

## 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 10 dBi. These antennas can be mast, wall or ceiling mounted.

**General Specifications:**  
Omnidirectional Base Station Antennas

**Radome Material:**  
5/8 inch diameter pultruded UV-stable fiberglass

**Polarization:**  
Vertical

**Nominal Impedance:**  
50 ohms

**Mounting Base Diameter:**  
1-1/4 inches

**Mounting Method (sold separately):**  
MMK1924 - L-bracket mount for wall or pipe mount (not recommended for use with model MFB24010)  
MMK8 - Aluminum extruded bracket for mast mounting  
MMK11 - Ceiling mount bracket  
MMK13 - Heavy duty L-bracket for wall or pipe mount

**Termination:**  
Type N female standard  
Type N female reverse polarity and reverse threaded connectors optional

### 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. Improved accessibility for taping thus reducing installation time and improving overall effectiveness.
- Internal O-ring seal in the base of the antenna. Assures a watertight seal to prevent water from migrating into the antenna connector.
- Electrical downtilt options. Allow system planners flexibility in challenging operating environments.



MFB Model 24004CM



MMK1924



MMK8

XtremeWave™ 2.4 GHz ISM Antennas



XtremeWave™ Models 25007 (MMDS), MFB58008 (5.8 GHz) and MFB19008A (PCS), MFB24006 and MFB24010 (ISM) Antennas



Vented System

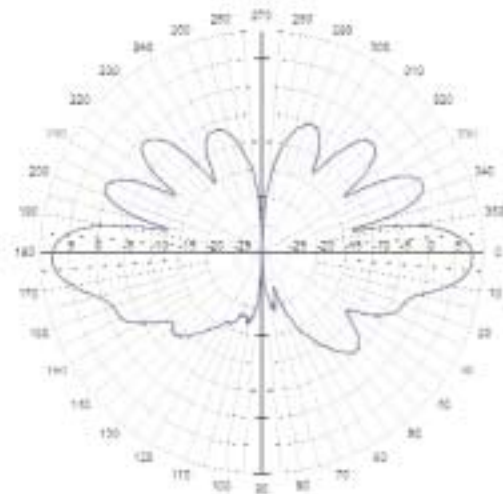
# Specifications

## Electrical Specifications

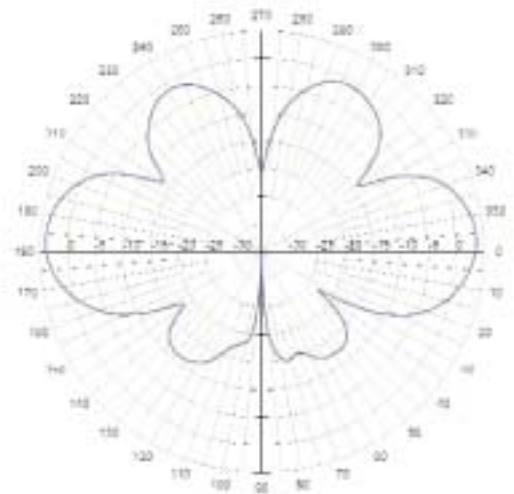
| Model #     | Frequency Range  | Gain   | Bandwidth<br>@ 1.5:1 VSWR | Vertical<br>Beamwidth<br>@ 1/2 Power | VSWR    | Maximum<br>Power | Downtilt |
|-------------|------------------|--------|---------------------------|--------------------------------------|---------|------------------|----------|
| MFB19008A   | 1.850-1.990 GHz  | 8 dBi  | 140 MHz                   | 12°                                  | < 1.5:1 | 25 Watts         | N/A      |
| MFB24004    | 2.400-2.4835 GHz | 4 dBi  | 100 MHz                   | 30°                                  | < 1.5:1 | 25 Watts         | N/A      |
| MFB24006    | 2.400-2.4835 GHz | 6 dBi  | 100 MHz                   | 20°                                  | < 1.5:1 | 25 Watts         | N/A      |
| MFB24008    | 2.400-2.4835 GHz | 8 dBi  | 100 MHz                   | 13°                                  | < 1.5:1 | 25 Watts         | N/A      |
| MFB24008DT3 | 2.400-2.4835 GHz | 8 dBi  | 100 MHz                   | 13°                                  | < 1.5:1 | 25 Watts         | 3°       |
| MFB24008DT5 | 2.400-2.4835 GHz | 8 dBi  | 100 MHz                   | 13°                                  | < 1.5:1 | 25 Watts         | 5°       |
| MFB24008DT7 | 2.400-2.4835 GHz | 8 dBi  | 100 MHz                   | 13°                                  | < 1.5:1 | 25 Watts         | 7°       |
| MFB24010    | 2.400-2.4835 GHz | 10 dBi | 100 MHz                   | 9°                                   | < 1.5:1 | 25 Watts         | N/A      |
| MFB25007    | 2.500-2.700 GHz  | 7 dBi  | 200 MHz                   | 13°                                  | < 1.5:1 | 25 Watts         | N/A      |
| MFB25007DT3 | 2.500-2.700 GHz  | 7 dBi  | 200 MHz                   | 13°                                  | < 1.5:1 | 25 Watts         | 3°       |
| MFB58008    | 5.725-5.875 GHz  | 8 dBi  | 150 MHz                   | 11°                                  | < 1.5:1 | 25 Watts         | N/A      |

