

Nemko EESI, Inc.		11696 Sorrento Valley Road, Suite. F, San Diego, CA 92121 Phone (858) 793-9911 Fax (858) 259-7170		
DATE	DOCUMENT NAME	SUBMITTAL #	FCC ID	PAGE
12/20/99	Solectek Corporation SkyWay Wireless LAN Bridge Antenna Specifications	99-244	KA324WAN5	1

Data/Spec Sheet

ORDER (800) 323-9122 FAX (630) 372-8077

2.4 GHz ISM - MFB Omni-Directional Antenna Series

The MAXRAD MFB24004, MFB24006, and MFB24008 are omni-directional base station antennas for ISM applications. They are designed to cover the entire 2.4 ISM frequency band with a VSWR of less than 1.5:1. The antennas have 4, 6, and 8 dBi of gain and their built-in matching networks eliminate the need for a ground plane. The antennas can be mounted in a wide variety of locations, including walls, ceilings, and pipes.

General Specifications:

2.4 GHz ISM - MFB omni-directional antenna series

Radome Material:

5/8 inch diameter pultruded UV-stable fiberglass

Termination:

N Female

Polarization:

Vertical

Wind Survival:

125 mph

Mounting Base Diameter:

1 1/4 inches

Maximum Power:

25 watts

Mounting Hardware:

MMK1924 - L-bracket mount for wall or pipe mount (sold separately)

Nominal Impedance:

50 ohms

Sensing Resistor

115K Ω at 1% Tolerance

Electrical Specifications

2.4 GHz ISM - MFB Omni-directional Antenna Series

Model #	Frequency Range	Factory Tuned Frequency	Gain	Bandwidth @ 1.5:1 VSWR	Vertical Beamwidth @ 1/2 Power	VSWR
MFB24004	2.400-2.4835 GHz	2.45 GHz	4 dBi	100 MHz	30°	< 1.5:1
MFB24006	2.400-2.4835 GHz	2.45 GHz	6 dBi	100 MHz	20°	< 1.5:1
MFB24008*	2.400-2.4835 GHz	2.45 GHz	8 dBi	100 MHz	13°	< 1.5:1

* Model available with an electrical downtilt feature. Consult the factory for downtilt options.

MFB24004

Mechanical Specifications

2.4 GHz ISM - MFB Omni-directional Antenna Series

Model #	Equivalent Flat Plate Area	Lateral Thrust @ Rated Wind	Bending Moment @ Rated Wind	Height	Weight	List Price
MFB24004	0.04 sq. ft.	3.201 lbs	1.32 ft-lbs	7 inches	0.30 lbs	\$99.98
MFB24006	0.055 sq. ft.	3.760 lbs	2.39 ft-lbs	10.5 inches	0.35 lbs	\$136.61
MFB24008	0.08 sq. ft.	5.530 lbs	5.94 ft-lbs	17 inches	0.45 lbs	\$148.80

Mounting Hardware

2.4 GHz ISM - MFB Omni-directional Antenna Series

Model #	Description	List Price
MMK1924	Stainless steel L-bracket mount for wall or pipe mount	\$13.13

