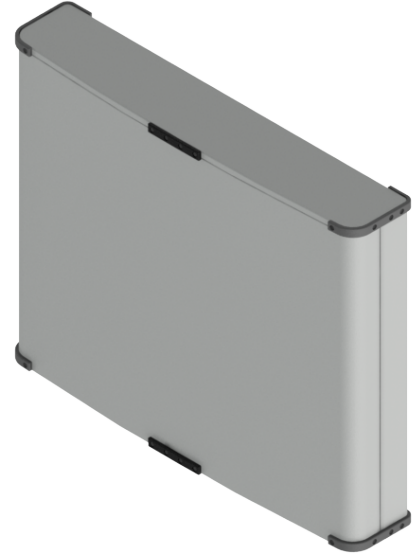


## GP4618-08037

### Description:

- Multi-band 3-beam antenna for high-capacity stadium/venue or special event applications
- 3-beam (6-port) covering 617-960 MHz, 3-beam (6-port) covering 1695-2690 MHz, 3-beam (6-port) covering 3300-3550 and 3700-4000 MHz
- Patent pending technology enables 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 to prevent damage for multiple deployment scenarios



### Electrical Specifications

| Frequency Band [MHz]                      | 617-698             | 698-806 | 806-896 | 896-960 | 1695-1910 | 1930-2020 | 2110-2200 | 2305-2360 | 2496-2690 | 3300-3550 | 3700-4000 |
|---|---------------------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Gain, max. (dBi)                          | 16.0                | 16.9    | 16.8    | 16.7    | 18.7      | 19.1      | 19.2      | 19.3      | 20.1      | 18.7      | 19.4      |
| Gain, avg. (dBi)                          | 14.7                | 15.5    | 15.6    | 15.3    | 17.2      | 18.2      | 18.5      | 18.1      | 18.5      | 17.7      | 18.1      |
| Azimuth Beamwidth (°)                     | 21.5                | 19.5    | 17.5    | 16.9    | 24.4      | 23.5      | 21.5      | 20.2      | 19.7      | 23.1      | 21.9      |
| Azimuth Beam Spacing (°)                  | 33                  |         |         |         | 35        |           |           |           |           |           |           |
| Azimuth Beam Crossover (dB)               | 9.3                 | 12.4    | 15.5    | 16.9    | 7.0       | 8.2       | 9.2       | 10.5      | 12.3      | 8.2       | 9.6       |
| Elevation Beamwidth (°)                   | 31.0                | 27.9    | 24.7    | 23.4    | 15.3      | 14.2      | 13.0      | 12.3      | 10.7      | 14.3      | 12.9      |
| Electrical Downtilt (°)                   | 9 FET               |         |         |         | 6 FET     |           |           |           |           |           |           |
| First Upper Sidelobe Suppression (dB)     | 16.9                | 17.5    | 15.4    | 17.0    | 18.0      | 16.1      | 15.4      | 15.2      | 11.1      | 19.0      | 19.0      |
| Front-to-Back Ratio, 180° (dB)            | 38                  |         |         |         | 40        |           |           |           |           | 45        |           |
| Cross-Pol Discrimination @ Boresight (dB) | 24                  | 21      | 17      | 16      | 20        | 23        | 26        | 21        | 21        | 26        | 25        |
| VSWR / RL (dB)                            | 1.5:1 / 14.0        |         |         |         |           |           |           |           |           |           |           |
| Port-to-Port Isolation, Intrabeam (dB)*   | 25                  |         |         |         |           |           |           |           |           |           |           |
| Port-to-Port Isolation, Interbeam (dB)**  | 14.0                |         |         |         | 16.0      |           |           |           |           | 14.0      |           |
| PIM @ 2x43 dBm (dBc)                      | -153                |         |         |         |           |           |           |           |           |           | -145      |
| Max Power per Port (W)                    | 100                 |         |         |         |           |           |           |           |           |           |           |
| Max Total Input Power (W)                 | 1800                |         |         |         |           |           |           |           |           |           |           |
| Polarization (°)                          | Dual slant 45 (±45) |         |         |         |           |           |           |           |           |           |           |
| Impedance (Ω)                             | 50                  |         |         |         |           |           |           |           |           |           |           |

\* Port-port isolation between each cluster of two ports in the same 2x2 MIMO beam

