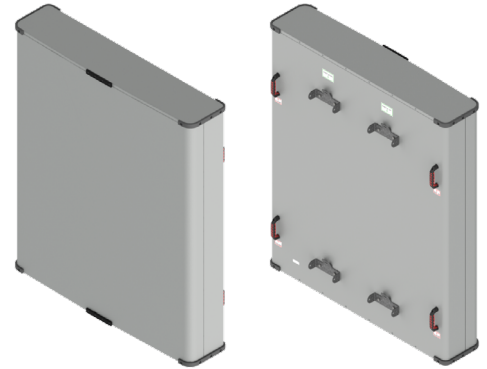


## Dual-Band 3/6 Multibeam 4x4 Antenna with RET [617-896 and 1695-2690 MHz]

# GP7136-08031

### Description:

- 4x4 MIMO 3/6 Beam Antenna for high-capacity stadium/venue or special event applicaitons
- 3-Beam (12-port) 617-896 MHz; each beam with 4x4 MIMO capacity
- 6-Beam (24-port) 1695-2690 MHz; each beam with 4x4 MIMO capability
- Patent pending technology allows for stable azimuth beam directions over the entire operating frequency band
- Excellent alternative to large lens-based multibeam antennas
- Optional heavy-duty transport case to prevent damage for multiple deployment scenarios



Dual-band 3/6 Multibeam 4x4 MIMO Antenna with RET

### Electrical Specifications

Frequency Band [MHz]	617-698	698-806	806-896	1695-1910	1930-2020	2110-2200	2305-2360	2496-2690
Input Connector Type	12x 4.3-10(F)			24x 4.3-10(F)				
Gain, max. (dBi)	16.3	17.0	17.0	20.9	21.2	21.9	21.6	21.2
Gain, avg. (dBi)	14.8	15.5	15.0	18.2	19.4	20.1	19.4	19.6
Azimuth Beamwidth (°)	20.9	18.8	16.4	11.5	10.9	10.1	9.5	8.7
Azimuth Beam Spacing (°)	32			16				
Azimuth Beam Crossover (dB)	8.2	11.1	15.9	6.7	8.0	9.4	11.0	13.5
Elevation Beamwidth (°)	30.7	27.1	24.0	14.6	13.1	11.9	11.4	10.7
Electrical Downtilt Range (°)	2-14			0-10				
First Upper Sidelobe Suppression (dB)	22.8	20.6	16.9	17.6	16.7	16.7	15.4	14.6
Front-to-Back Ratio, 180° (dB)	35							
Cross-Pol Discrimination@Boresight (dB)	19.3	19.1	16.0	19.2	24.2	25.2	21.2	22.1
VSWR /RL (dB)	1.5:1 / 14.0							
Port-to-Port Isolation, Intrabeam (dB)*	25							
Port-to-Port Isolation, Interbeam (dB)**	14							
PIM @ 2x43 dBm, (dBc)	-153							
Max Power / Port (W)	200							
Max Total Power (W)	2400							
Polarization (°)	Dual slant 45 (±45)							
Impedance (Ω)	50							

\* Port-port isolation between each cluster of two ports in the same 4x4 MIMO beam

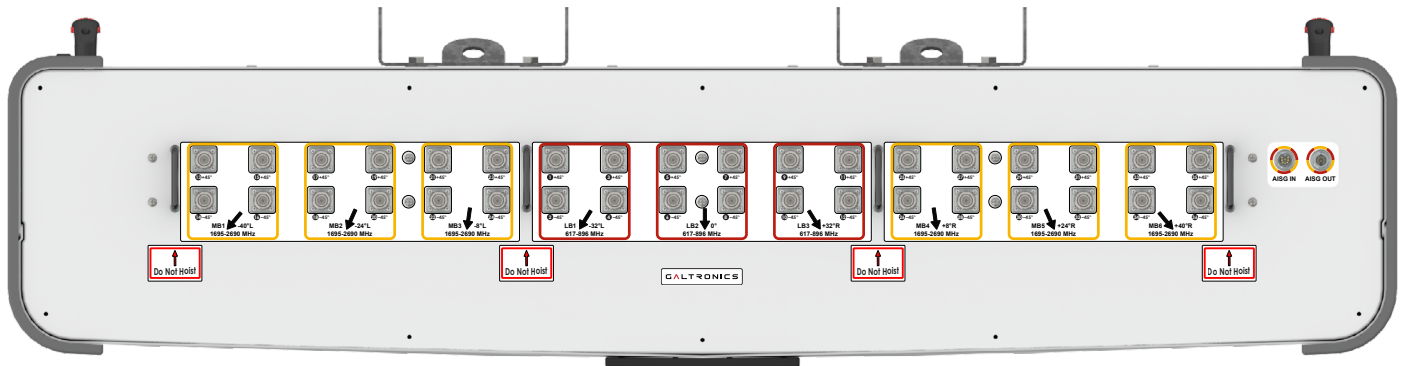
\*\* Port-port isolation between any combination of ports between different beams

