BARKER & WILLIAMSON

Antennas, Masts and Accessories for HF Radio

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Manpack Broadband HF Antenna System
Tactical Forward - ALE and NVIS Compatible
Folded Dipole Antenna with Fiberglass Masts

Complete Antenna

Complete 3-Pole Mast

- **Smallest and lighest Manpack full range HF broadband antenna**
- **Operate 1.8-30 Mhz with < 1.6:1 SWR *without a Coupler* in only 90 feet**
- **20 W power handling capability for your manpack radio**
- **True balanced design - no ground needed**
- **Rapid deployment**

This complete manpack broadband antenna system gives forward units the HF communications capability of a rear unit in one small, light, rapidly deployable kit. Although focused on operating NVIS propagation from a 20 Watt field radio such as the PRC-150, the antenna is capable of fully automatic, low SWR operation from 1.8 - 30 Mhz without need for an antenna tuner/coupler. The NVIS propagation will allow no skip operation within approximately 250 miles, even over mountains. This antenna is frequency agile, and will operate continuous ALE or frequency hopping.

The system is amazingly compact and simple. The mast poles are easy to erect, simply stacking 18” sections on top of each other, and tensioning 3 guy lines. The kit is complete, all the way down to the ground stakes, camouflage bag, and dead blow hammer. The antenna is equally easy to deploy, comprised of only the center assembly, two wire spreaders, and the wire assemblies. After erecting the support poles, hang the center assembly from a snap hook, clip the wires to the center assembly, unroll the wires to the end supports, clip onto the end rings, tension, and snap in the spreaders. The wire is extremely flexible copper with colored PVC insulation.

There is nothing else available that can compete with the ease of use, rapid deployment time, or performance of this antenna. True broadband operation gives you the most from your low power field radio without need for a coupler/tuner. A complete HF communications system in a 22" x 10" x 10" bag for NVIS.

Whatever your mission profile, we have an HF antenna for you.

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ANTENNA P/N SELECTION

Complete Antenna System - This includes the antenna, mast system, camouflage bag and 50 foot light weight coaxial cable. The mast includes three poles that set up to 6 feet of height for NVIS operation. Pole sections are only 18" long.

Model	Length	SWR < 1.6:1	Camouflage
AK-MP90B-G	90 Ft	1.8 - 30 Mhz	Green
AK-MP90B-S	90 Ft	1.8 - 30 Mhz	Sand
AK-MP65B-G	65 Ft	4 - 30 Mhz	Green
AK-MP65B-S	65 Ft	4 - 30 Mhz	Sand

Antenna Only - No mast system, bag or coaxial cable.

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MP-90B-S	90 Ft	1.8 - 30 Mhz	Sand
MP-65B-G	65 Ft	4 - 30 Mhz	Green
MP-65B-S	65 Ft	4 - 30 Mhz	Sand

Mast System Only - No antenna or coaxial cable

Model	# of Poles	Assembled Height	Camouflage
MK114-306MP-G	3	6 Ft	Green
MK114-306MP-S	3	6 Ft	Sand

SPECIFICATIONS

Electrical

Frequency Range (no coupler/tuner required)
65 Foot model ..... 4 - 30 Mhz
90 Foot model ..... 1.8 - 30 Mhz

VSWR (without a coupler/tuner) ..... <1.6:1

RF Power Rating (continuous) ..... 20 Watts

Input Impedance ..... 50 Ohms

Radiation Pattern and Gain
Azimuth ..... Omnidirectional
Elevation ..... see patterns below

Polarization
Flat Top ..... Horizontal
Inverted Vee ..... Combination Horizontal and Vertical

Environmental

Temperature (Operating) ..... -40° to +55° C

Wind ..... 100 MPH

Mechanical

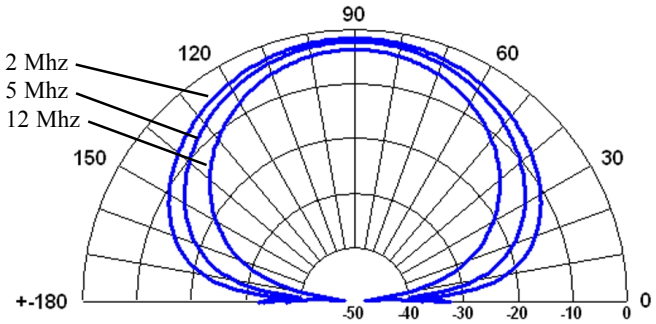
RF Connector ..... BNC Connector

Mast Height
NVIS - flat-top ..... 6 Foot
Long Range - inverted vee ..... 15 Foot

Weight
Antenna ..... 5 Lbs
Mast System ..... 17 Lbs

Deployment Time (entire system) ..... 1 Person <15 Minutes

Radiation Patterns



Typical NVIS Elevation Patterns (dBi)