

## Dual-Band 3/3 Multibeam 4x4 Antenna [1695-2690/3300-4000 MHz]

# GP6624-07894

### Description:

- 4x4 MIMO 3/3 beam antenna for high-capacity stadium/venue or special events applications
- 3-beams (12-ports) 1695-2690 MHz; each beam with 4x4 MIMO capability
- 3-beams (12-ports) 3300-4000 MHz; each beam with 4x4 MIMO capability
- 6° Fixed Electrical Downtilt in all bands
- 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 is provided to prevent damage for multiple deployment scenarios



4x4 MIMO 1695-2690 & 3300-4000 MHz 3/3 Beam Antenna

Electrical Specifications								
Frequency Band [MHz]	1695-1910	1930-2020	2110-2200	2305-2360	2496-2690	3300-3550	3550-3700	3700-4000
Gain, max. (dBi)	17.4	17.8	18.0	18.8	19.5	18.4	18.4	18.8
Gain, avg. (dBi)	16.1	16.5	17.1	17.1	18.1	17.0	17.4	17.4
Azimuth Beamwidth (°)	26	25	24	22	21	23	23	21
Azimuth Beamwidth, 10dB (°)	45	44	41	39	36	42	41	38
Azimuth Beam Spacing (°)	33							
Azimuth Beam Crossover (dB)	6	7	7	8	9	8	9	10
Elevation Beamwidth (°)	16	15	13	12	11	14	13	12
Elevation Beamwidth, 10dB (°)	28	25	22	21	19	23	23	21
Electrical Downtilt (°)	6 FET (per each 4x4 beam cluster)							
First Upper Sidelobe Suppression (dB)	22	19	21	20	23	19	20	20
Front-to-Back Ratio, 180° (dB)	40					40		
Cross-Pol Discrimination @ Boresight (dB)	22	25	25	21	24	26	29	25
VSWR / RL (dB)	1.5:1 / 14.0							
Port-to-Port Isolation, Intrabeam (dB)*	25							
Port-to-Port Isolation, Interbeam (dB)**	15	16	19	20	18	15		
PIM @ 2x43 dBm, max. (dBc)	-153					-145		
Max Power per Port (Watt)	100							
Polarization (°)	Dual slant 45 (±45)							
Impedance (Ω)	50							

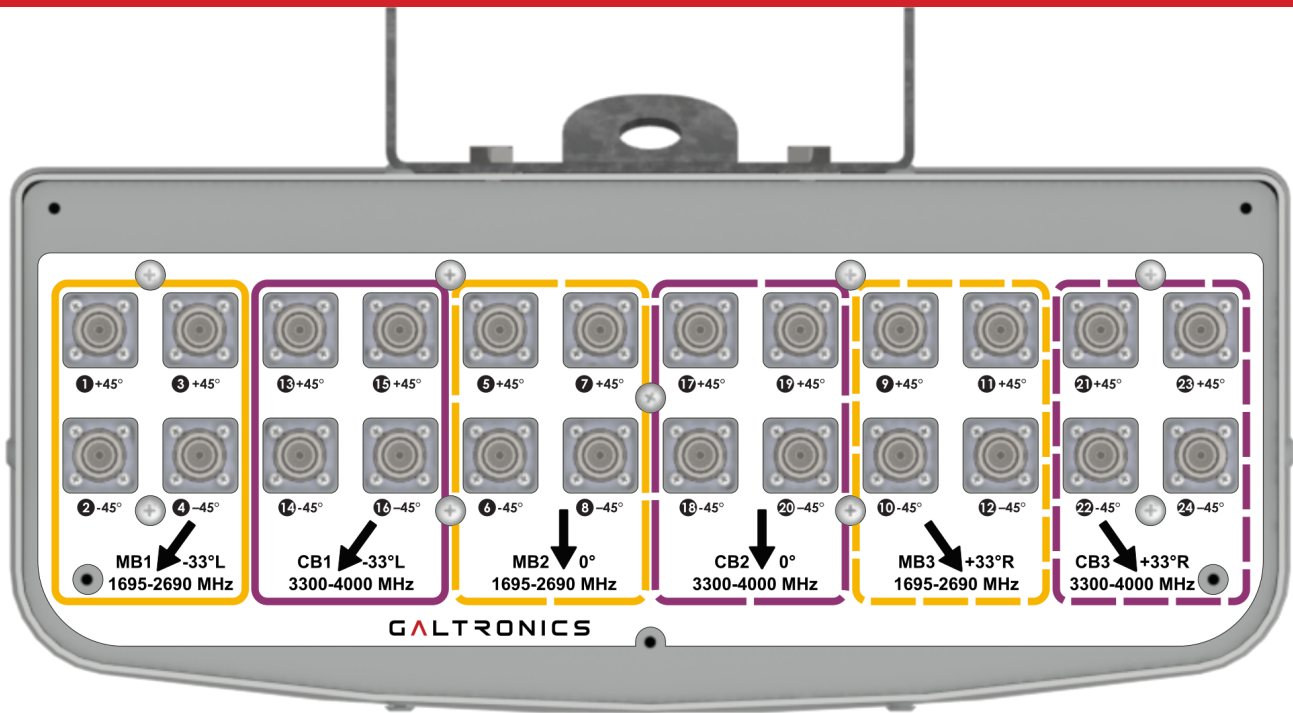
\* Port-port isolation between each cluster of two ports in the same 4x4 MIMO beam

