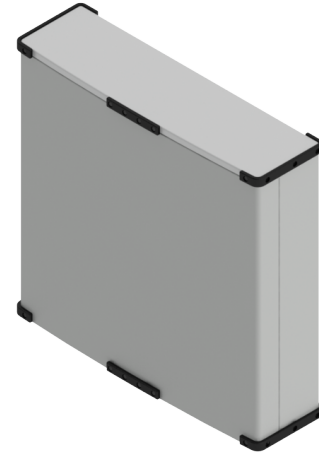


C-Band 9-Beam 90° Sector 4x4 MIMO Panel Antenna [3300-4000 MHz]

GP3936-08032

Description:

- 9-beam antenna for high-capacity stadium/venue or special events applications
- 9-beam (36-port) 3300-4000 MHz; each beam with 4x4 MIMO capability
- 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 to prevent damage for multiple deployment scenarios



4x4 MIMO 3300-4000 MHz 9-beam Panel Antenna

Electrical Specifications

| Frequency Band [MHz] | 3300-3550 | 3550-3700 | 3700-4000 |
|---|-----------------------------------|-----------|-----------|
| Gain, max. (dBi) | 22.0 | 22.2 | 22.4 |
| Gain, avg. (dBi) | 20.3 | 20.3 | 19.8 |
| Azimuth Beamwidth (°) | 6.2 | 6.0 | 6.0 |
| Azimuth Beamwidth, 10dB (°) | 10.6 | 10.4 | 10.4 |
| Azimuth Beam Spacing (°) | 10 | | |
| Azimuth Beam Crossover (dB) | 9 | 10 | 10 |
| Elevation Beamwidth (°) | 14 | 13 | 13 |
| Elevation Beamwidth, 10dB (°) | 24 | 23 | 22 |
| Electrical Downtilt (°) | 6 FET (per each 4x4 beam cluster) | | |
| First Upper Sidelobe Suppression (dB) | 20 | 20 | 18 |
| Front-to-Back Ratio, 180° (dB) | 45 | | |
| Cross-Polar Discrimination @ Boresight (dB) | 23 | | |
| VSWR / RL (dB) | 1.5:1 / 14.0 | | |
| Port-to-Port Isolation, Intrabeam* (dB) | 25 | | |
| Port-to-Port Isolation, Interbeam** (dB) | 14 | | |
| PIM @ 2x43 dBm (dBc) | -145 | | |
| Max Power per Port (W) | 100 | | |
| Polarization (°) | Dual slant 45 (±45) | | |
| Impedance (Ω) | 50 | | |

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

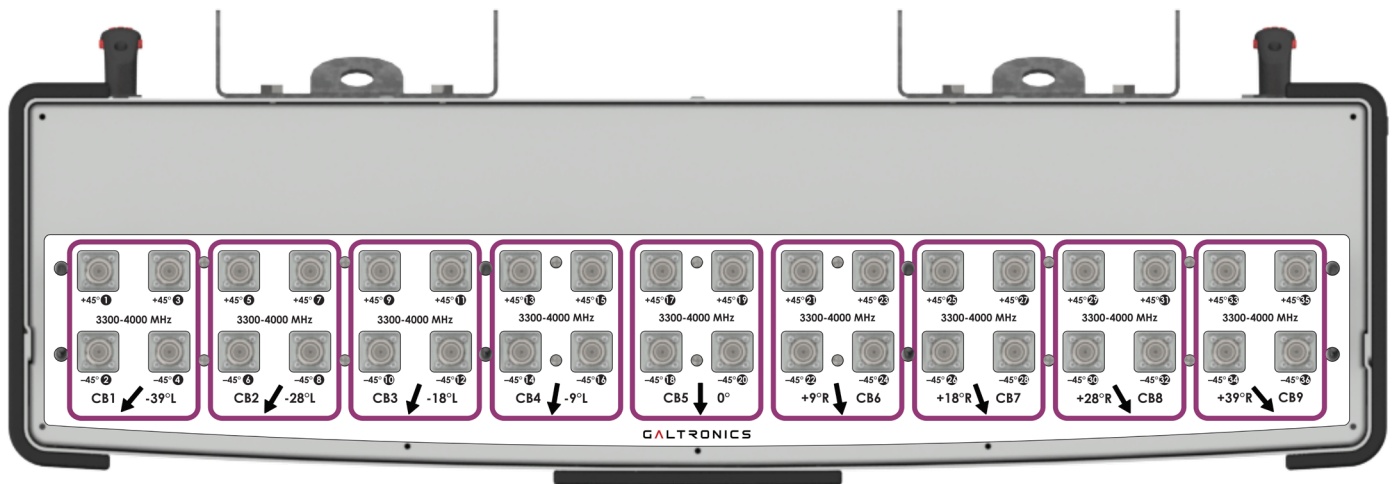
** Port-port isolation between any combination of ports between different beams

