

Dual-band 3-Beam 4x4 Multibeam Antenna with RET [617-896 and 1695-2690 MHz]

GP7724-08029

Description:

- 4x4 MIMO 3-Beam Antenna for high-capacity stadium/venue or special event applications
- 3-Beam (12-port) 617-896 MHz and 3-Beam (12-port) 1695-2690 MHz
- Remote Electrical Tilt (RET) with independent control for each beam
- Patented 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-beam 4x4 Multibeam Antenna with RET
617-896 and 1695-2690 MHz

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)			12x 4.3-10(F)				
Gain, max. (dBi)	16.3	17.7	18.2	17.9	18.2	18.8	18.6	19.1
Gain, avg. (dBi)	14.8	16.3	16.6	15.6	16.7	17.5	17.1	16.5
Azimuth Beamwidth (°)	20	18	16	22	22	21	20	18
Azimuth Beam Spacing (°)	33							
Azimuth Beam Crossover (dB)	8.6	11.7	15.1	7.0	8.4	9.5	10.7	13.0
Elevation Beamwidth (°)	28	24	21	15	13	12	12	11
First Upper Sidelobe Suppression (dB)	21	17	15	18	19	20	19	16
Front-to-Back Ratio, 180° (dB)	40			45				
Electrical Downtilt Range (°)	2-14			0-10				
Cross-Pol Discrimination @ Boresight (dB)	28	29	23	24	27	26	21	22
Port-to-Port Isolation, Intrabeam (dB)*	25							
Port-to-Port Isolation, Interbeam (dB)**	14.0	17.0						
VSWR /RL (dB)	1.5:1 / 14.0							
PIM @ 2x43 dBm, (dBc)	-153							
Max Power per Port (W)	200							
Max Total Power (W)	2000							
Polarization (°)	Dual slant 45 (±45)							

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

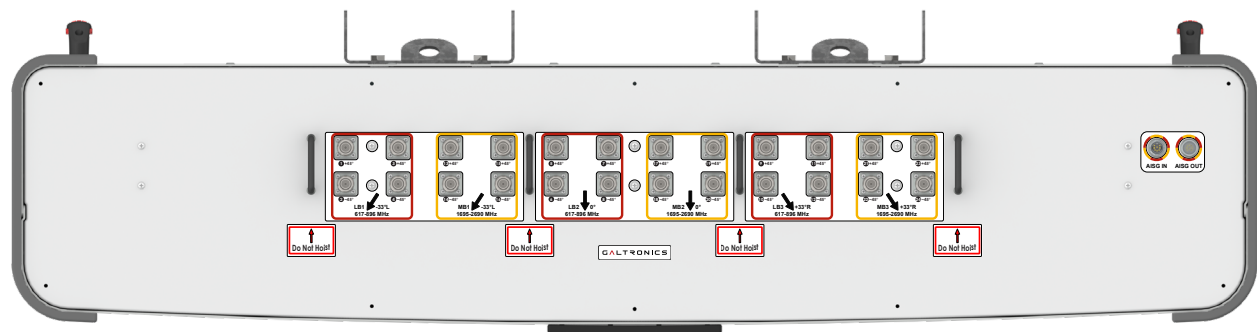
** Port-port isolation between any combination of ports between different beams

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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	16.3	16.6	15.6	16.7	17.5	17.1	16.6
Gain Over All Tilts Tolerance (dB)	1.3	0.9	1.2	1.6	0.9	0.8	1.1	1.1
AZ Beamwidth Tolerance (°)	2.4	2.0	1.4	2.3	1.8	1.5	2.7	2.5
EL Beamwidth Tolerance (°)	2.5	2.2	1.9	1.5	0.8	0.5	0.7	1.1
Upper Sidelobe Suppression, Peak to +20° (dB)	5.4	7.5	10.9	15.0	14.9	16.3	15.1	14.8
Front-to-Back Ratio, Total Power, +/-30° (dB)	26	29	30	31	34	36	37	35
Cross-Polar Discrimination at Boresight (dB)	22	24	18	18	21	20	15	17
Azimuth Beam Peak Tolerance (°)	0.7	0.9	0.9	1.0	0.5	0.5	0.7	0.8
Azimuth Beam Crossover Tolerance (dB)	1.1	1.6	2.6	1.0	0.5	0.6	0.9	2.1