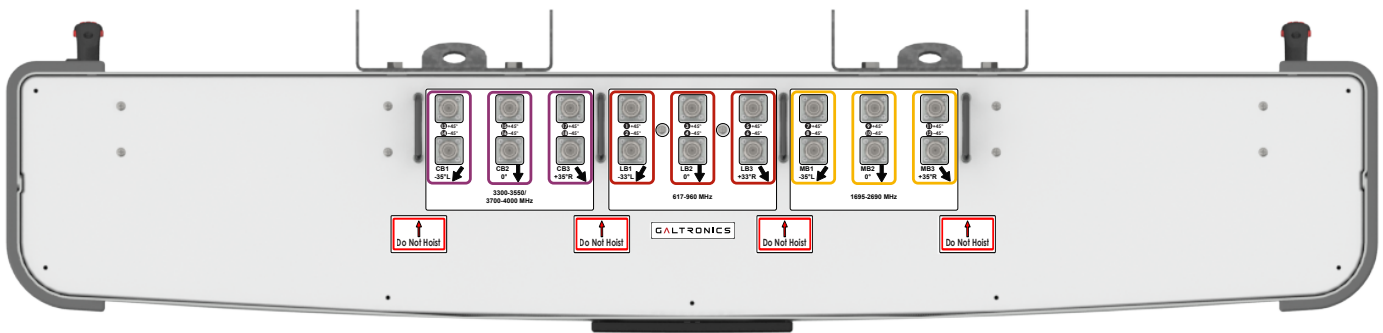
\*\* Port-port isolation between any combination of ports between different beams

RFD#: 8037 ; Revision: R1 ; Release Date: September 11, 2025;

## Electrical Specifications - BASTA

| Frequency Band [MHz]                          | 617-698 | 698-806 | 806-896 | 896-960 | 1695-1910 | 1930-2020 | 2110-2200 | 2305-2360 | 2496-2690 | 3300-3550 | 3700-4000 |
|---|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Gain Over All Tilts, avg. (dBi)               | 14.7    | 15.5    | 15.6    | 15.3    | 17.2      | 18.2      | 18.5      | 18.1      | 18.5      | 17.7      | 18.1      |
| Gain Over All Tilts Tolerance (dB)            | 1.5     | 1.5     | 1.4     | 1.1     | 0.9       | 0.8       | 0.4       | 1.1       | 1.0       | 0.8       | 1.2       |
| AZ Beamwidth Tolerance (°)                    | 2.6     | 2.5     | 1.5     | 1.1     | 2.1       | 2.1       | 1.2       | 2.2       | 2.1       | 3.2       | 3.6       |
| EL Beamwidth Tolerance (°)                    | 3.1     | 3.4     | 1.9     | 2.6     | 1.0       | 0.7       | 0.5       | 0.7       | 0.8       | 0.9       | 1.0       |
| Upper Sidelobe Suppression, Peak to +20° (dB) | N/A     |         |         |         | 17.5      | 14.3      | 13.4      | 13.0      | 8.3       | 16.8      | 17.3      |
| Front-to-Back Ratio, Total Power, +/-30° (dB) | 26      | 28      | 28      | 28      | 31        | 36        | 35        | 35        | 33        | 32        | 32        |
| Cross-Polar Discrimination at Boresight (dB)  | 17      | 15      | 14      | 10      | 14        | 20        | 20        | 15        | 17        | 20        | 21        |
| Azimuth Beam Peak Tolerance (°)               | 1.2     | 1.2     | 0.8     | 0.8     | 0.7       | 0.4       | 0.5       | 1.0       | 0.6       | 0.7       | 0.7       |
| Azimuth Beam Crossover Tolerance (dB)         | 1.3     | 1.7     | 1.9     | 2.8     | 0.9       | 0.6       | 0.5       | 1.1       | 1.8       | 1.0       | 1.0       |

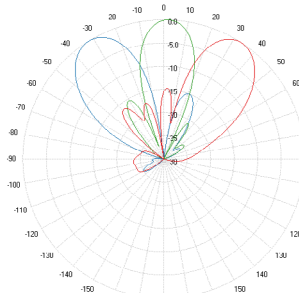
## Bottom Plate & Port Designation Details



