

## PCS, 2.4 GHz ISM, MMDS and 5.8 GHz ISM Omnidirectional Base Station Antenna Series

The MAXRAD XtremeWave™ wireless broadband omnidirectional antennas are designed to provide maximum performance and reliability under the toughest weather conditions. These antennas feature a U.V. stable, vented radome that provides ultimate protection against weather elements. The line includes seven models covering MMDS, ISM and PCS frequencies with gains ranging from 4 to 12 dBi. These antennas can be mast, wall or ceiling mounted.

### General Specifications:

Omnidirectional base station antennas

### Radome Material:

UV resistant pultruded fiberglass

### Polarization:

Vertical

### Nominal Impedance:

50 Ohms

### Mounting Base Diameter:

1.25 inches (all models except MFB24012)

1.5 inches (model MFB24012)

### Mounting Method (sold separately):

MMK1924 - L-bracket mount for wall or pipe mount (not recommended for use with model MFB24010 or MFB24012)

MMK8 - Aluminum extruded bracket for mast mounting (not recommended for use with MFB24012)

MMK11 - Ceiling mount bracket (for MFB24004, MFB24006 and MFB24008 only)

MMK12 - Heavy duty bracket for mast mounting the MFB24012

MMK14 - light duty mounting clamp for MFB24012

### Termination:

Type N female standard with all models, except MFB24012

Type N female reverse polarity and reverse threaded connectors optional

16" RG-213 pigtail with N female connector for model MFB24012 only

### Features and Benefits:

- U.V. stable, pultruded fiberglass radome. Allows outdoor installation even in harsh climates.
- Vented system design. Provides reliable performance by protecting the electrical design against extreme moisture and/or temperatures.
- Thread relief on connector (all models, except MFB24012 which has a pigtail.) Improved accessibility for taping reduces installation time and improves overall effectiveness.
- Internal o-ring seal in the base of the antenna with integrated connector at the base. Assures a watertight seal to prevent water from migrating into the antenna connector (all models, except MFB24012 which has a pigtail.)
- Electrical downtilt options on select models. Provide system planners flexibility in challenging operating environments.



XtremeWave™ MFB24012 (2.4 GHz ISM)



XtremeWave™ Models 25007 (MMDS), MFB58009 (5.8 GHz ISM) and MFB19008A (PCS), MFB24006 and MFB24008 (2.4 GHz ISM) Antennas



