous bandwidth
- Increased performance over standard blade antenna
- Position and handling radio has no effect on antenna performance
- Increased immunity to EMI from data terminals
- Self contained passive matching network
- Flexible blade allows folding
- Flexible antenna body contours to operator
- ALICE clips allow simple attachment to vest or rucksack
- Environmentally sealed in durable material



RF-3161 Elevation Radiation Patterns for 30, 60, and 90 MHz (Azimuth are Omnidirectional)

Optional Configurations

RF-5800V-DS001
VHF Dismounted Communication System

RF-5800V-DS101
VHF Dismounted Communication System With Internal GPS

Both Include:

- RF-5800V-HH Handheld Radio
- 2 High Capacity Li-Ion Batteries
- RF-3161-AT001 VHF Soldier Antenna
- Antenna Elevation Kit
- Holster
- Rubber Duck Antenna
- VHF Blade Antenna
- Accessory Bag

Specifications are subject to change without notice.