GALTRONICS

Tri-band 3/6/6 Multibeam 2x2 and 4x4 MIMO Panel Antenna [698-896, 1695-2690/3300-4000 MHz]

GP6442-07985

Description:

- Panel 3/6/6 beam antenna for high-capacity stadium/venue or special event applications
- 3-Beam (6-Port) 698-896 MHz; each beam with 2x2 MIMO capability
- 12-Port (6-Beam) 1695-2690 MHz, 12-ports (6-beams) 3300-4000 MHz, and 12-Port (6-Beam) 1695-2690/3300-4000 MHz
- 6-Beam 1695-2690 MHz with 4x4 MIMO capability
- 6-Beam 3300-4000 MHz with 4x4 MIMO capability
- 6° Fixed Electrical Downtilt
- 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
- Optional heavy-duty transport case is provided to prevent damage for multiple deployment scenarios

2x2 and 4x4 MIMO 698-896 1695-2690/3300-4000 MHz 3/6/6-beam Panel Antenna

Electrical Specifications

Frequency Band [MHz]	698-806	806-896	1695-1910	1930-2020	2110-2200	2305-2360	2496-2690	3300-3550	3550-3700	3700-4000
Gain, max. (dBi)	16.6	16.8	19.3	20.0	20.1	20.3	20.4	18.0	17.8	18.7
Gain, avg. (dBi)	15.8	15.6	17.4	18.3	18.8	18.6	18.5	17.3	17.5	17.8
Azimuth Beam Width (°)	19.9	17.2	11.4	10.7	10.0	9.3	8.4	11.6	11.0	10.5
Elevation Beam Width (°)	24.0	21.7	16.0	14.5	13.1	11.9	11.0	13.4	12.8	12.4
Azimuth Beam Spacing (°)	30		16					16		
Azimuth Beam Crossover (dB)	10	12	8	9	11	12	14	8	9	10
First Upper Sidelobe Suppression (dB)	23		18					19		
Front-to-Back Ratio, 180° (dB)	41		38					37		
Electrical Downtilt (°)	6 FET									
VSWR / RL (dB)	1.5:1 / 14.0									
Port-to-Port Isolation, Intra-beam* (dB)	25									
Port-to-Port Isolation, Inter-beam (dB)**	17.0		17.5	18.0	22.0	14.5	16.5	14.0		
PIM @ 2x43 dBm (dBc)	-153							-145		
Max Power per Port (W)	100									
Polarization (°)	Dual slant 45 (±45)									
Impedance (Ω)	50									

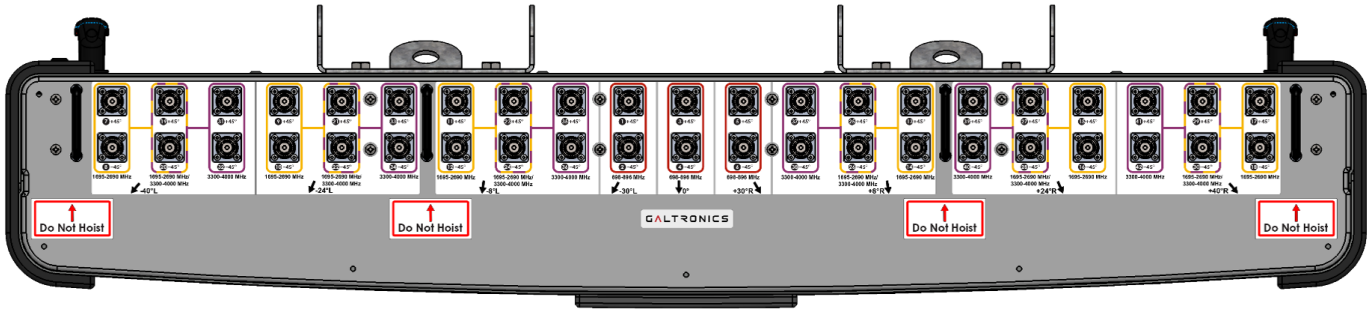
* Port-port isolation between each cluster of two or four ports in the same 2x2 or 4x4 MIMO beam

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

RFD#: 7985 ; Revision: R1 ; Release Date: September 08, 2023;