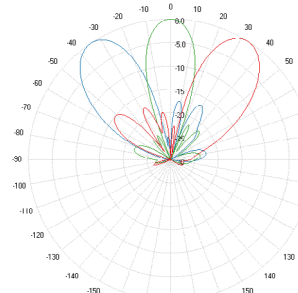
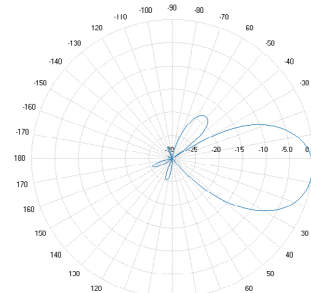
## Port/Beam Designator Table

| Frequency Range           | Ports   | Beam Assignment | AZ Beam Direction | Downtilt |
|---------------------------|---------|-----------------|-------------------|----------|
| 617-960 MHz               | 1 - 2   | LB1             | -33° L            | 9° Fixed |
| 617-960 MHz               | 3 - 4   | LB2             | 0°                | 9° Fixed |
| 617-960 MHz               | 5 - 6   | LB3             | +33° R            | 9° Fixed |
| 1695-2690 MHz             | 7 - 8   | MB1             | -35° L            | 6° Fixed |
| 1695-2690 MHz             | 9 - 10  | MB2             | 0°                | 6° Fixed |
| 1695-2690 MHz             | 11 - 12 | MB3             | +35° R            | 6° Fixed |
| 3300-3550 & 3700-4000 MHz | 13 - 14 | CB1             | -35° L            | 6° Fixed |
| 3300-3550 & 3700-4000 MHz | 15 - 16 | CB2             | 0°                | 6° Fixed |
| 3300-3550 & 3700-4000 MHz | 17 - 18 | CB3             | +35° R            | 6° Fixed |

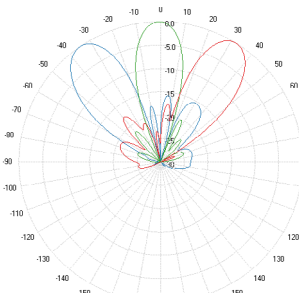
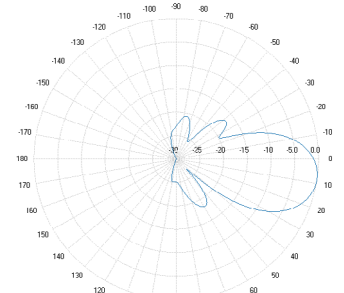
## 2D Antenna Patterns



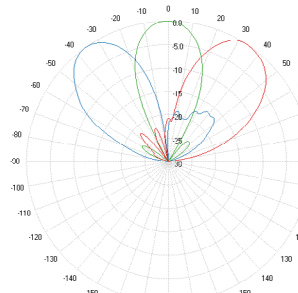
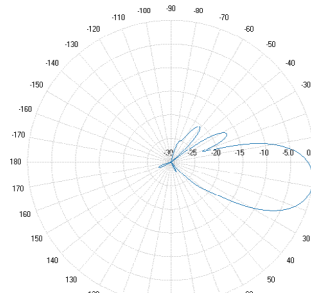
640 MHz



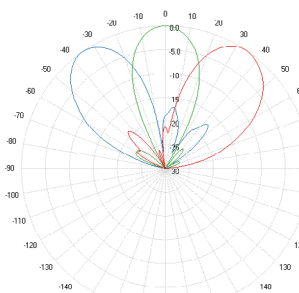
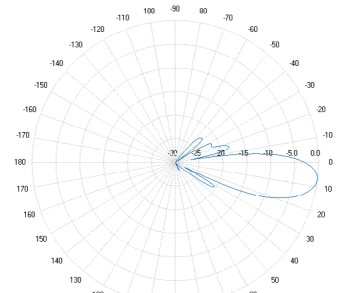
760 MHz



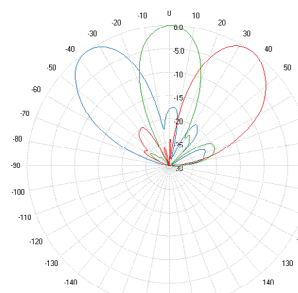
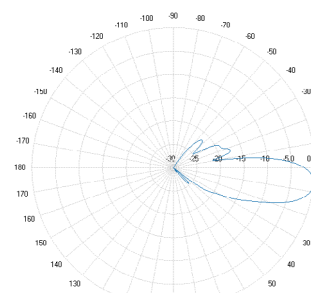
851 MHz



