Fiberglass Omnidirectional Antennas

VHF White MAXRAD Fiberglass Base Station (MFB) Omnidirectional Antennas

The 144-174 MHz white fiberglass antenna series consists of base matched half wave antennas encapsulated in a heavy duty fiberglass radomes with a thick walled aluminum mounting base for reliable long term use. All models are DC grounded and UPS shippable.

Features

- Effective "J" pole design requires no radials or ground plane
- · White ultra-violet resistant pultruded fiberglass radome
- · Thick-walled aluminum mounting base
- Unity/3 dB models
- · UPS shippable



Technical Data

Maximum Power: 250 watts

Normal Impedance: 50 ohms

VSWR: < 1.5:1 VSWR

Radome Material: Pultruded white fiberglass

Radiator Material: Coated steel wire

ESD Protection: DC grounded

Wind Survival: 100 mph

Termination:

N male with 16" jumper

Mounting Base Diameter: 1-5/16"

Mounting Method:

(Sold separately)

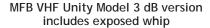
MMK3: light duty mast mounting MMK4: heavy duty mast mounting

MMK6: cast mount bracket

MMK9: Aluminum mast mount for 1-5/16" OD antennas (two required with the 10" sleeve

antenna models)

MBSWM: wall mounting bracket (2 required)





MMK3







MMK6





MBSWM

MMK9

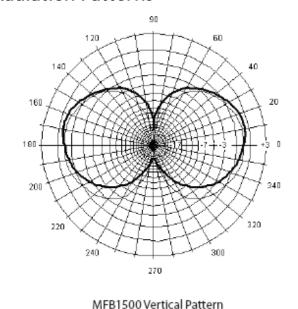
Antenna Electrical Specifications

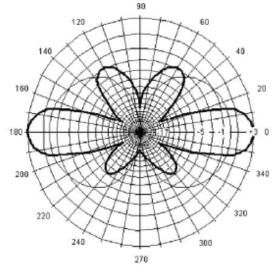
Model	Frequency Range	Factory Tuned Frequency	Gain	Bandwidth @ 1.5:1 VSWR	Vertical Beamwidth @ 1/2 Power
MFB1443	144-150 MHz	144 MHz	3 dB*	3.5 MHz	29°
MFB1500	150-156 MHz	153 MHz	Unity	3.0 MHz	80°
MFB1503	150-156 MHz	150 MHz	3 dB*	3.5 MHz	29°
MFB1560	156-162 MHz	159 MHz	Unity	3.0 MHz	80°
MFB1563	156-162 MHz	156 MHz	3 dB*	3.5 MHz	29°
MFB1683	168-174 MHz	168 MHz	3 dB*	3.5 MHz	29°

Mechanical Specifications

Model	Height	Weight (Mass)	Bending Moment at Rated Wind	Lateral Thrust at Rated Wind	Equivalent Flat Plate Area
MFB1443	129"	4 lbs	62.5 ft-lbs	15.8 lbs	.44 ft²
MFB1500	71″	3 lbs	29.2 ft-lbs	10.8 lbs	.30 ft²
MFB1503	129"	4 lbs	62.5 ft-lbs	15.8 lbs	.44 ft²
MFB1560	71″	3 lbs	29.2 ft-lbs	10.8 lbs	.30 ft²
MFB1563	129"	4 lbs	62.5 ft-lbs	15.8 lbs	.44 ft²
MFB1683	129"	4 lbs	62.5 ft-lbs	15.8 lbs	.44 ft ²

Radiation Patterns





MFB1503 Elevation Pattern

*Note: 3 dB gain antennas are factory tuned to the lowest side of the frequency range. Field tuning to the desired frequency is required. Mount sold separately. For SO-239 connector, please add \$27.00; for N female connector, please add \$10.00.