

Dual-Band 3/6 Multibeam 4x4 Antenna [617-960 & 1695-2690 MHz]

GP6436-07883

Description:

- 4x4 MIMO 3/6 Beam antenna for high-capacity stadium/venue or special events applications
- 3-beams (12-ports) 617-960 MHz; each beam with 4x4 MIMO capability
- 6-beams (24-ports) 1695-2690 MHz; each beam with 4x4 MIMO capability
- Fixed 12° electrical downtilt in low band and 6° electrical downtilt in middle band
- Patent pending technology allows for stable azimuth beam directions over the entire operating frequency band
- Excellent alternative to large lens-based multibeam antennas
- External ruggedized features of the antenna enclosure provide added protection during the installation process



4x4 MIMO 617-960 & 1695-2690 MHz
3/6 Beam Antenna

Electrical Specifications

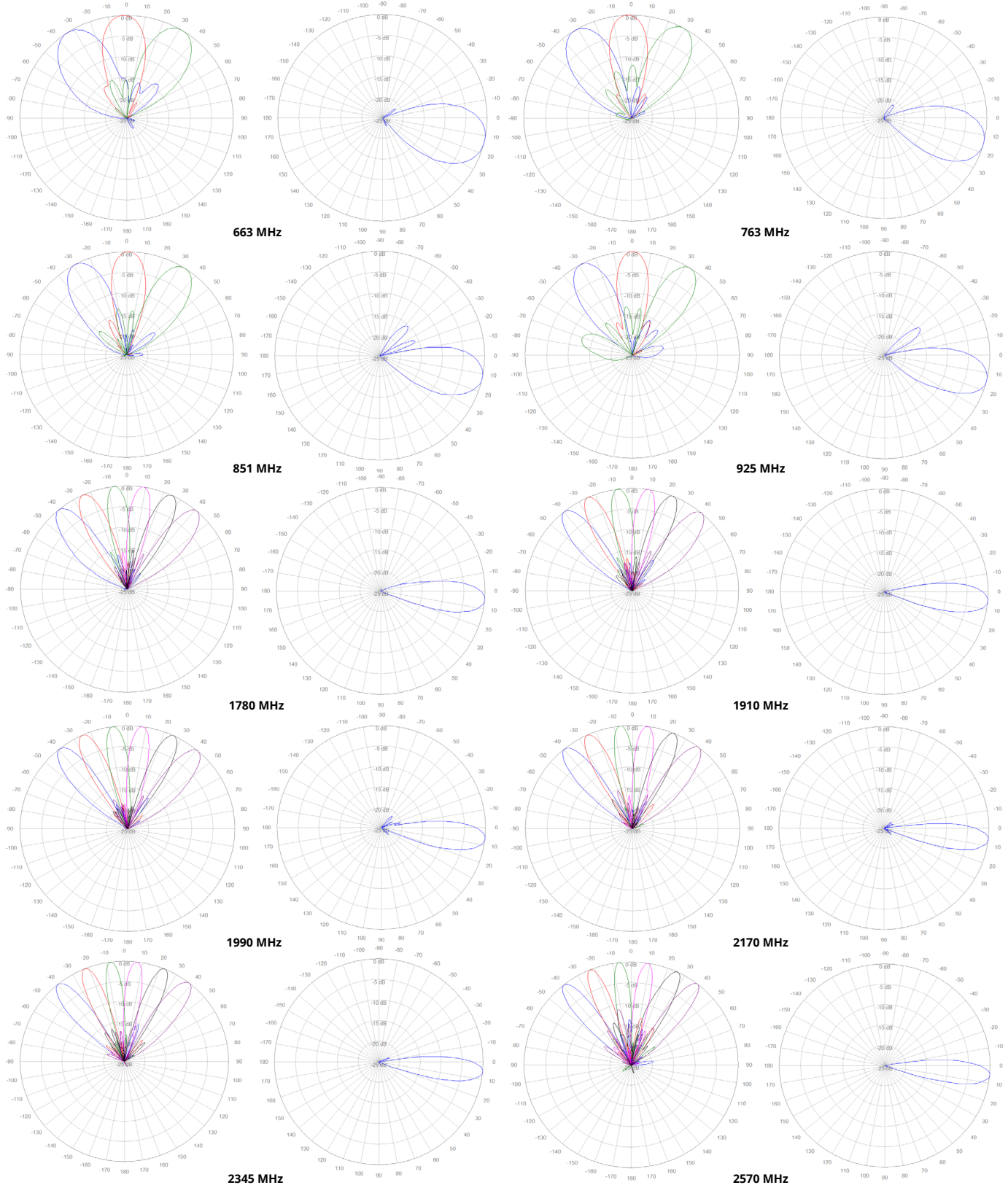
Frequency Band [MHz]	617-698	698-806	806-896	896-960	1695-1910	1930-2020	2110-2200	2305-2360	2496-2690
Gain, max. (dBi)	15.0	16.3	16.0	16.3	20.3	20.8	21.2	21.3	21.2
Gain, avg. (dBi)	13.6	14.5	14.3	14.3	17.7	19.1	19.8	19.7	19.3
Azimuth Beamwidth (°)	23	21	18	17	12	11	10	9	8
Azimuth Beam Spacing (°)	30				16				
Azimuth Beam Crossover (dB)	7.5	9.5	11.9	13.0	7.2	8.9	10.4	12.4	13.8
Elevation Beamwidth (°)	31	28	24	23	16	15	13	12	11
Electrical Downtilt (°)	12 FET				6 FET				
First Upper Sidelobe Suppression (dB)	17	17	14	14	18				
Front-to-Back Ratio, 180° (dB)	34				38				
Cross-Polar Discr. @ Boresight (dB)	20								
VSWR / RL (dB)	1.5:1 / 14.0								
Port-to-Port Isolation, Intrabeam (dB)*	25								
Port-to-Port Isolation, Interbeam (dB)**	15	17	17	17	16	16	19	14.5	17
PIM @ 2x43 dBm, (dBc)	-153								
Max Power per Port (Watt)	100								
Polarization (°)	Dual slant 45 (±45)								
Impedance (Ω)	50								