Bottom Plate & Port Designation Details

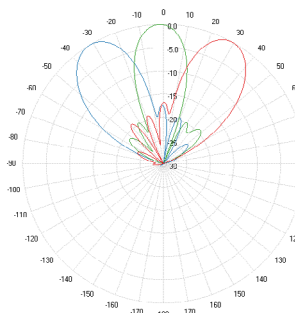


Port/Beam Designator Table

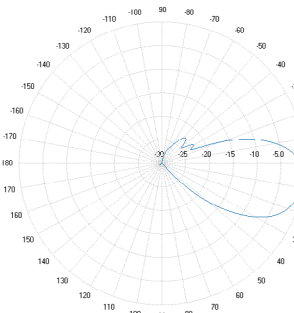
Frequency Range	Ports	Beam Assignment	AZ Beam Direction	Downtilt	Actuator ID
617-896 MHz	1 - 4	LB1	-33° L	2-14°	R0
617-896 MHz	5 - 8	LB2	0°	2-14°	R1
617-896 MHz	9 - 12	LB3	+33° R	2-14°	R2
1695-2690 MHz	13 - 16	MB1	-33° L	0-10°	R3
1695-2690 MHz	17 - 20	MB2	0°	0-10°	R4
1695-2690 MHz	21 - 24	MB3	+33° R	0-10°	R5

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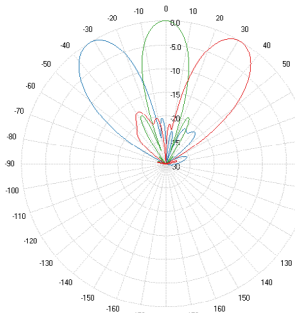
2D Antenna Patterns