## Mechanical Specifications

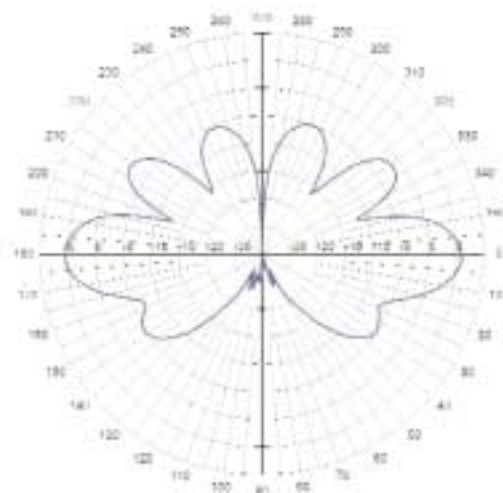
| Model #     | Wind<br>Survival | Equivalent Flat<br>Plate Area | Lateral Thrust<br>@ Rated Wind | Bending Moment<br>@ Rated Wind | Height           | Weight              |
|-------------|------------------|-------------------------------|--------------------------------|--------------------------------|------------------|---------------------|
| MFB19008A   | 125 mph          | .07 ft <sup>2</sup>           | 5.9 lbs                        | 5.7 ft-lbs                     | 24.0" (609.6 kg) | 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 kg)  | 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 kg) | 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 kg) | 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 kg) | 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 kg) | 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 kg) | 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 kg) | 0.65 lbs (0.295 kg) |
| MFB25007    | 125 mph          | .06 ft <sup>2</sup>           | 5.2 lbs                        | 4.4 ft-lbs                     | 20.2" (513.1 kg) | 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 kg) | 0.50 lbs (0.226 kg) |
| MFB58008    | 125 mph          | .06 ft <sup>2</sup>           | 5.2 lbs                        | 4.4 ft-lbs                     | 20.2" (294.6 kg) | 0.50 lbs (0.226kg)  |



