



Gabriel MBeam™ 90° Multibeam Antenna

Model: MB2-90V6-24
MBeam™ Antenna
90° Multibeam - 6 Sectors
ISM Unlicensed Band

Facts & Features

- Compact environmentally pleasing design.
- High gain.
- Site capacity increased by 4 times that of traditional antenna types.
- Optional beam combiners available.
- Lightweight and durable construction.
- Quick and easy installation.
- Low sidelobes 18 dB or better.
- Patents Pending.

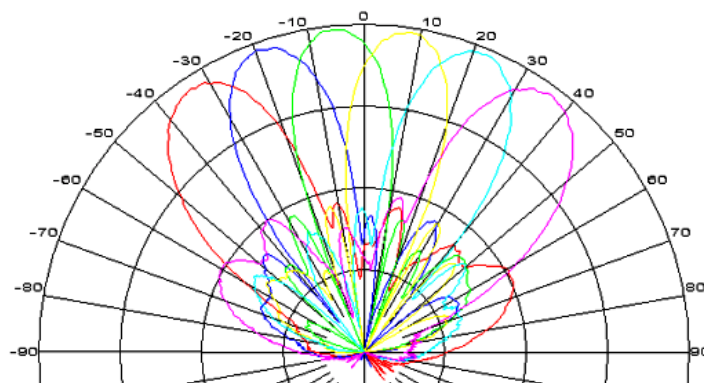
Electrical Specifications

Model	MB2-90V6-24
Frequency Band, GHz	2.400 - 2.490
Polarization	Linear, Vertical
Sector Coverage	90°
Beams per Sector	6 Simultaneous
Beam Width Azimuth	15° (+/- 2°)
Beam Width Elevation	10° (+/- 1°)
Gain, dBi (Minimum)	17.6
First Sidelobe, dB	>18.0
F/B Ratio, dB	>35
Cross Polarization Discrimination (XPD), dB	25
Antenna to Antenna Isolation, dB Min.	
Horizontal 4-in. spacing	>50 dB
Vertical 24-in. spacing	>70 dB
VSWR Max. (R.L.)	1.50:1 (14.0)
Input Connector Type / Impedance	Type N Female / 50 ohm
Maximum Input Power (per beam)	3 Watts

Performance Specifications

Azimuth Beam Position

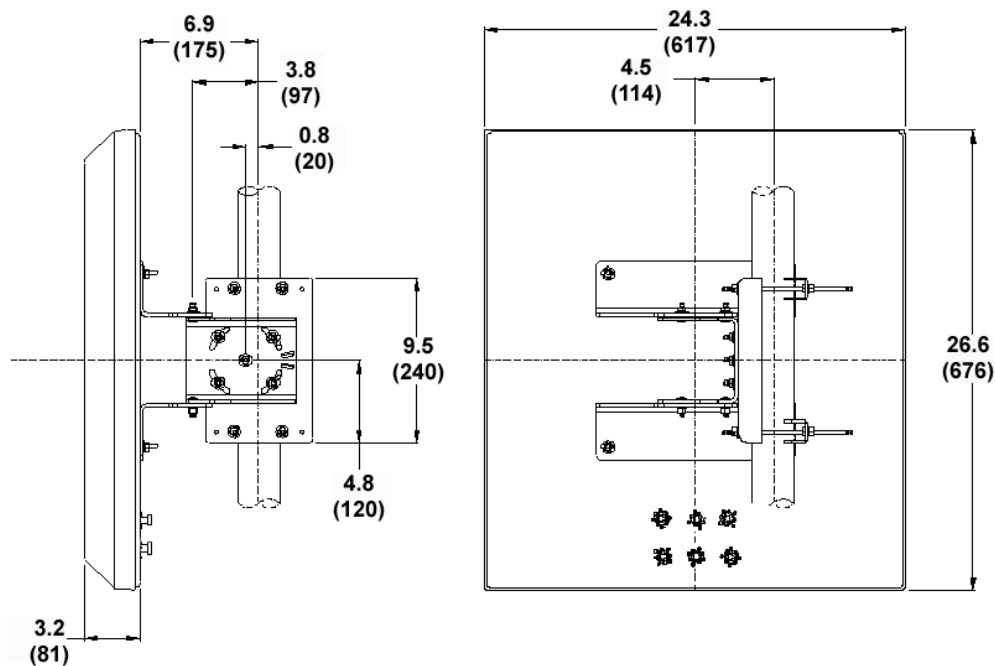
Beam 1 **Beam 2** **Beam 3** **Beam 4** **Beam 5** **Beam 6**
-35.5 **-20.8** **-6.8** **6.8** **20.8** **35.5**



Beam#	Pointing Angle (deg.)	Azimuth B/W (deg.)	Elevation B/W (deg.)	Minimum Gain (dBi)	Max. SLL	XPD (dB)	F/B Ratio (dB)	Max. VSWR (R.L.)
1	-35.5	17	10	17.5	18	>25	>35	1.5 (14)
2	-20.8	15	10	17.8	18	>28	>35	1.5 (14)
3	-6.8	13.5	10	18.1	18	>30	>35	1.5 (14)
4	6.8	13.5	10	18.1	18	>30	>35	1.5 (14)
5	20.8	15	10	17.8	18	>28	>35	1.5 (14)
6	35.5	17	10	17.5	18	>25	>35	1.5 (14)

NOTE: Product information subject to change without notice.

Mechanical & Environmental Specifications



Mechanical Specifications

Mount Type	Quick Align Mount	
Elevation Range	±20°	
Fine Azimuth Range	±10°	
Mast diameter (Min. / Max.)	in. (mm)	1.9 - 4.5 (50 - 115)
Construction	Backstructure	Aluminum
	Radome	UV Protected ABS
	Mount	Aluminum
Antenna Dimensions L x W x H	approx. in. approx. (mm)	26.6 x 3.2 x 24.3 (676 x 81 x 618)
Antenna Shipping Dimensions	L x W x H	30 x 14 x 34
	approx. in. approx. (mm)	(762 x 356 x 864)
Antenna Weight (with mount)	lbs. (kg)	24 (10.9)
Gross Shipping Weight	lbs. (kg)	31 (14.1)
Connector	N Female / 50 Ohm	
Connector Position	6 connectors on back	
Color	white	

Environmental Specifications

Wind Survival Rating	mph (kmh)	125 (201)
Wind Operational Rating	mph (kmh)	100 (160)
Operating Temperature	F° (C°)	-40° to +140° (-40° to +60°)
Storage Temperature	F° (C°)	-58° to +158° (-50° to +70°)