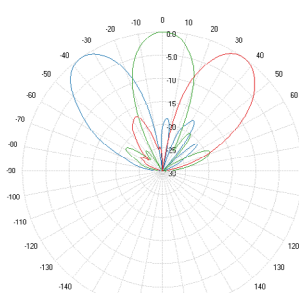
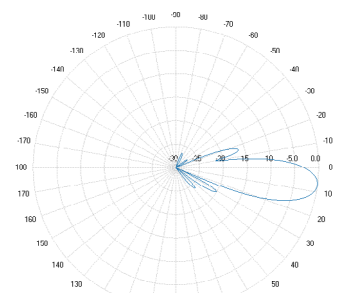
1780 MHz



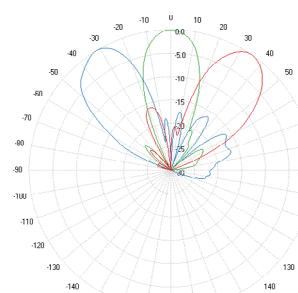
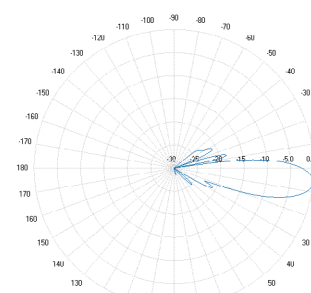
1805 MHz



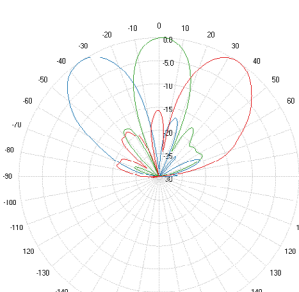
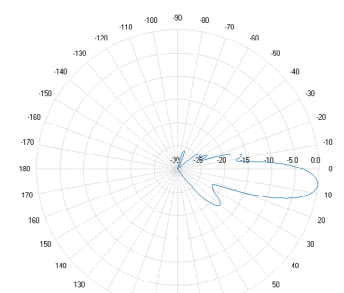
1970 MHz



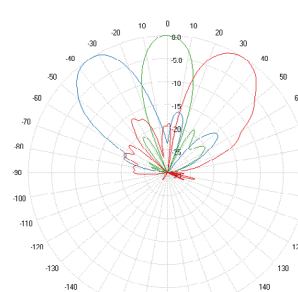
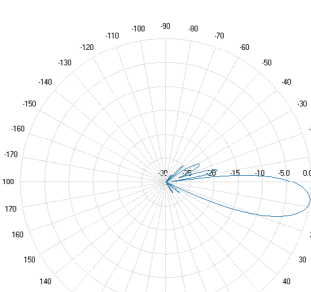
2155 MHz