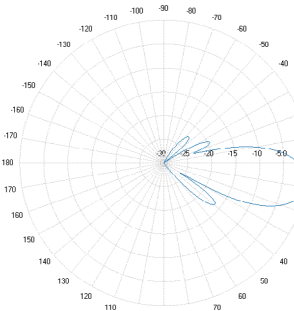
640 MHz



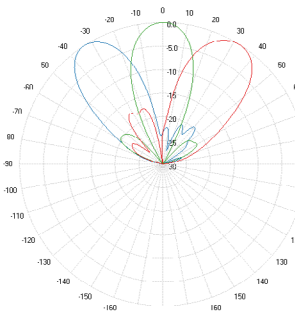
760 MHz



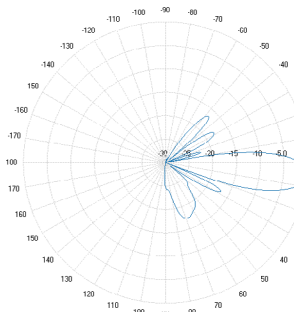
851 MHz



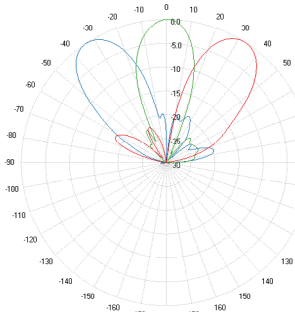
1780 MHz



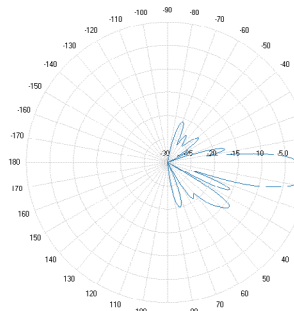
1980 MHz



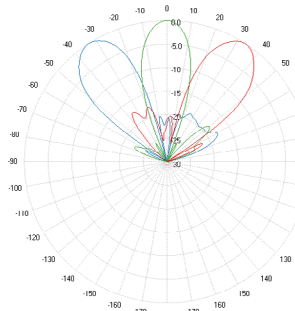
2133 MHz



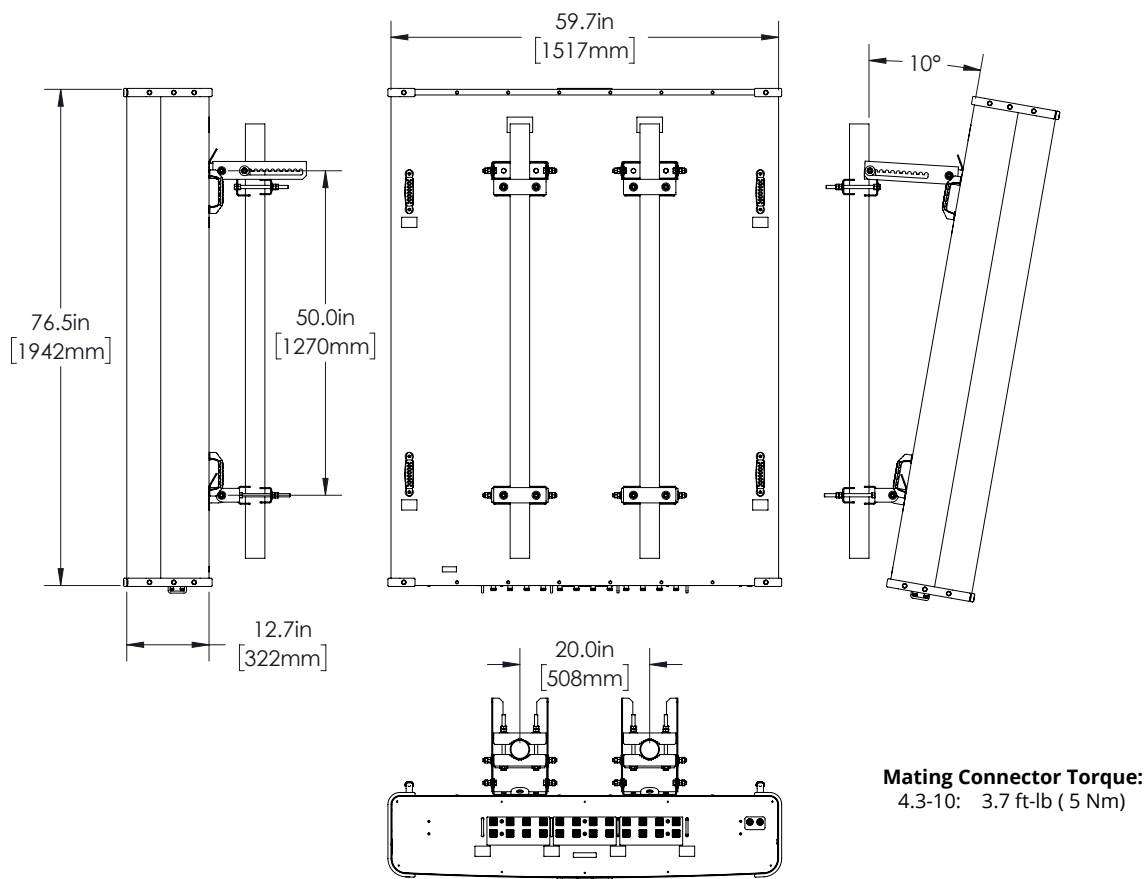
2320 MHz



2535 MHz



Antenna Outline



Mechanical Specifications	
Operating Temperature	-40° to 158°F (-40° to +70°C)
Antenna Weight	201.5 lbs (91.4 kg)
Antenna Bracket Weight	13.4 lbs (6.1 kg)
Antenna Dimension (Height x Width x Depth)	76.5" (1942 mm) x 59.7" (1517mm) x 12.7" (322 mm)
Input Connector Type	24x 4.3/10 (F)
RET Specification	Internal, AISG 2.0
Radome Material	ASA
Radome Color	Gray
Environment Rating	Outdoor
WInd Load, Front (@ 150 km/h)*	3417 N / 768 lbf
WInd Load, Rear (@ 150 km/h)*	3561 N / 801 lbf
WInd Load, Side (@ 150 km/h)*	846 N / 190 lbf
WInd Load, Max (@ 150 km/h)*	3848 N / 865 lbf
Wind Survival Rating	150 mph (241 km/h)

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

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Part Numbers & Ordering Options

Description	Color	Mounting Kit	Part Number
4x4 MIMO 617-896 and 1695-2690MHz 6-Beam Antenna with 24x 4.3-10 (F) Connectors	Gray	Includes 2x MK-07286 Mounting Bracket Assemblies	GP7724-08029-112
4x4 MIMO 617-896 and 1695-2690MHz 6-Beam Antenna with 24x 4.3-10 (F) Connectors and Heavy Duty Transport Case	Gray	Includes 2x MK-07286 Mounting Bracket Assemblies	GP7724-08029-212

Mounting Brackets & Optional Accessories

Description:	Part Number:
Heavy Duty Mounting Bracket (wind speed of 150 mph) [2x Included] 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". Note: The MK-07286 mounting bracket can also be ordered separately.	 MK-07286