

VHF/UHF White MAXRAD Fiberglass Base Station (MFB) Omnidirectional Antennas

PCTEL's 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, and 5 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-inch jumper
Mounting Base Diameter: 1-5/16"
Mounting Options (Sold separately): MMK4: heavy duty mast mounting MMK9: aluminum mast mount for 1-5/16" OD antennas (two required with the 10" sleeve antenna models) MMK12: heavy duty mount bracket MBSWM: wall mounting bracket (2 required)



MFB4505



MFB VHF Unity
Model 3 dB version
includes exposed
whip



MMK9



MMK4



MMK12



MBSWM

RF/Electrical Specifications

Model*	Frequency Range	Factory Tuned Frequency	Gain	Bandwidth @ 1.5:1 VSWR	Vertical Beamwidth @ ½ Power
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°
MFB4500	450-460 MHz	455 MHz	Unity	10 MHz	90°
MFB4503	450-460 MHz	455 MHz	3 dB	10 MHz	38°
MFB4505	450-460 MHz	455 MHz	5 dB	10 MHz	27°
MFB4600	460-470 MHz	465 MHz	Unity	10 MHz	90°
MFB4603	460-470 MHz	465 MHz	3 dB**	10 MHz	38°

Mechanical Specifications

Model	Height	Weight (Mass)	Bending Moment at Rated Wind	Lateral Thrust at Rated Wind	Equivalent Flat Plate Area
MFB1500	61 in (154.9 cm)	3 lbs (1.36 kg)	59.8 ft-lbs	20.21 lbs	.30 sq ft
MFB1503	117 in (297.2 cm)	4 lbs (1.81 kg)	107 ft-lbs	26.9 lbs	.44 sq ft
MFB1560	71 in (180.3 cm)	3 lbs (1.36 kg)	59.8 ft-lbs	20.21 lbs	.30 sq ft
MFB1563	117 in (297.2 cm)	4 lbs (1.81 kg)	107 ft-lbs	26.9 lbs	.44 sq ft
MFB4500	20 in (50.8 cm)	1.0 lbs (0.45 kg)	9.35 ft-lb	7.48 lbs	.11 sq ft
MFB4503	47 in (119.4 cm)	4.0 lbs (1.81 kg)	38.9 ft-lb	16.4 lbs	.30 sq ft
MFB4505	67 in (170.2 cm)	4.5 lbs (2.04 kg)	0.73 ft-lb	1.97 lbs	.35 sq ft
MFB4600	20 in (50.8 cm)	1.0 lbs (0.45 kg)	9.35 ft-lb	7.48 lbs	.11 sq ft
MFB4603	47 in (119.4 cm)	4.0 lbs (1.81 kg)	38.9 ft-lb	16.4 lbs	.30 sq ft



* Mount sold separately.

** 3 dB gain antennas are factory tuned to the lowest side of the frequency range. Field tuning to the desired frequency is required.