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Electrical Specifications - BASTA

| Frequency Band [MHz] | 3300-3550 | 3550-3700 | 3700-4000 |
|---|-----------|-----------|-----------|
| Gain Over All Tilts, avg. (dBi) | 20.3 | 20.3 | 19.8 |
| Gain Over All Tilts Tolerance (dB) | 1.9 | 2.1 | 2.1 |
| AZ Beamwidth Tolerance (°) | 0.9 | 0.8 | 0.6 |
| EL Beamwidth Tolerance (°) | 0.9 | 0.9 | 1.2 |
| Upper Sidelobe Suppression, Peak to +20° (dB) | 14.0 | 15.7 | 14.0 |
| Front-to-Back Ratio, Total Power, +/-30° (dB) | 34.4 | 33.7 | 34.6 |
| Cross-Polar Discrimination at Boresight (dB) | 20.4 | 20.0 | 17.2 |
| Azimuth Beam Peak Tolerance | 0.8 | 0.7 | 0.6 |
| Azimuth Beam Crossover Tolerance | 3.0 | 3.0 | 2.8 |

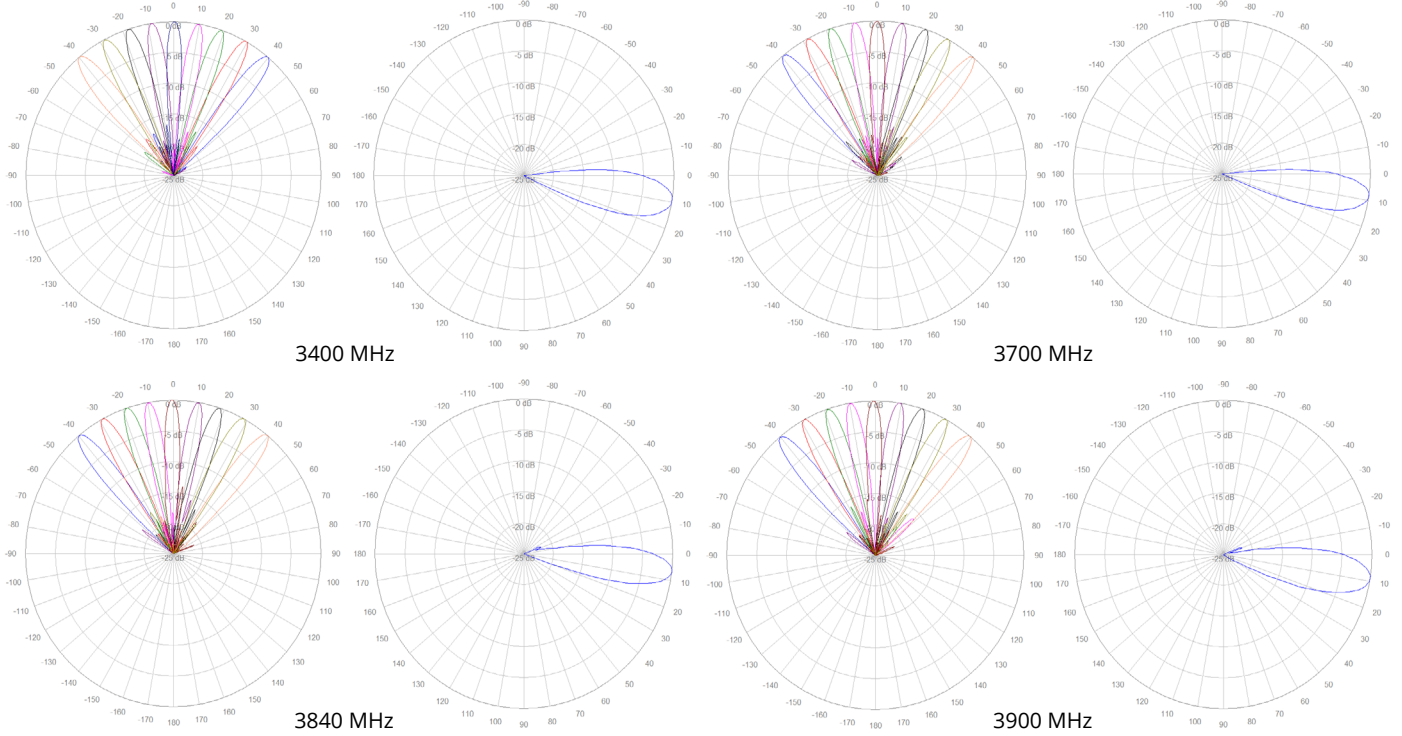