RFD#: 8031 ; Revision: R1 ; Release Date: October 17, 2024;

## Electrical Specifications - BASTA

Frequency Band [MHz]	617-698	698-806	806-896	1695-1910	1930-2020	2110-2200	2305-2360	2496-2690
Gain Over All Tilts, avg. (dBi)	14.8	15.6	15.1	18.4	19.4	20.1	19.4	19.6
Gain Over All Tilts Tolerance (dB)	1.0	0.9	1.9	2.0	1.3	1.3	1.7	1.2
AZ Beamwidth Tolerance (°)	2.4	2.1	1.5	1.4	1.6	1.7	1.6	1.5
EL Beamwidth Tolerance (°)	2.7	2.1	1.8	1.2	0.5	0.4	0.5	0.7
Upper Sidelobe Suppression, Peak to +20° (dB)	N/A			15.0	14.4	13.7	12.9	12.4
Front-to-Back Ratio, Total Power, +/-30° (dB)	24.8	25.1	25.1	25.1	25.6	25.6	25.2	23.6
Cross-Polar Discrimination at Boresight (dB)	14.9	16.7	11.0	16.1	20.2	19.5	17.0	15.4
Azimuth Beam Peak Tolerance (°)	1.0	0.8	0.8	0.6	0.5	0.4	0.5	0.5
Azimuth Beam Crossover Tolerance (dB)	1.1	1.6	4.2	1.5	1.7	1.8	2.5	3.5

## Bottom Plate & Port Designation Details

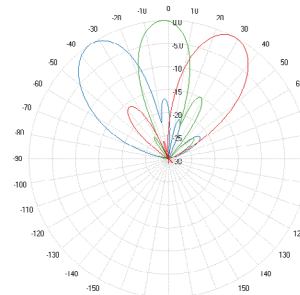


## Port/Beam Designator Table

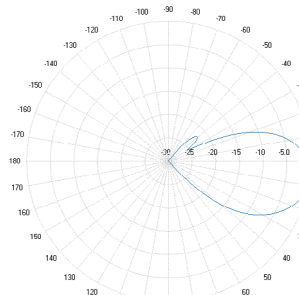
Frequency Range	Ports	Beam Assignment	AZ Beam Direction	Downtilt	Controller ID
617-896 MHz	1 - 4	LB1	-32° L	2-14°	LB01
617-896 MHz	5 - 8	LB2	0°	2-14°	
617-896 MHz	9 - 12	LB3	+32° R	2-14°	
1695-2690 MHz	13 - 16	MB1	-40° L	0-10°	MB01
1695-2690 MHz	17 - 20	MB2	-24° L	0-10°	
1695-2690 MHz	21 - 24	MB3	-8° L	0-10°	
1695-2690 MHz	25 - 28	MB4	+8° R	0-10°	MB02
1695-2690 MHz	29 - 32	MB5	+24° R	0-10°	
1695-2690 MHz	33 - 36	MB6	+40° R	0-10°	

RFD#: 8031 ; Revision: R1 ; Release Date: October 17, 2024;

