

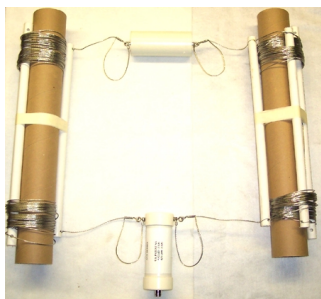


BARKER & WILLIAMSON

Antennas, Masts and Accessories for HF Radio

www . bwantennas . com

BWDS Folded Dipole Broadband HF Antennas Base Use - ALE and NVIS Compatible



- **Small, light, low cost full range HF broadband antenna**
- **Operate 1.8-30 Mhz with < 2:1 SWR *without a Coupler* in only 90 feet**
- **1 KW power handling capability**
- **NVIS or long range from one antenna**
- **Flat-top, inverted Vee, or sloper configurations**
- **True balanced design - no ground needed**
- **Fast deployment**
- **Field proven for over 25 years**

A wide variety of missions can be handled with this family of antennas, from base stations to rear tactical operations. They offer fully automatic, low SWR operation over the entire HF band without need for an antenna tuner/coupler. They are frequency agile, and will operate continuous ALE or frequency hopping. They will propagate excellent NVIS, medium or long range, depending upon the mast configuration.

Besides impressive performance transmitting, this antenna design also delivers excellent reception. The superior signal to noise ratio, loop configuration, and high impedance terminator allows reading the weakest signals that other antennas would lose in the background noise. The design also incorporates automatic bleed off of static noise from wind and thunderstorms.

These antennas are fast and simple to deploy. They come in a variety of lengths to match your usage and frequency range. Our MK114 Mast Kits allow a variety of support options for rear tactical situations. The MK112 Mast Kits are available for permanent base use.

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

ANTENNA P/N SELECTION

BWDS antennas are made with stranded stainless steel wire. They may be used for permanent base or rear tactical situations. Antennas 90 feet and shorter are able to self support between two end poles, although greater wind/ice survivability is achieved with a three pole installation. The 180 foot antenna *must* have a center support. You should use the FDMK center mount to attach any of these antennas to a center mast. The 90 foot antenna is the minimum length recommended to perform nighttime NVIS well. The 180 foot antenna has enhanced performance at the low end. Use our MK114 and MK112 Mast Kits for support.

Model	Length	SWR <2:1
BWDS-20N	20 Ft	14 - 30 Mhz
BWDS-45N	45 Ft	7 - 30 Mhz
BWDS-65N	65 Ft	4 - 30 Mhz
BWDS-90N	90 Ft	1.8 - 30 Mhz
BWDS-180N	180 Ft	1.8 - 30 Mhz

Electrical

Frequency Range (no coupler/tuner required)
 20 Foot model 14 - 30 Mhz
 45 Foot model 7 - 30 Mhz
 65 Foot model 4 - 30 Mhz
 90 Foot model 1.8 - 30 Mhz
 180 Foot model 1.8 - 30 Mhz

VSWR (without a coupler/tuner)
 1.8 - 3 Mhz < 2:1
 3 - 30 Mhz < 1.6:1

RF Power Rating (output PEP CW/SSB ICAS) .. 1000 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

SPECIFICATIONS

Environmental

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

Wind (3-pole mast) 150 MPH

Ice (3-pole mast) 80 Lbs

Mechanical

RF Connector N Connector

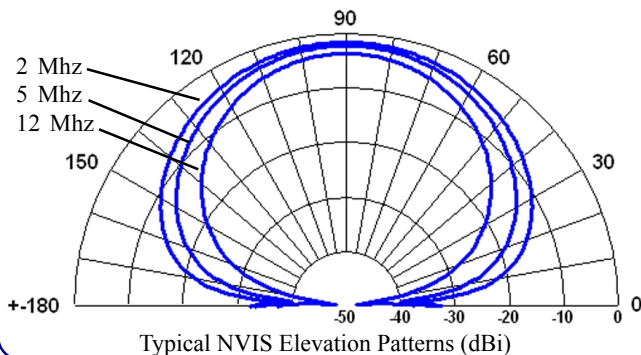
Height

NVIS 12 foot flat-top
 Long Range 24 foot apex inverted Vee

Weight Deployed (90 Foot) 7 Lbs

Deployment Time 2 People - 5 Minutes

Radiation Patterns



Options

BAG-FD - Camouflage Carry Bag

Holds the antenna with center mounting kit assembled, and has space for a coaxial cable or other small items. Includes weather resistant spools for rolling the antenna up. 29" x 10" x 10"

FDMK - Center Mount

Supports the center components of the antenna to provide a proper means of center attachment. Works with mast poles or suspension from line. Will fit into camouflage carry bag assembled to antenna.