MAXRAD
MAKERS OF TOP LINE ANTENNAS

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WIRELESS DATA PRODUCT SPECIFICATIONS				
This is a partial listing of wireless data antennas available from Maxrad. For a complete listing please refer to our product catalog.				
Model Number	Frequency Range	Style	Description	Gain
MFB-2400	2.4-2.4835 GHz	Parabolic Reflector Antenna	24" Aluminum Dish	20 dBi
MFB-3000	2.4-2.4835 GHz	Parabolic Reflector Antenna	30" Aluminum Dish	22 dBi
MFB-3600	2.4-2.4835 GHz	Parabolic Reflector Antenna	36" Aluminum Dish	24 dBi
MA-1000	2.4-2.4835 GHz	Yagi Antenna	Totally Enclosed 6 Element	8.8 dBi
MA-1600	2.4-2.4835 GHz	Yagi Antenna	Totally Enclosed 16 Element	13.5 dBi
MA-3000	902-928 MHz	Yagi Antenna	Aluminum; 3 Element	6 dBd
MA-6000	902-928 MHz	Yagi Antenna	Aluminum; 6 Element	9 dBd
MA-9000	902-928 MHz	Yagi Antenna	Aluminum; 9 Element	10 dBd
MA-12000	902-928 MHz	Yagi Antenna	Aluminum; 12 Element	11 dBd
MA-15000	902-928 MHz	Yagi Antenna	Gold Anodized; Welded	9 dBd
MA-18000	902-928 MHz	Yagi Antenna	Gold; Welded; Enclosed Driver	9 dBi
MA-24000	902-928 MHz	Yagi Antenna	Gold; Welded; Fully Encapsulated	9 dBd
MA-3000	902-928 MHz	Omni Directional Antenna	Fiberglass	Unity
MA-6000	902-928 MHz	Omni Directional Antenna	Fiberglass	3 dBd
MA-9000	902-928 MHz	Omni Directional Antenna	Fiberglass	5 dBd
MA-12000	902-928 MHz	Omni Directional Antenna	Fiberglass	7 dBd
MA-15000	2.4-2.4835 GHz	Omni Directional Antenna	Fiberglass	4 dBi
MA-18000	2.4-2.4835 GHz	Omni Directional Antenna	Fiberglass	6 dBi
MFB-2400	2.4-2.4835 GHz	Omni Directional Antenna	Fiberglass	6 dBi
MA-1000	902-928 MHz	Portable Antenna	1/2 Wave Portable; Right Angle TNC	Unity
MA-1000	2.4-2.4835 GHz	Portable Antenna	1/2 Wave Portable	1 dBi
MA-1000	2.4-2.4835 GHz	Portable Antenna	1/2 Wave Portable; Right Angle TNC	1 dBi
MA-1000	2.4-2.4835 GHz	Mobile Antenna	Max Base	3 dBi
MA-1000	2.4-2.4835 GHz	Mobile Antenna	Max Base	5 dBi
MA-1000	902-928 MHz	Mini-Mag Antenna	Magnetic Mount	Unity
MA-1000	902-928 MHz	Mini-Mag Antenna	Magnetic Mount	3 dBi
MA-1000	2.4-2.4835 GHz	Mini-Mag Antenna	Magnetic Mount	Unity
MA-1000	2.4-2.4835 GHz	Mini-Mag Antenna	Magnetic Mount	3 dBi
MA-1000	2.4-2.4835 GHz	Mini-Mag Antenna	Magnetic Mount	5 dBi

*Choose vertical or horizontal **Several connector options available

WE CAN BUILD TO YOUR SPECS

If you do not see the antenna you need in our regular product line, let us know. We specialize in manufacturing custom antennas to meet the particular needs of our customers.

MAXRAD
STATE OF THE ART ANTENNAS

Maxrad, Inc.
4350 Chandler Drive
Hanover Park, IL 60103
(800) 323-9122 (Toll Free)
(630) 372-8077 (Fax)