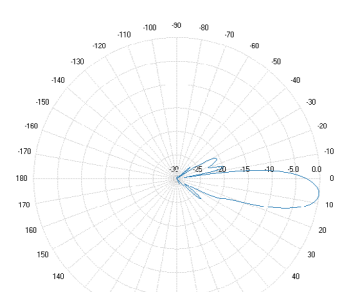
2345 MHz



3450 MHz



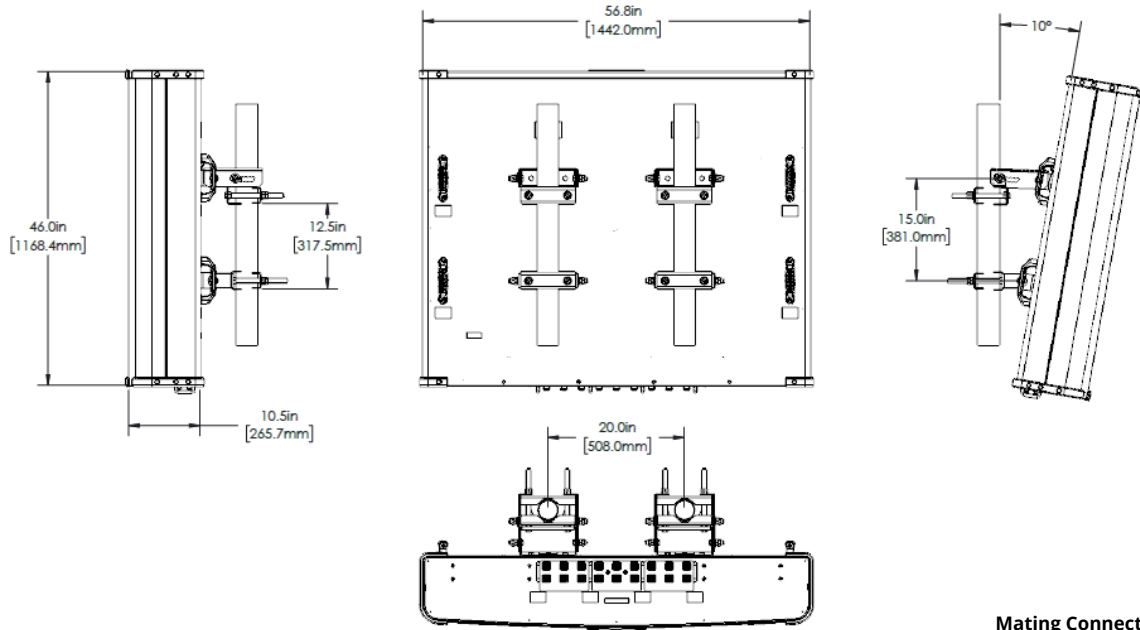
3900 MHz



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## Antenna Outline



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

## Mechanical Specifications

|   |  |
|---|--|
| <b>Operating Temperature</b>                      | -40° to 158°F (-40° to +70°C)                            |
| <b>Antenna Weight</b>                             | 118.0 lbs (53.5 kg)                                      |
| <b>Antenna Bracket Weight</b>                     | 15.3 lbs (6.9 kg), 2x Brackets Per Antenna               |
| <b>Antenna Dimension (Height x Width x Depth)</b> | 46.0" (1168.4 mm) x 56.8" (1442.0 mm) x 10.5" (265.7 mm) |
| <b>Input Connector Type</b>                       | 18 x 4.3/10 (F)  |
| <b>Radome Material</b>                            | ASA w/Heavy Duty Top/Bottom Caps                         |
| <b>Radome Color</b>                               | Gray   |
| <b>Environment Rating</b>                         | Outdoor  |
| <b>Wind Load, Front (@ 150 km/h)*</b>             | 1944 N / 437 lbf   |
| <b>Wind Load, Rear (@ 150 km/h)*</b>              | 2083 N / 468 lbf   |
| <b>Wind Load, Side (@ 150 km/h)*</b>              | 409 N / 92 lbf   |
| <b>Wind Load, Max (@ 150 km/h)*</b>               | 2189 N / 492 lbf   |
| <b>Wind Survival Rating</b>                       | 150 mph (241 km/h)                                       |

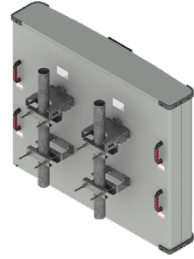
\* Wind load based on calculations according to TIA-222-H

RFD#: 8037 ; Revision: R1 ; Release Date: September 11, 2025;

## Part Numbers & Ordering Options

| Description   | Color | Mounting Kit                                 | Part Number      |
|---|-------|--|------------------|
| Multi-band 3/3/3 multibeam 2x2 antenna with 18x 4.3-10 (F) connectors                               | Gray  | Includes 2x MK-07915 mounting kit assemblies | GP4618-08037-112 |
| Multi-band 3/3/3 multibeam 2x2 antenna with 18x 4.3-10 (F) connectors and heavy-duty transport case | Gray  | Includes 2x MK-07915 mounting kit assemblies | GP4618-08037-212 |

## Mounting Brackets & Optional Accessories

| Description:   | Part Number:  |
|--|---|
| <p><b>Heavy Duty Mounting Bracket (wind speed of 150 mph) [Included]</b></p> <p>The MK-07915 standard mounting bracket allows for easy installation of this Galtronics multibeam antenna with height between 1.5' and 3'. It provides 0°-10° mechanical downtilt adjustability, and fits pole diameters ranging from 2.0" to 4.5".</p> <p><b>Note:</b> The MK-07915 mounting bracket can also be ordered separately.</p> |  <p>MK-07915</p> |