GALTRONICS

Bottom Plate & Port Designation Details



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

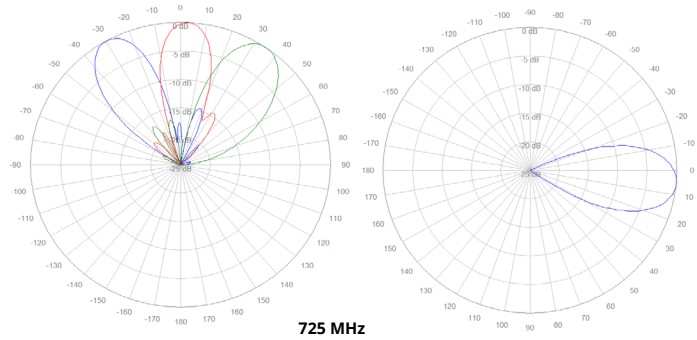
Port/Beam Designator Table

Frequency Range	Ports	Beam Assignment	AZ Beam Direction	Downtilt
698-896 MHz	1 - 2	LB1	-30° L	6° Fixed
698-896 MHz	3 - 4	LB2	0°	6° Fixed
698-896 MHz	5 - 6	LB3	+30° R	6° Fixed
1695-2690 MHz	7 - 8	MB1	-40° L	6° Fixed
1695-2690 MHz	9 - 10	MB2	-24° L	6° Fixed
1695-2690 MHz	11 - 12	MB3	-8° L	6° Fixed
1695-2690 MHz	13 - 14	MB4	+8° R	6° Fixed
1695-2690 MHz	15 - 16	MB5	+24° R	6° Fixed
1695-2690 MHz	17 - 18	MB6	+40° R	6° Fixed
1695-2690/3300-4000 MHz	19 - 20	MCB1	-40° L	6° Fixed
1695-2690/3300-4000 MHz	21 - 22	MCB2	-24° L	6° Fixed
1695-2690/3300-4000 MHz	23 - 24	MCB3	-8° L	6° Fixed
1695-2690/3300-4000 MHz	25 - 26	MCB4	+8° R	6° Fixed
1695-2690/3300-4000 MHz	27 - 28	MCB5	+24° R	6° Fixed
1695-2690/3300-4000 MHz	29 - 30	MCB6	+40° R	6° Fixed
3300-4000 MHz	31 - 32	CB1	-40° L	6° Fixed
3300-4000 MHz	33 - 34	CB2	-24° L	6° Fixed
3300-4000 MHz	35 - 36	CB3	-8° L	6° Fixed
3300-4000 MHz	37 - 38	CB4	+8° R	6° Fixed
3300-4000 MHz	39 - 40	CB5	+24° R	6° Fixed
3300-4000 MHz	41 - 42	CB6	+40° R	6° Fixed

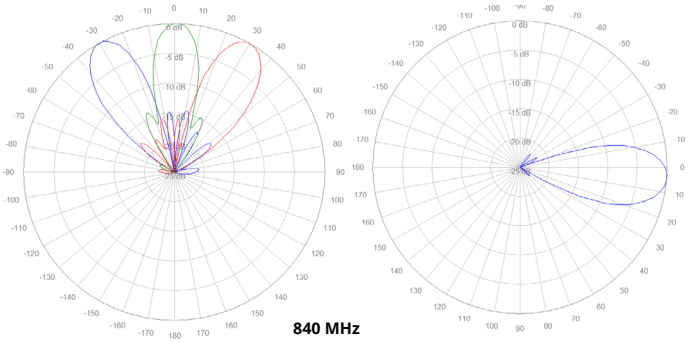
RFD#: 7985 ; Revision: R1 ; Release Date: September 08, 2023;