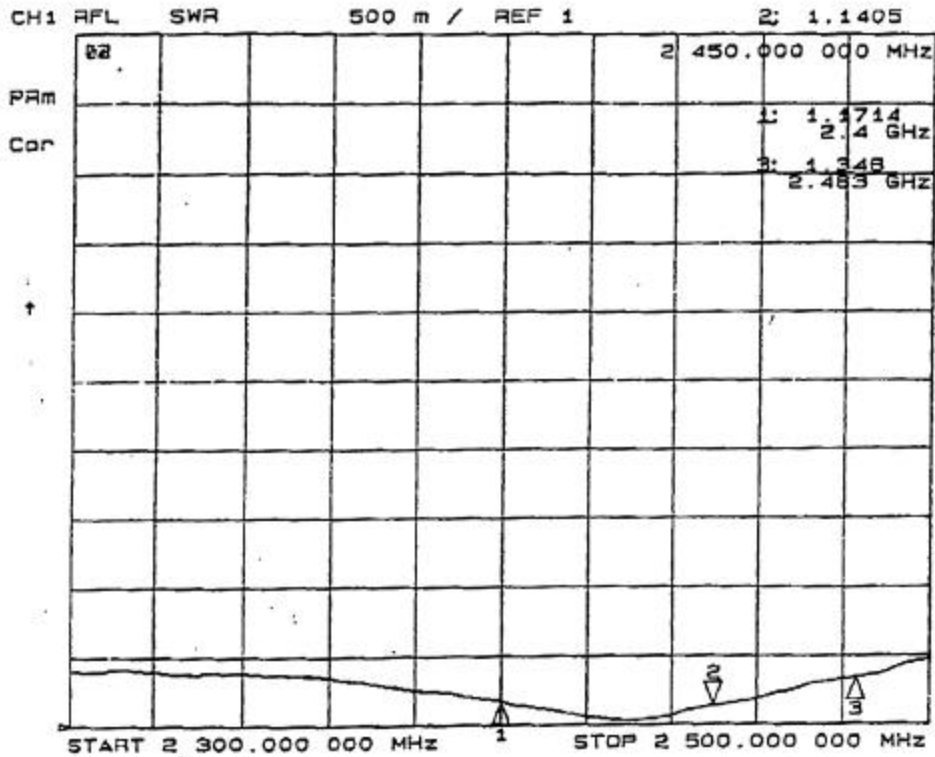
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Hanover Park, IL 60103-6763

Orders: (800) 323-9122
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Fax: (630) 372-8077