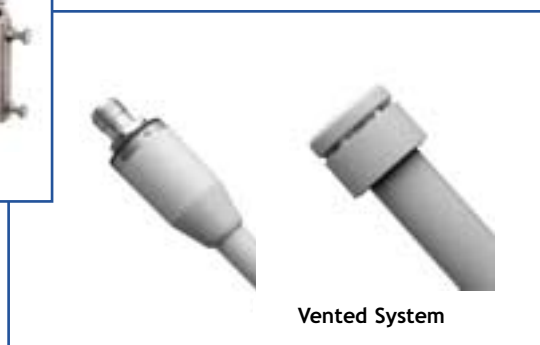
# Specifications

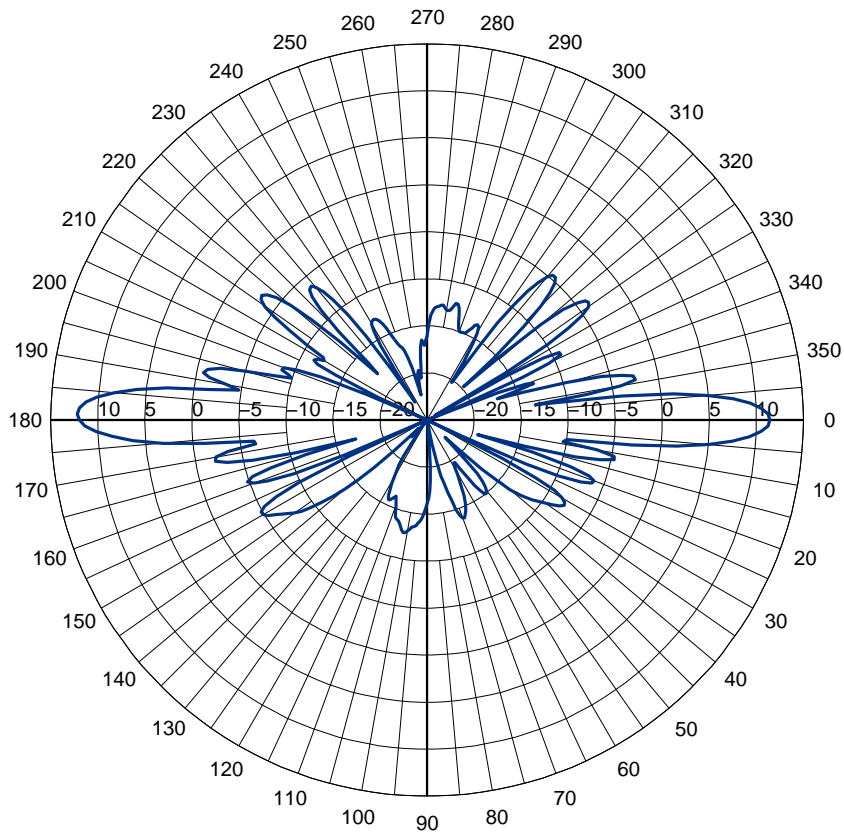
## Electrical Specifications

Model #	Frequency Range	Gain	Bandwidth @ 1.5:1 VSWR	Vertical Beamwidth @ 1/2 Power	VSWR	Maximum Power	Downtilt
MFB19008A	1850-1990 MHz	8 dBi	140 MHz	12°	< 1.5:1	25 Watts	N/A
MFB24004	2400-2483.5 MHz	4 dBi	100 MHz	30°	< 1.5:1	25 Watts	N/A
MFB24006	2400-2483.5 MHz	6 dBi	100 MHz	20°	< 1.5:1	25 Watts	N/A
MFB24008	2400-2483.5 MHz	8 dBi	100 MHz	13°	< 1.5:1	25 Watts	N/A
MFB24008DT3	2400-2483.5 MHz	8 dBi	100 MHz	13°	< 1.5:1	25 Watts	3°
MFB24008DT5	2400-2483.5 MHz	8 dBi	100 MHz	13°	< 1.5:1	25 Watts	5°
MFB24008DT7	2400-2483.5 MHz	8 dBi	100 MHz	13°	< 1.5:1	25 Watts	7°
MFB24008DT12	2400-2483.5 MHz	8 dBi	100 MHz	13°	< 1.5:1	25 Watts	12°
MFB24010	2400-2483.5 MHz	10 dBi	100 MHz	9°	< 1.5:1	25 Watts	N/A
MFB24012	2400-2500 MHz	12 dBi	100 MHz	7°	< 1.5:1	25 Watts	N/A
MFB25007	2500-2700 MHz	7 dBi	200 MHz	13°	< 1.5:1	25 Watts	N/A
MFB25007DT3	2500-2700 MHz	7 dBi	200 MHz	13°	< 1.5:1	25 Watts	3°
MFB58009	5725-5875 MHz	9 dBi	150 MHz	8°	< 1.5:1	25 Watts	N/A