GALTRONICS

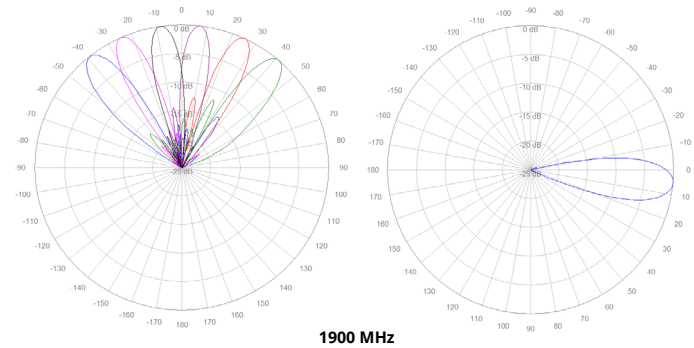
2D Antenna Patterns



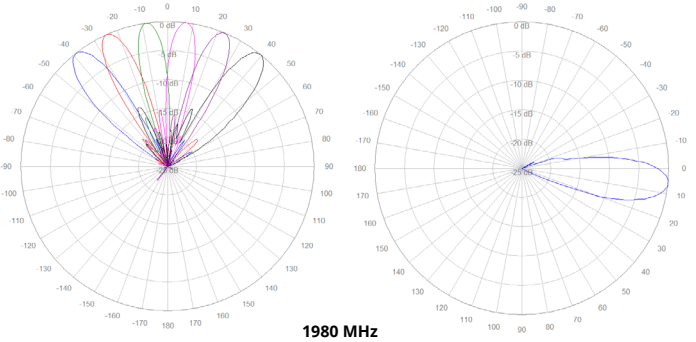
725 MHz



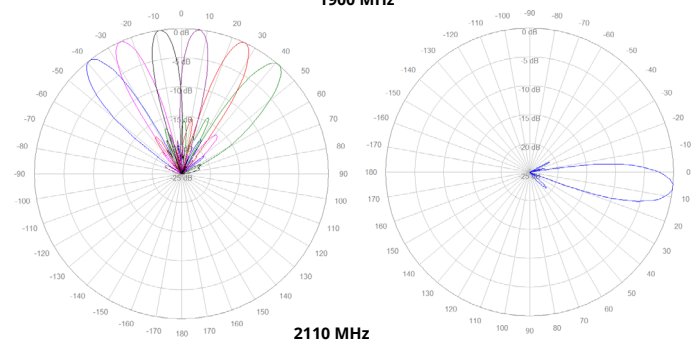
840 MHz



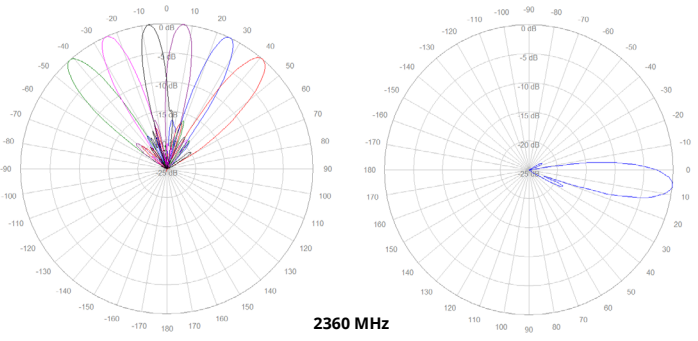
1900 MHz



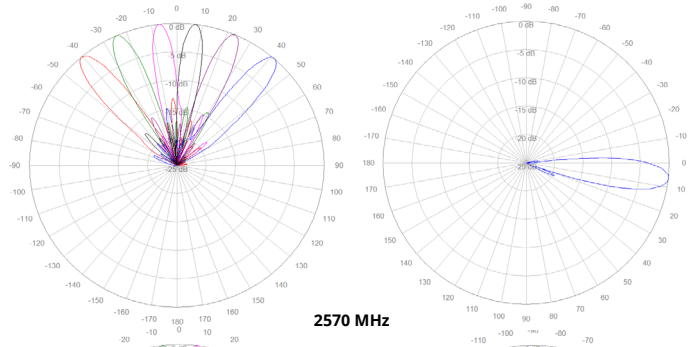
1980 MHz



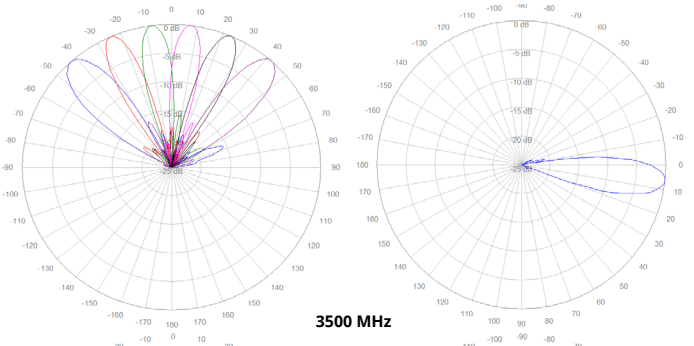
2110 MHz



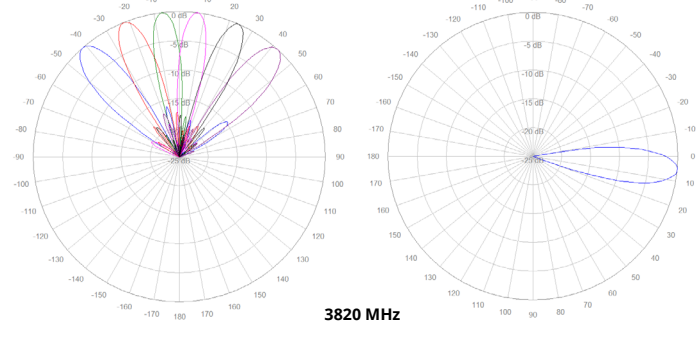
2360 MHz



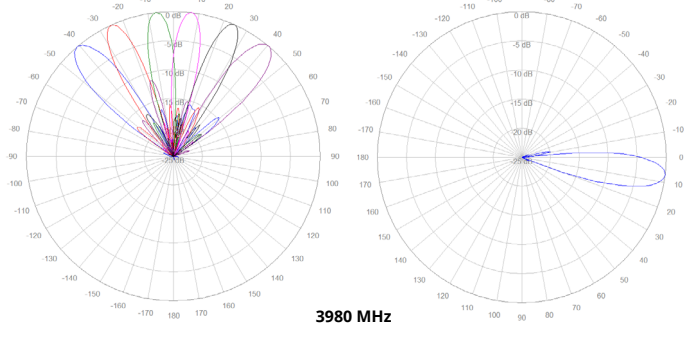
2570 MHz



3500 MHz



3820 MHz

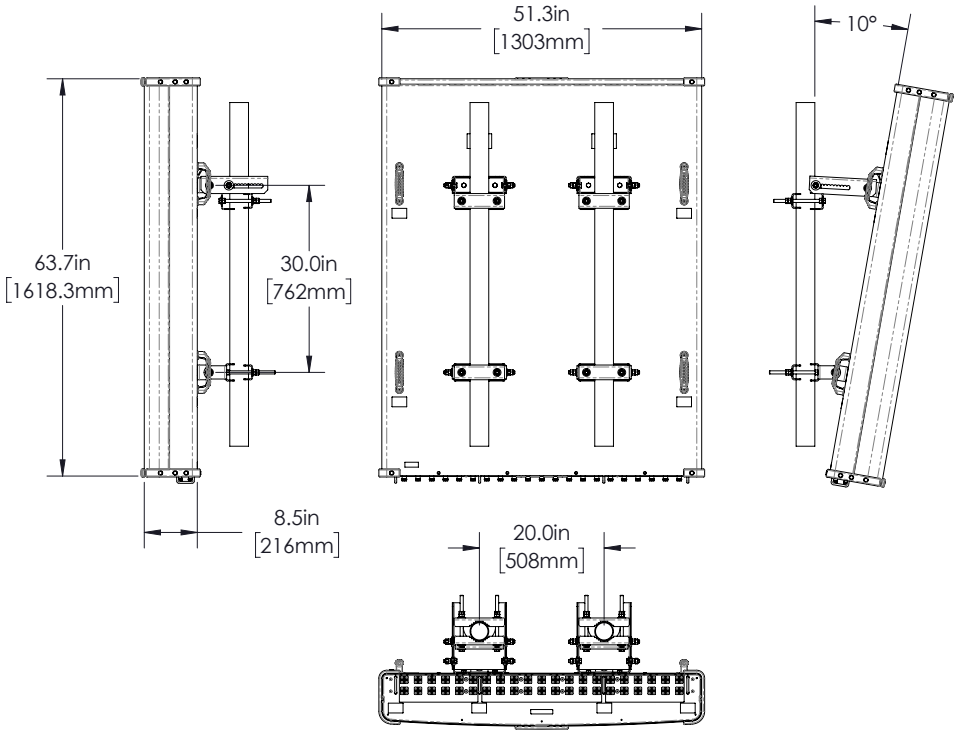


3980 MHz

RFD#: 7985 ; Revision: R1 ; Release Date: September 08, 2023;

GALTRONICS

Antenna Outline



Mechanical Specifications

Operating Temperature	-40° to 158°F (-40° to +70°C)
Antenna Weight	147.7 lbs (67.0 kg)
Antenna Bracket Weight (2 Brackets)	26.8 lbs (12.2 kg), 2x Brackets Per Antenna
Antenna Dimension (Height x Width x Depth)	63.7" (1618.3 mm) x 51.3" (1303.0 mm) x 8.5" (216.0 mm)
Input Connector Type	42x 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

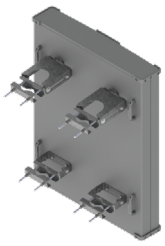
RFD#: 7985 ; Revision: R1 ; Release Date: September 08, 2023;

GALTRONICS

Part Numbers & Ordering Options

Description	Color	Mounting Kit	Part Number
2x2 and 4x4 MIMO 698-896, 1695-2690/3300-4000 MHz 3/6/6 Beam Antenna, 6° FET with 42x 4.3-10 (F) Connectors	Gray	Includes 2x MK-06989 mounting kit assemblies	GP6442-07985-112
2x2 and 4x4 MIMO 698-896, 1695-2690/3300-4000 MHz 3/6/6 Beam Antenna, 6° FET with 42x 4.3-10 (F) Connectors and Heavy Duty Transport Case	Gray	Includes 2x MK-06989 mounting kit assemblies	GP6442-07985-212

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" to 5". **Note**: The MK-06989 mounting bracket can also be ordered separately.	 MK-06989

RFD#: 7985 ; Revision: R1 ; Release Date: September 08, 2023;