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

## Electrical Specifications - BASTA

Frequency Band [MHz]	1695-1910	1930-2020	2110-2200	2305-2360	2496-2690	3300-3550	3550-3700	3700-4000
Gain Over All Tilts, avg. (dBi)	16.1	16.5	17.1	17.1	18.1	17.0	17.4	17.4
Gain Over All Tilts Tolerance (dB)	0.8	0.9	0.8	1.5	1.0	0.9	0.9	1.0
AZ Beamwidth Tolerance (°)	2.1	2.6	2.6	2.7	3.1	4.2	3.8	3.7
EL Beamwidth Tolerance (°)	1.1	0.9	0.5	0.7	0.8	0.7	0.7	0.9
Upper Sidelobe Suppression, Peak to +20° (dB)	19.0	18.2	18.8	15.4	18.6	15.4	15.6	17.6
Front-to-Back Ratio, Total Power, +/-30° (dB)	27.7	33.1	35.0	30.8	30.8	30.3	29.8	27.8
Cross-Polar Discrimination at Boresight (dB)	16.7	19.8	20.7	15.2	19.2	20.9	22.3	19.2
Azimuth Beam Peak Tolerance	1.0	0.8	0.9	1.5	1.0	1.1	1.1	1.2
Azimuth Beam Crossover Tolerance	0.8	0.9	1.1	1.6	1.7	1.2	1.2	1.7

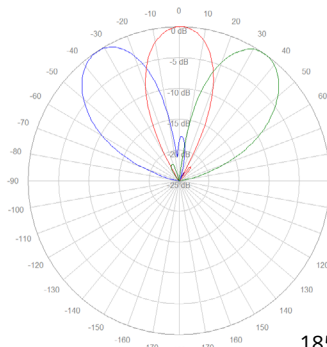
## Bottom Plate & Port Designation Details



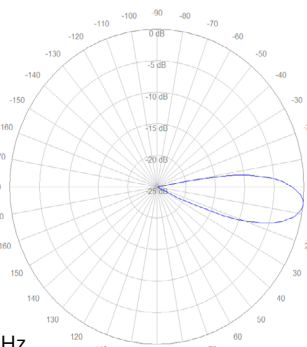
## Port/Beam Designator Table

Frequency Range	Ports	Beam Assignment	AZ Beam Direction	Downtilt
1695-2690 MHz	1 - 4	MB1	-33° L	6° Fixed
1695-2690 MHz	5 - 8	MB2	0°	6° Fixed
1695-2690 MHz	9 - 12	MB3	+33° R	6° Fixed
3300-4000 MHz	13 - 16	CB1	-33° L	6° Fixed
3300-4000 MHz	17 - 20	CB2	0°	6° Fixed
3300-4000 MHz	21 - 24	CB3	+33° R	6° Fixed

