

PCTEL VHF & UHF Fiberglass Base Station Omnidirectional Antennas



The 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 UV-resistant pultruded fiberglass radome
- Thick-walled aluminum mounting base
- UPS shippable
- DC grounded
- Mast or wall mounted. Mount options for all models sold separately

STANDARD CONFIGURATION

Model	Connector	Mount
MFB1500 MFB1503 MFB1560 MFB1563 MFB4500 MFB4503 MFB4505 MFB4600 MFB4603 MFB4605	N Male with 16" jumper (all models)	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) MMK4: heavy-duty mast mounting



ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Factory Tuned Frequency	Gain	VSWR	Elevation Half Power Beamwidth	Bandwidth @ 1.5:1 VSWR	Average Power	Nominal Impedance
MFB1500	150-156 MHz	153 MHz	Unity	< 1.5:1	80°	3.0 MHz	250 watts	50 ohms
MFB1503	150-156 MHz	150 MHz	3 dB*	< 1.5:1	29°	3.5 MHz	250 watts	50 ohms
MFB1560	156-162 MHz	159 MHz	Unity	< 1.5:1	80°	3.0 MHz	250 watts	50 ohms
MFB1563	156-162 MHz	156 MHz	3 dB*	< 1.5:1	29°	3.5 MHz	250 watts	50 ohms
MFB4500	450-460 MHz	455 MHz	Unity	< 1.5:1	90°	10 MHz	250 watts	50 ohms
MFB4503	450-460 MHz	455 MHz	3 dB	< 1.5:1	38°	10 MHz	250 watts	50 ohms
MFB4505	450-460 MHz	455 MHz	5 dB	< 1.5:1	27°	10 MHz	250 watts	50 ohms
MFB4600	460-470 MHz	465 MHz	Unity	< 1.5:1	90°	10 MHz	250 watts	50 ohms
MFB4603	460-470 MHz	465 MHz	3 dB*	< 1.5:1	38°	10 MHz	250 watts	50 ohms
MFB4605	460-470 MHz	465 MHz	5 dB	< 1.5:1	27°	10 MHz	250 watts	50 ohms

MECHANICAL SPECIFICATIONS

Model	Dimensions	Weight	Bending Moment at 100 mph Rated Wind	Lateral Thrust at 100 mph Rated Wind	Equivalent Flat Plate Area
MFB1500	1-5/16" OD X 71"	3 lbs	59.8 ft-lbs	20.21 lbs	.30 sq ft
MFB1503	1-5/16" OD X 117"	4 lbs	107 ft-lbs	26.9 lbs	.44 sq ft
MFB1560	1-5/16" OD X 71"	3 lbs	59.8 ft-lbs	20.21 lbs	.30 sq ft
MFB1563	1-5/16" OD X 117"	4 lbs	107 ft-lbs	26.9 lbs	.44 sq ft
MFB4500	1-5/16" OD X 30"	1.0 lbs	9.35 ft-lb	7.48 lbs	.11 sq ft
MFB4503	1-5/16" OD X 51"	4.0 lbs	38.9 ft-lb	16.4 lbs	.30 sq ft
MFB4505	1-5/16" OD X 77"	4.5 lbs	69.7 ft-lb	21.8 lbs	.34 sq ft
MFB4600	1-5/16" OD X 30"	1.0 lbs	9.35 ft-lb	7.48 lbs	.11 sq ft
MFB4603	1-5/16" OD X 51"	4.0 lbs	38.9 ft-lb	16.4 lbs	.30 sq ft
MFB4605	1-5/16" OD X 77"	4.5 lbs	69.7 ft-lb	21.8 lbs	.34 sq ft

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