# UHF White MAXRAD Fiberglass Base Station (MFB) Omnidirectional Antennas

These white fiberglass omnidirectional antenna series consists of 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 are UPS shippable.

#### **Features**

- UPS shippable
- Effective "J" pole design requires no radials or ground plane
- Unity, 3 dB, and 5 dB models

#### **Antenna Electrical Specifications**

Model	Frequency Range	Factory Tuned Frequency	Gain	Bandwidth*	Vertical Beamwidth**
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°
MFB4605(NF)	460-470 MHz	465 MHz	5 dB	10 MHz	27°
MFB4705	470-480 MHz	475 MHz	5 dB	10 MHz	27°

### **Mechanical Specifications**

Model	Weight (Mass)	Height	Bending Moment***	Lateral Thrust***	Equivalent Flat Plate Area
MFB4500	1.0 lbs	30″	5.2 ft-lb	5 lbs	.11 sq ft
MFB4503	4.0 lbs	71″	29.0 ft-lb	10.8 lbs	.30 sq ft
MFB4505	4.5 lbs	77″	40.4 ft-lb	12.6 lbs	.35 sq ft
MFB4600	1.0 lbs	30″	5.2 ft-lb	5 lbs	.11 sq ft
MFB4603	4.0 lbs	71″	29.0 ft-lb	10.8 lbs	.30 sq ft
MFB4605(NF)	4.5 lbs	77″	40.4 ft-lb	12.6 lbs	.35 sq ft
MFB4705	4.5 lbs	77″	40.4 ft-lb	12.6 lbs	.35 sq ft

\*Bandwdith at 1.5:1 VSWR \*\*Vertical Beamwidth @ 1/2 Power

\*\*\*At rated wind



## **Technical Data**

Maximum Power: 250 watts	
Normal Impedance: 50 ohms	
Radome Material: Pultruded white fiberglass	
Radiator Material: Coated steel wire	
ESD Protection: DC grounded	
Wind Survival: 100 mph	
Termination: N male with 16" jumper; N female optional	
Mounting Hardware (sold separately, MMK1: light duty mast mounting for antennas under 30" MMK3: light duty mast mounting for antennas over 30" MMK4: heavy duty mast mounting b MMK9: Aluminum mast mount for 1- OD antennas (two required with the sleeve antenna models) MBSWM: wall mounting bracket for nas over 30" (2 required)	r r -5/16" e 10"