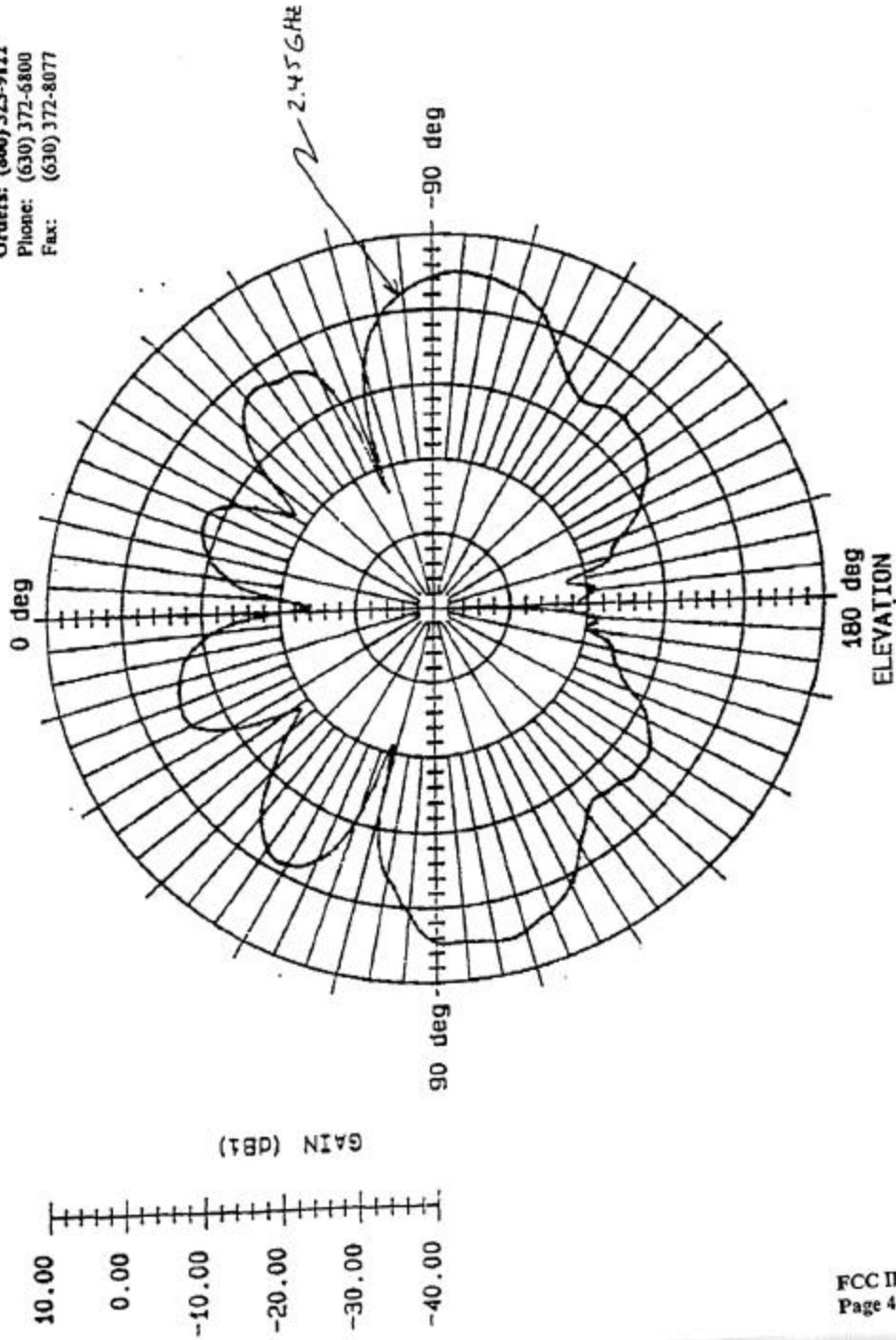


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STATE OF THE ART ANTENNAS



MFB-24006 Elevation Pattern - 6 dBi Fiberglass Omni-directional Base Station Antenna

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REVISE		REVISION		DATE		APPROVED	
204E	REV						

ITEM	QTY	PART NO.	DESCRIPTION	COMMENTS
6	2	AHC-4060	H204S HOSE CLAMP	P/O MK1924
5	1	ANV-5000	5/8-24 JAM NUT	P/O MK1924
4	1	ANV-4001	5/8 INT LOCK WASHER	P/O MK1924
3	1	ALB-105B	"L" BRACKET	P/O MK1924
2	1	ANV-1066	BASE SEAL WASHER	P/O ITEM 1
1	1	Z1-MF B2 4006	MF B2 4006 WITH 6.3 KOHM / SENSING RESISTOR	

