

PCTEL 800/900 MHz Fiberglass Base Station Omnidirectional Antennas

PCTEL's MFB 900/800 MHz series are base matched half wave antennas encapsulated in 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

- White ultra-violet resistant pultruded fiberglass radome
- Thick walled aluminum mounting base
- Unity, 3 dB, 5 dB, 7 dB models
- UPS shippable
- Factory tuned



MFB9153

STANDARD CONFIGURATION

Model	Connector	Mount
MFB8133	N Female	Mast or wall mounted. Mount options for all models: (sold separately) MMK1: light duty mast mount for antennas under 30" MMK4: heavy duty mast mount MMK9: aluminum mast mount for 1-5/16" OD antennas, BSWM: wall mounting bracket for antennas over 30" (two are required) MMK12: heavy duty mount bracket.
MFB8583	N Female	
MFB8965(NF)*	N Male	
MFB8967(NF)*	N Male	
MFB9153	N Female	
MFB9155(NF)*	N Male	
MFB9157(NF)*	N Male	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	Elevation Half Power Beamwidth	Average Power	Nominal Impedance
MFB8133	806-866 MHz	3 dB	40°	150 watts	50 ohms
MFB8583	806-866 MHz	3 dB	40°	150 watts	50 ohms
MFB8965(NF)	896-940 MHz	5 dB	22°	150 watts	50 ohms
MFB8967(NF)	896-940 MHz	7 dB	17°	150 watts	50 ohms
MFB9153	902-928 MHz	3 dB	40°	150 watts	50 ohms
MFB9155(NF)	902-928 MHz	5 dB	22°	150 watts	50 ohms
MFB9157(NF)	902-928 MHz	7 dB	17°	150 watts	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions	Weight	Bending Moment at Rated Wind	Lateral Thrust at Rated Wind	Equivalent Flat Plate Area	Housing Material	Rated Wind	Temperature Range
MFB8133	height: 26 in (66.0 cm)	1.25 lbs (0.57 kg)	7.8 ft-lbs	6.6 lbs	.12 sq ft	Fiberglass	125 mhp	-40°C to +85°C
MFB8583	height: 26 in (66.0 cm)	1.25 lbs (0.57 kg)	7.75 ft-lbs	6.64 lbs	.12 sq ft	Fiberglass	125 mhp	-40°C to +85°C
MFB8965(NF)	height: 48 in (121.9 cm)	1.75 lbs (0.79 kg)				Fiberglass	125 mhp	-40°C to +85°C
MFB8967(NF)	height: 96 in (243.8 cm)	4.00 lbs (1.81 kg)				Fiberglass	125 mhp	-40°C to +85°C
MFB9153	height: 23.25 in (59.06 cm)	1.25 lbs (0.57 kg)	5.3 ft-lbs	5.5 lbs	.12 sq ft	Fiberglass	125 mhp	-40°C to +85°C
MFB9155(NF)	height: 48 in (121.9 cm)	1.75 lbs (0.79 kg)	34.4 ft-lbs	15.41 lbs	.22 sq ft	Fiberglass	125 mhp	-40°C to +85°C
MFB9157(NF)	height: 96 in (243.8 cm)	4.00 lbs (1.81 kg)	113 ft-lbs	27.7 lbs	.44 sq ft	Fiberglass	125 mhp	-40°C to +85°C

* (NF) indicates optional N Female connector.

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 ultra-violet resistant pultruded fiberglass radome
- Thick-walled aluminum mounting base
- UPS shippable
- DC Grounded

STANDARD CONFIGURATION

Model	Connector	Mount
MFB1500 MFB1503 MFB1560 MFB1563 MFB4500 MFB4503 MFB4505 MFB4600 MFB4603 MFB4605	N Male with 16" jumper (all models)	Mast or wall mounted. Mount options for all models: (sold separately) MMK3: light duty mast mounting 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)



ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Factory Tuned Frequency	Gain	VSWR	Elevation Half Power Beamwidth	Bandwith @ 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 Rated Wind	Lateral Thrust at Rated Wind	Housing Material	Equivalent Flat Plate Area	Rated Wind
MFB1500	1-5/16 OD x 71 H in	3 lbs	59.8 ft-lbs	20.21 lbs	Fiberglass	.30 sq ft	100 mhp
MFB1503	1-5/16 OD x 129 H in	4 lbs	107 ft-lbs	26.9 lbs	Fiberglass	.44 sq ft	100 mhp
MFB1560	1-5/16 OD x 71 H in	3 lbs	59.8 ft-lbs	20.21 lbs	Fiberglass	.30 sq ft	100 mhp
MFB1563	1-5/16 OD x 129 H in	4 lbs	107 ft-lbs	26.9 lbs	Fiberglass	.44 sq ft	100 mhp
MFB4500	1-5/16 OD x 30 H in	1.0 lbs	9.35 ft-lb	7.48 lbs	Fiberglass	.11 sq ft	100 mhp
MFB4503	1-5/16 OD x 71 H in	4.0 lbs	38.9 ft-lb	16.4 lbs	Fiberglass	.30 sq ft	100 mhp
MFB4505	1-5/16 OD x 77 H in	4.5 lbs	0.73 ft-lb	1.97 lbs	Fiberglass	.35 sq ft	100 mhp
MFB4600	1-5/16 OD x 30 H in	1.0 lbs	9.35 ft-lb	7.48 lbs	Fiberglass	.11 sq ft	100 mhp
MFB4603	1-5/16 OD x 71 H in	4.0 lbs	38.9 ft-lb	16.4 lbs	Fiberglass	.30 sq ft	100 mhp
MFB4605	1-5/16 OD x 77 H in	4.5 lbs			Fiberglass		100 mhp

*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.