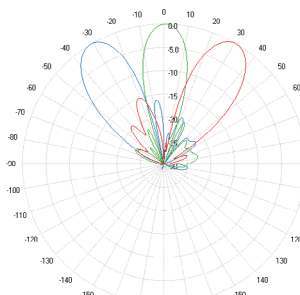
## 2D Antenna Patterns



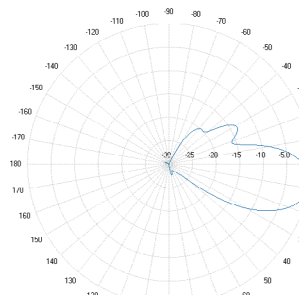
652 MHz



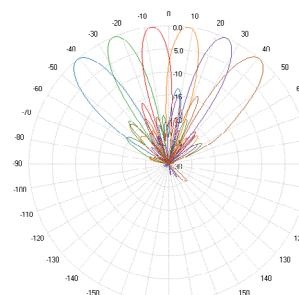
740 MHz



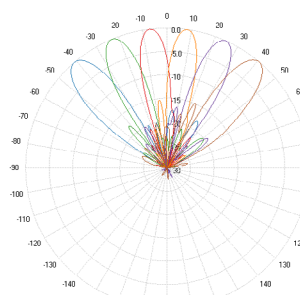
817 MHz



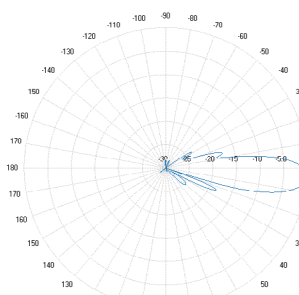
1900 MHz



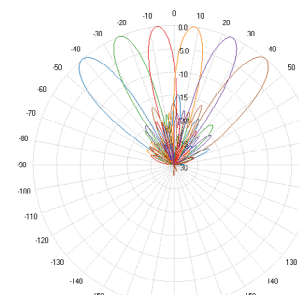
1980 MHz



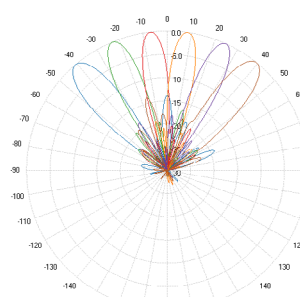
2155 MHz



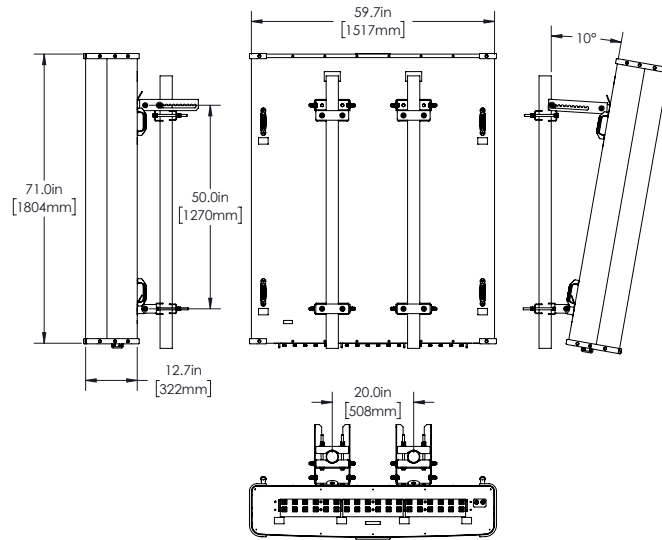
2320 MHz



2620 MHz



## Antenna Outline



**Mating Connector Torque:**  
4.3-10: 3.7 ft-lb (5 Nm)

### Mechanical Specifications


Operating Temperature	-40° to 158°F (-40° to +70°C)
Antenna Weight	240.3 lbs (109.0 kg)
Antenna Dimension (Height x Width x Depth)	71.0" (1804 mm) x 59.7" (1517 mm) x 12.7" (322 mm)
Radome Material	ASA
RET Specification	Internal, AISG 2.0
Environmental Rating	Outdoor
Wind Survival Rating	150 mph (241 km/h)
Wind Load, Front (@ 150 km/h)*	712 lbf / 3167 N
Wind Load, Back (@ 150 km/h)*	742 lbf / 3301 N
Wind Load, Side (@ 150 km/h)*	174 lbf / 774 N
Wind Load, Maximum (@ 150 km/h)*	802 lbf / 3567 N

\* Wind load based on calculations according to TIA-222-H

### Part Numbers & Ordering Options

Description	Color	Mounting Kit	Part Number
Dual-Band 3/6 Multibeam 4x4 Antenna with 36x 4.3-10 (F) Connectors	Gray	Includes 2x MK-07286 Mounting Bracket Assemblies	GP7136-08031-112
Dual-Band 3/6 Multibeam 4x4 Antenna with 36x 4.3-10 (F) Connectors and Heavy Duty Transport Case	Gray	Includes 2x MK-07286 Mounting Bracket Assemblies	GP7136-08031-212

### Mounting Brackets & Optional Accessories

Description:	Part Number:
<p><b>Heavy Duty Mounting Bracket (wind speed of 150 mph) [2x Included]</b></p> <p>The MK-07286 standard mounting bracket allows for easy installation of this Galtronics Multibeam Antenna. It provides 0°-10° of mechanical downtilt adjustability, and fits pole diameters ranging from 2.375" to 4.5".</p> <p><b>Note:</b> The MK-07286 mounting bracket can also be ordered separately.</p>	 <p>MK-07286</p>