MAXRAD® STATE OF THE ART ANTENNAS 4300 UNIV. DR. FA. MO. 631-1821 BARTON, ILL. 60010-3100	
1.1X - 45.1 1.2X - 45.01 1.3X - 45.005 1.4X - 45.001 1.5X - 45.000 1.6X - 45.000 1.7X - 45.000 1.8X - 45.000 1.9X - 45.000 2.0X - 45.000 2.1X - 45.000 2.2X - 45.000 2.3X - 45.000 2.4X - 45.000 2.5X - 45.000 2.6X - 45.000 2.7X - 45.000 2.8X - 45.000 2.9X - 45.000 3.0X - 45.000 3.1X - 45.000 3.2X - 45.000 3.3X - 45.000 3.4X - 45.000 3.5X - 45.000 3.6X - 45.000 3.7X - 45.000 3.8X - 45.000 3.9X - 45.000 4.0X - 45.000 4.1X - 45.000 4.2X - 45.000 4.3X - 45.000 4.4X - 45.000 4.5X - 45.000 4.6X - 45.000 4.7X - 45.000 4.8X - 45.000 4.9X - 45.000 5.0X - 45.000 5.1X - 45.000 5.2X - 45.000 5.3X - 45.000 5.4X - 45.000 5.5X - 45.000 5.6X - 45.000 5.7X - 45.000 5.8X - 45.000 5.9X - 45.000 6.0X - 45.000 6.1X - 45.000 6.2X - 45.000 6.3X - 45.000 6.4X - 45.000 6.5X - 45.000 6.6X - 45.000 6.7X - 45.000 6.8X - 45.000 6.9X - 45.000 7.0X - 45.000 7.1X - 45.000 7.2X - 45.000 7.3X - 45.000 7.4X - 45.000 7.5X - 45.000 7.6X - 45.000 7.7X - 45.000 7.8X - 45.000 7.9X - 45.000 8.0X - 45.000 8.1X - 45.000 8.2X - 45.000 8.3X - 45.000 8.4X - 45.000 8.5X - 45.000 8.6X - 45.000 8.7X - 45.000 8.8X - 45.000 8.9X - 45.000 9.0X - 45.000 9.1X - 45.000 9.2X - 45.000 9.3X - 45.000 9.4X - 45.000 9.5X - 45.000 9.6X - 45.000 9.7X - 45.000 9.8X - 45.000 9.9X - 45.000 10.0X - 45.000	1.1X - 45.1 1.2X - 45.01 1.3X - 45.005 1.4X - 45.001 1.5X - 45.000 1.6X - 45.000 1.7X - 45.000 1.8X - 45.000 1.9X - 45.000 2.0X - 45.000 2.1X - 45.000 2.2X - 45.000 2.3X - 45.000 2.4X - 45.000 2.5X - 45.000 2.6X - 45.000 2.7X - 45.000 2.8X - 45.000 2.9X - 45.000 3.0X - 45.000 3.1X - 45.000 3.2X - 45.000 3.3X - 45.000 3.4X - 45.000 3.5X - 45.000 3.6X - 45.000 3.7X - 45.000 3.8X - 45.000 3.9X - 45.000 4.0X - 45.000 4.1X - 45.000 4.2X - 45.000 4.3X - 45.000 4.4X - 45.000 4.5X - 45.000 4.6X - 45.000 4.7X - 45.000 4.8X - 45.000 4.9X - 45.000 5.0X - 45.000 5.1X - 45.000 5.2X - 45.000 5.3X - 45.000 5.4X - 45.000 5.5X - 45.000 5.6X - 45.000 5.7X - 45.000 5.8X - 45.000 5.9X - 45.000 6.0X - 45.000 6.1X - 45.000 6.2X - 45.000 6.3X - 45.000 6.4X - 45.000 6.5X - 45.000 6.6X - 45.000 6.7X - 45.000 6.8X - 45.000 6.9X - 45.000 7.0X - 45.000 7.1X - 45.000 7.2X - 45.000 7.3X - 45.000 7.4X - 45.000 7.5X - 45.000 7.6X - 45.000 7.7X - 45.000 7.8X - 45.000 7.9X - 45.000 8.0X - 45.000 8.1X - 45.000 8.2X - 45.000 8.3X - 45.000 8.4X - 45.000 8.5X - 45.000 8.6X - 45.000 8.7X - 45.000 8.8X - 45.000 8.9X - 45.000 9.0X - 45.000 9.1X - 45.000 9.2X - 45.000 9.3X - 45.000 9.4X - 45.000 9.5X - 45.000 9.6X - 45.000 9.7X - 45.000 9.8X - 45.000 9.9X - 45.000 10.0X - 45.000

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One 6 dBi MaxRad Omni Antenna

From Vendors Charts

<u>Degree</u>	<u>6 dBi Omni</u>	<u>TEST 06</u>
0	6	
10	6	
20	6	
30	6	
40	6	
50	6	
60	6	
70	6	
80	6	
90	6	
100	6	
110	6	
120	6	
130	6	
140	6	
150	6	
160	6	
170	6	
180	6	
190	6	
200	6	
210	6	
220	6	
230	6	
240	6	
250	6	
260	6	
270	6	
280	6	
290	6	
300	6	
310	6	
320	6	
330	6	
340	6	
350	6	

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**MaxRad 6 dBi Omni
Test 06**