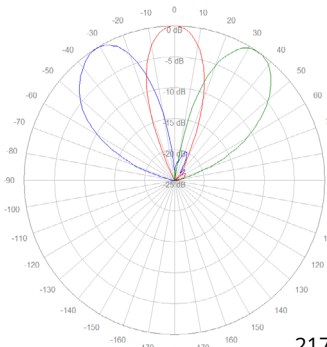
## 2D Antenna Patterns



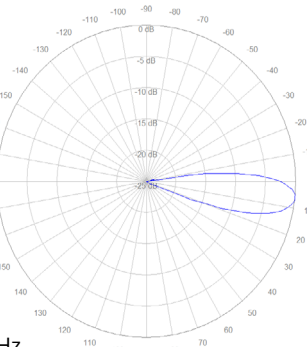
1850 MHz



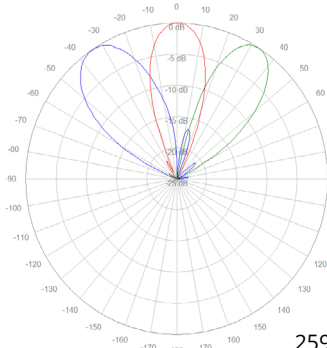
1990 MHz



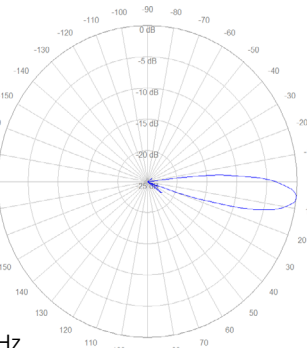
2170 MHz



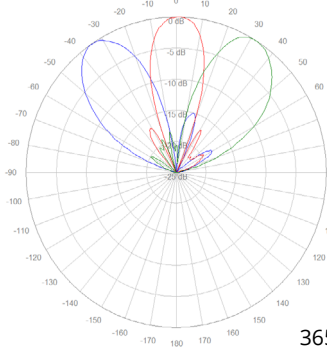
2345 MHz



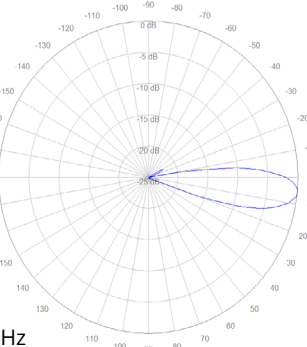
2599 MHz



3450 MHz

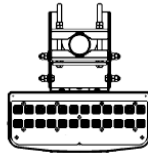
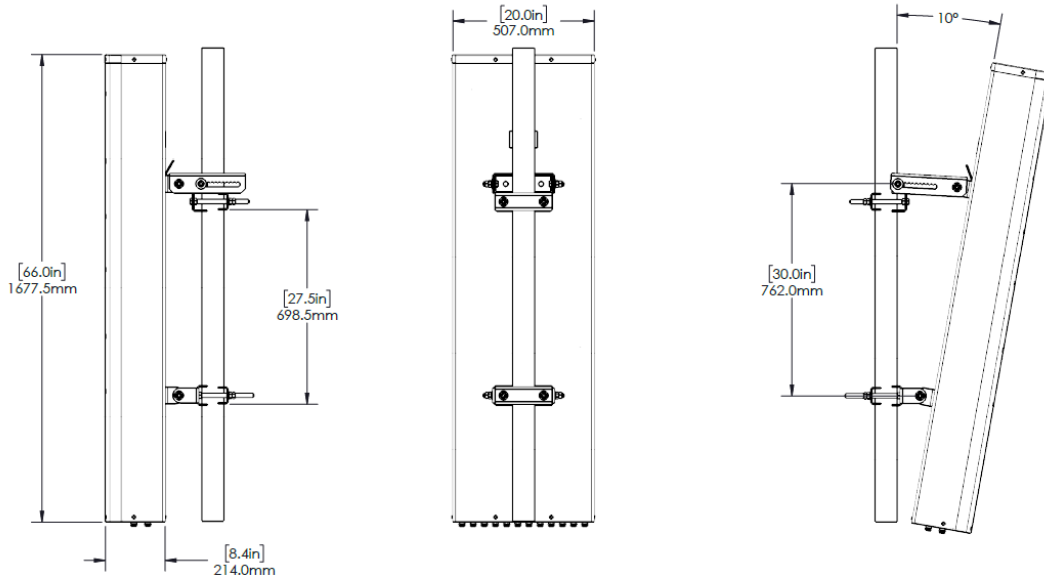


3650 MHz



3820 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	64.6 lbs (29.3 kg)
Antenna Bracket Weight	13.4 lbs (6.1 kg)
Antenna Dimension (Height x Width x Depth)	66.0" (1677.5 mm) x 19.96" (507.0 mm) x 8.43" (214.0 mm)
Input Connector Type	24x 4.3/10 (F)
Radome Material	ASA
Radome Color	Gray
Environment Rating	Outdoor
Wind Load, Front (@ 150 km/h)*	1119 N / 252 lbf
Wind Load, Back (@ 150 km/h)*	546 N / 123 lbf
Wind Load, Side (@ 150 km/h)*	1203 N / 271 lbf
Wind Survival Rating	150 mph (241 km/h)


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

RFD#: 7894 ; Revision: R1 ; Release Date: January 18, 2024;

## Part Numbers & Ordering Options

Description	Color	Mounting Kit	Part Number
4x4 MIMO 1695-2690 & 3300-4000 MHz 3/3 Beam Antenna with 24x 4.3-10 (F) Connectors	Gray	Includes MK-06989 mounting kit assemblies	GP6624-07894-112
4x4 MIMO 1695-2690 & 3300-4000 MHz 3/3 Beam Antenna with 24x 4.3-10 (F) Connectors and Heavy Duty Transport Case	Gray	Includes MK-06989 mounting kit assemblies	GP6624-07894-212

## Mounting Brackets & Optional Accessories

Description:	Part Number:
<p><b>Heavy Duty Mounting Bracket (wind speed of 150 mph) [Included]</b></p> <p>The MK-06989 standard mounting bracket allows for easy installation of all Galtronics outdoor Base Station Panel Antennas with height between 2.5' and 4'. It provides 0°-10° of mechanical downtilt adjustability, and fits pole diameters ranging from 2" to 5".</p> <p><b>Note:</b> The MK-06989 mounting bracket can also be ordered separately.</p>	 <p><b>MK-06989 (Included)</b></p>