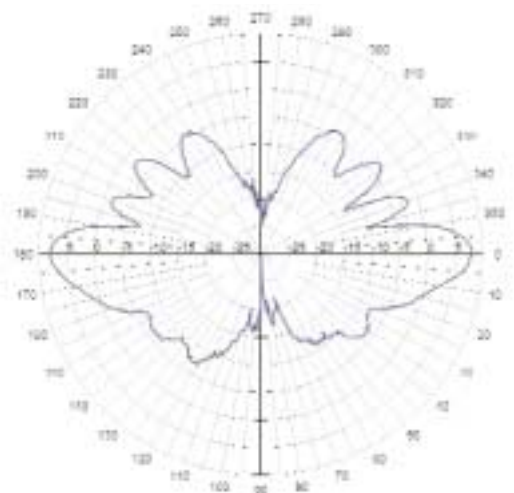
**MFB19008A Elevation Cut**



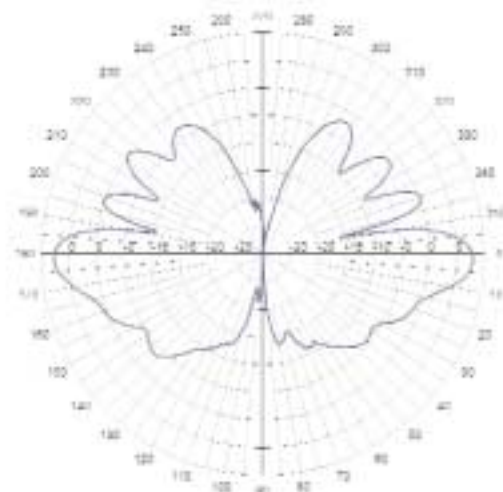
**MFB24004 Elevation Cut**



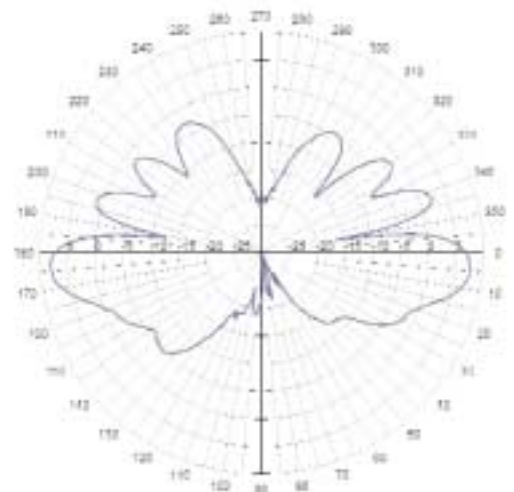
**MFB24006 Elevation Cut**



**MFB24008 Elevation Cut**

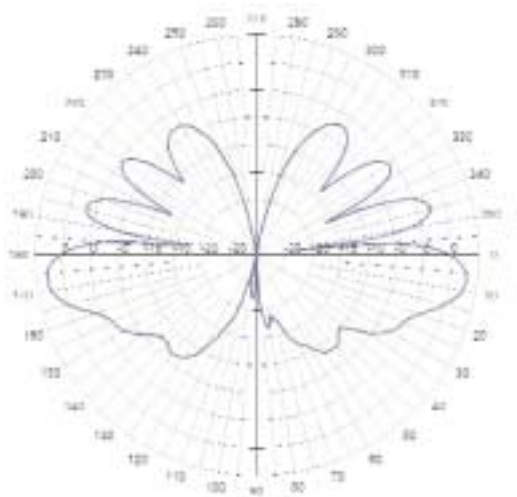


**MFB24008DT3 Elevation Cut**

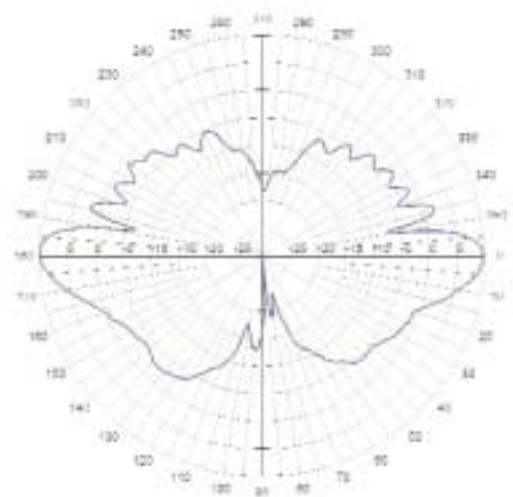


**MFB24008DT5 Elevation Cut**

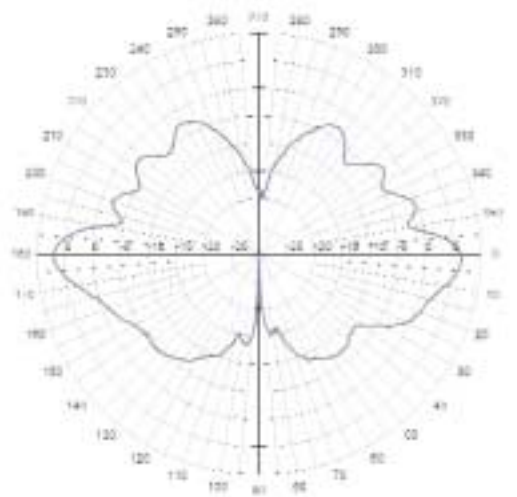
# Patterns



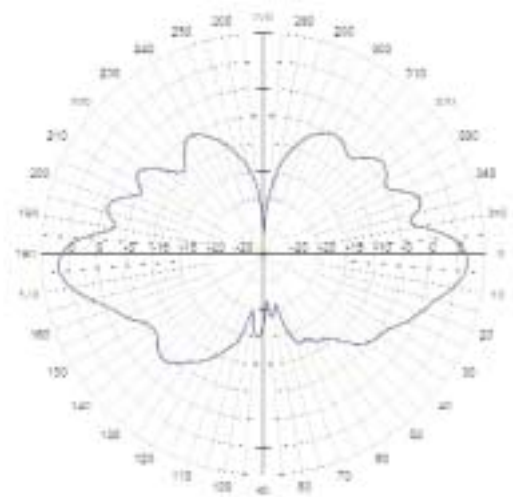
**MFB24008DT7 Elevation Cut**



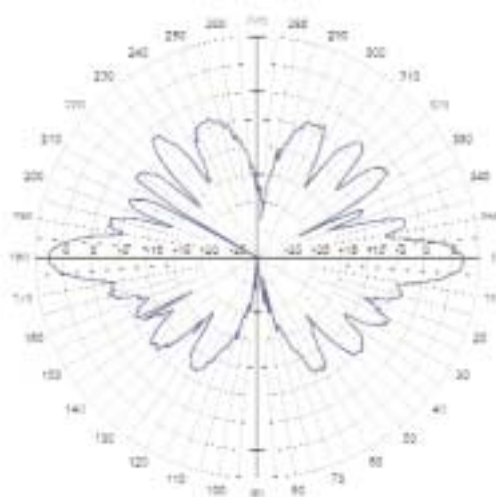
**MFB24010 Elevation Cut**



**MFB25007 Elevation Cut**



**MFB25007DT3 Elevation Cut**



**MFB58008 Elevation Cut**