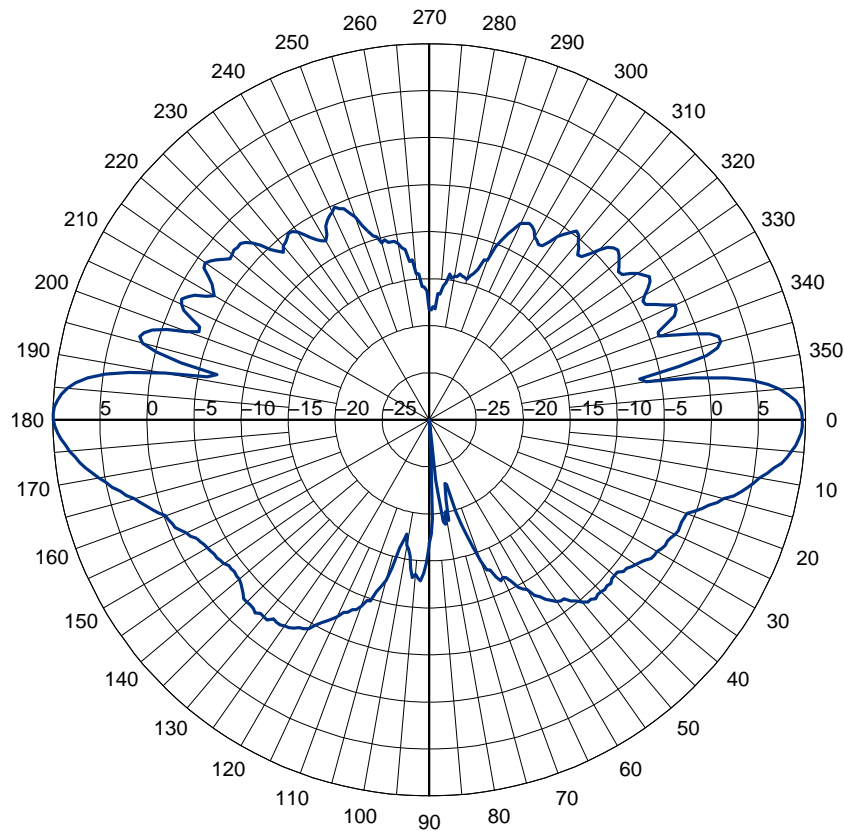
## Mechanical Specifications

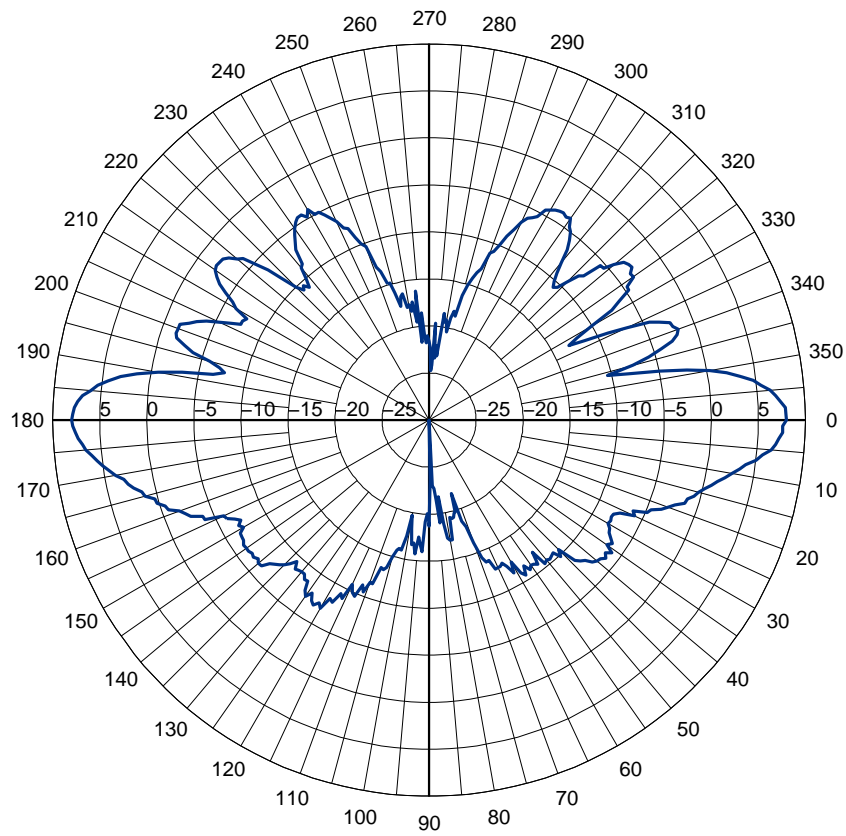
Model #	Wind Survival	Equivalent Flat Plate Area	Lateral Thrust @ Rated Wind	Bending Moment @ Rated Wind	Height	Weight
MFB19008A	125 mph	.07 ft <sup>2</sup>	5.9 lbs	5.7 ft-lbs	24.0" (609.6 mm)	0.70 lbs (0.318 kg)
MFB24004	125 mph	.02 ft <sup>2</sup>	2.1 lbs	0.7 ft-lbs	8.1" (205.7 mm)	0.34 lbs (0.154 kg)
MFB24006	125 mph	.04 ft <sup>2</sup>	3.0 lbs	1.4 ft-lbs	11.6" (294.6 mm)	0.38 lbs (0.172 kg)
MFB24008	125 mph	.06 ft <sup>2</sup>	5.2 lbs	4.4 ft-lbs	20.2" (513.1 mm)	0.50 lbs (0.226 kg)
MFB24008DT3	125 mph	.06 ft <sup>2</sup>	5.2 lbs	4.4 ft-lbs	20.2" (513.1 mm)	0.50 lbs (0.226 kg)
MFB24008DT5	125 mph	.06 ft <sup>2</sup>	5.2 lbs	4.4 ft-lbs	20.2" (513.1 mm)	0.50 lbs (0.226 kg)
MFB24008DT7	125 mph	.06 ft <sup>2</sup>	5.2 lbs	4.4 ft-lbs	20.2" (513.1 mm)	0.50 lbs (0.226 kg)
MFB24008DT12	125 mph	.06 ft <sup>2</sup>	5.2 lbs	4.4 ft-lbs	20.2" (513.1 mm)	0.50 lbs (0.226 kg)
MFB24010	125 mph	.11 ft <sup>2</sup>	10.1 lbs	14.7 ft-lbs	36.0" (914.4 mm)	0.65 lbs (0.295 kg)
MFB24012	125 mph	.25 ft <sup>2</sup>	22.4 lbs	41 ft-lbs	44.0" (1,118 mm)	3.00 lbs (1.400 kg)
MFB25007	125 mph	.06 ft <sup>2</sup>	5.2 lbs	4.4 ft-lbs	20.2" (513.1 mm)	0.50 lbs (0.226 kg)
MFB25007DT3	125 mph	.06 ft <sup>2</sup>	5.2 lbs	4.4 ft-lbs	20.2" (513.1 mm)	0.50 lbs (0.226 kg)
MFB58009	125 mph	.046 ft <sup>2</sup>	4.1 lbs	2.7 ft-lbs	15.7" (398.8 mm)	0.43 lbs (0.195 kg)





**MFB24012 (above) and MFB24010 (below) Elevation Cuts**





**MFB24008 (above) and MFB58009 (below) Elevation Cuts**