* 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

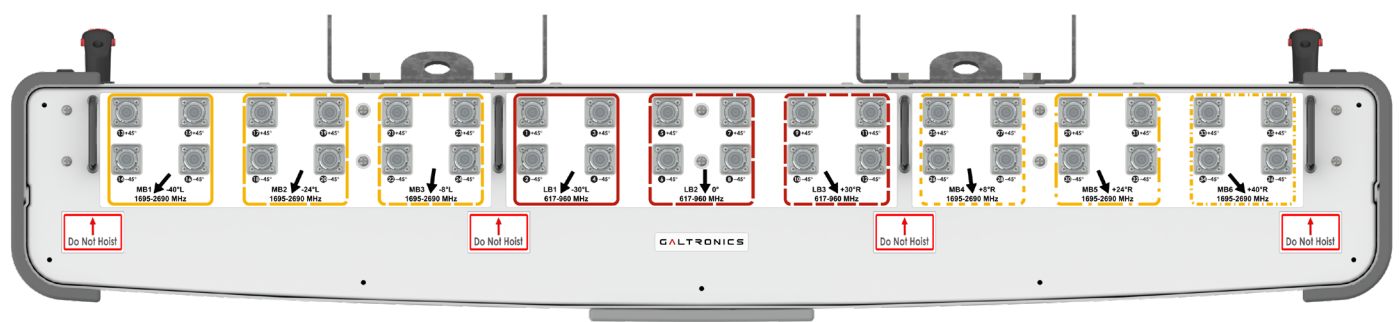
RFD#: 7883 ; Revision: R2 ; Release Date: June 29, 2023;

2D Antenna Patterns



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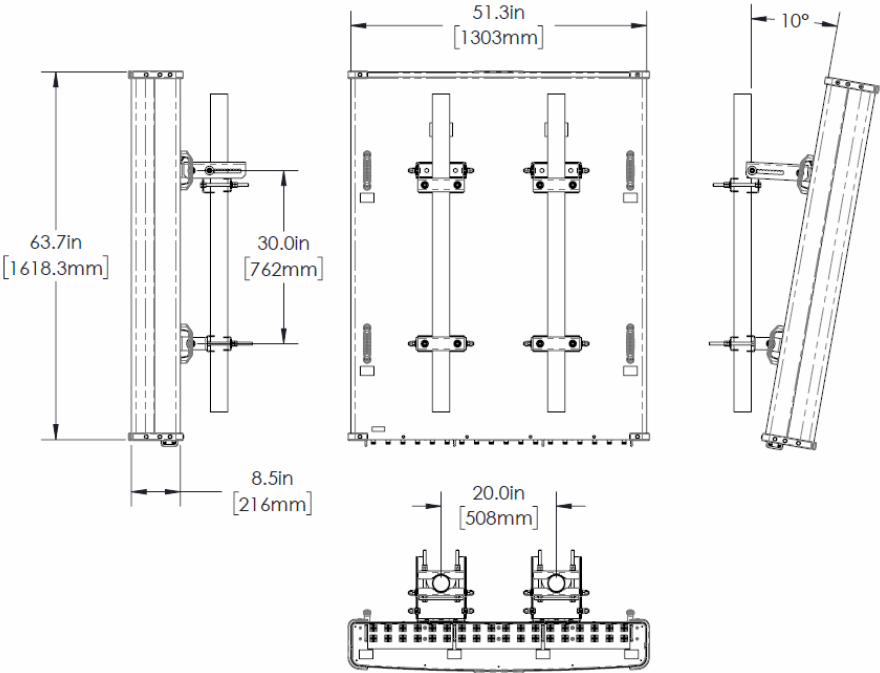
Bottom Plate & Port Designation Details



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

Port/Beam Designator Table				
Frequency Range	Ports	Beam Assignment	AZ Beam Direction	Downtilt
617-960 MHz	1-4	LB1	-30° L	12° Fixed
617-960 MHz	5-8	LB2	0° C	12° Fixed
617-960 MHz	9-12	LB3	+30° R	12° Fixed
1695-2690 MHz	13-16	MB1	-40° L	6° Fixed
1695-2690 MHz	17-20	MB2	-24° L	6° Fixed
1695-2690 MHz	21-24	MB3	-8° L	6° Fixed
1695-2690 MHz	25-28	MB4	+8° R	6° Fixed
1695-2690 MHz	29-32	MB5	+24° R	6° Fixed
1695-2690 MHz	33-36	MB6	+40° R	6° Fixed

Antenna Outline



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Mechanical Specifications

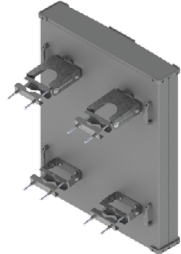
Operating Temperature	-40° to 158°F (-40° to +70°C)
Antenna Weight	125.7 lbs (57 kg)
Antenna Bracket Weight	13.4 lbs (6.1 kg), 2x Brackets Per Antenna
Antenna Dimension (Height x Width x Depth)	63.7" (1618.3 mm) x 51.3" (1303 mm) x 8.5" (216 mm)
Input Connector Type	36 x 4.3/10 (F)
Radome Material	ASA w/Heavy Duty Top/Bottom Caps
Radome Color	Gray
Wind Load, Front (@ 150 km/h)*	2501 N / 562 lbf
Wind Load, Back (@ 150 km/h)*	2598 N / 584 lbf
Wind Load, Side (@ 150 km/h)*	504 N / 113 lbf
Wind Load, Maximum (@ 150 km/h)*	2731 N / 614 lbf
Wind Survival Rating	150 mph (241 km/h)

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

Part Numbers & Ordering Options

Description	Color	Mounting Kit	Part Number
4x4 MIMO 617-960 & 1695-2690 MHz 3/6 Beam Antenna with 36x 4.3-10 (F) Connectors and Heavy Duty Transport Case	Gray	Includes 2x MK-06989 mounting kit assemblies	GP6436-07883-212

Mounting Brackets & Optional Accessories

Description:	Part Number:
Heavy Duty Mounting Bracket (wind speed of 150 mph) [2x Included] The MK-6989 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-06989 mounting bracket can also be ordered separately.	 MK-06989