Bottom Plate & Port Designation Details



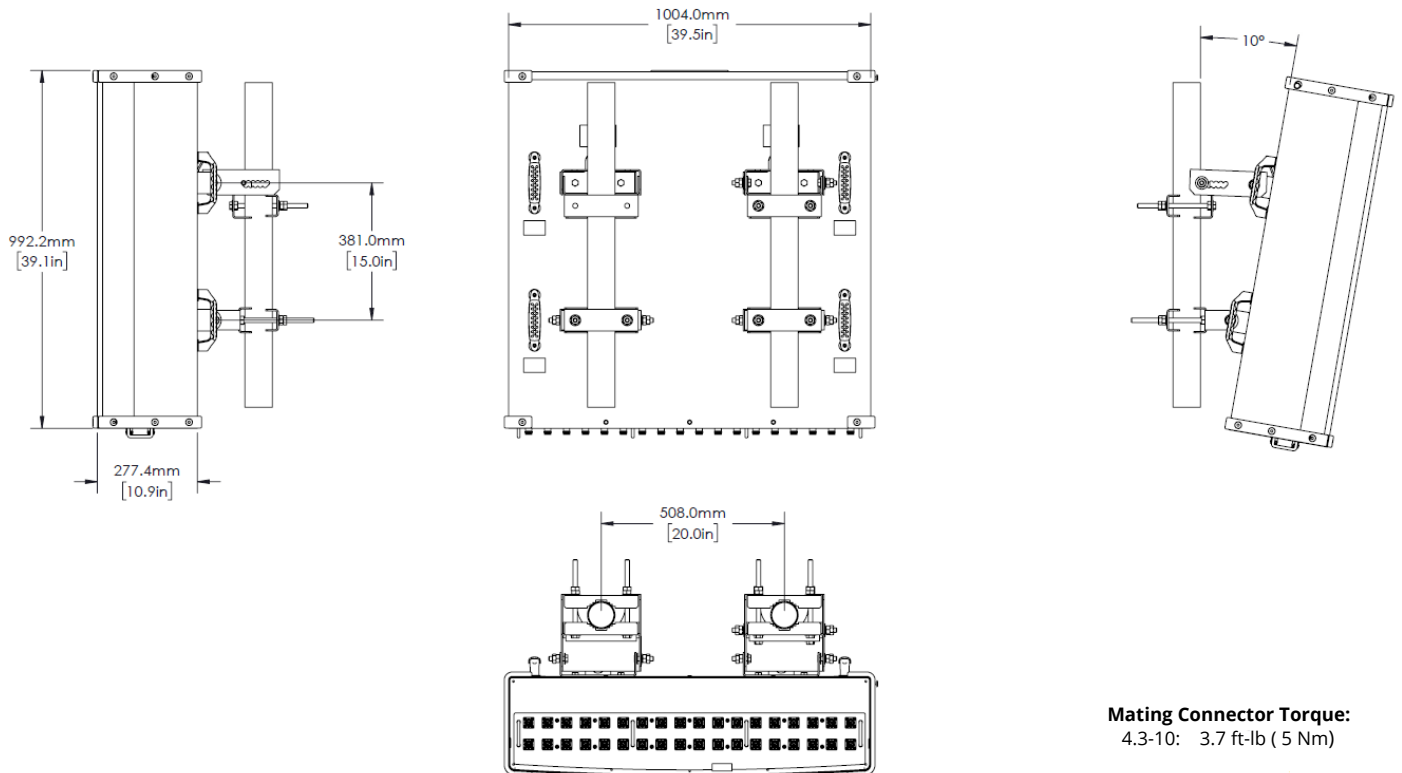
Port/Beam Designator Table

| Frequency Range | Ports | Beam Assignment | AZ Beam Direction | Downtilt |
|-----------------|---------|-----------------|-------------------|----------|
| 3300-4000 MHz | 1 - 4 | CB1 | -39° L | 6° Fixed |
| 3300-4000 MHz | 5 - 8 | CB2 | -28° L | 6° Fixed |
| 3300-4000 MHz | 9 - 12 | CB3 | -18° L | 6° Fixed |
| 3300-4000 MHz | 13 - 16 | CB4 | -9° L | 6° Fixed |
| 3300-4000 MHz | 17 - 20 | CB5 | 0° | 6° Fixed |
| 3300-4000 MHz | 21 - 24 | CB6 | +9° R | 6° Fixed |
| 3300-4000 MHz | 25 - 28 | CB7 | +18° R | 6° Fixed |
| 3300-4000 MHz | 29 - 32 | CB8 | +28° R | 6° Fixed |
| 3300-4000 MHz | 33 - 36 | CB9 | +39° R | 6° Fixed |

2D Antenna Patterns



Antenna Outline



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Mechanical Specifications

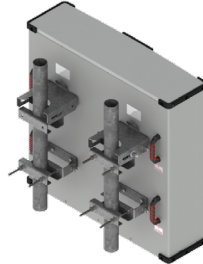
| | |
|--|---|
| Operating Temperature | -40° to 158°F (-40° to +70°C) |
| Antenna Weight | 92.6 lbs (42.0 kg) |
| Antenna Bracket Weight (2 Brackets) | 15.3 lbs (6.9 kg), 2x Brackets Per Antenna |
| Antenna Dimension (Height x Width x Depth) | 39.1" (992.2 mm) x 39.5" (1004.0 mm) x 10.9" (277.4 mm) |
| Input Connector Type | 36x 4.3/10 (F) |
| Radome Material | ASA w/ Heavy Duty Top/Bottom Caps |
| Radome Color | Gray |
| Environment Rating | Outdoor |
| Wind Load, Front (@ 150 km/h)* | 1221.0 N / 274 Lbf |
| Wind Load, Back (@ 150 km/h)* | 1243.0 N / 279 Lbf |
| Wind Load, Side (@ 150 km/h)* | 357.0 N / 80 Lbf |
| Wind Load, Max (@ 150 km/h)* | 1320.4 N / 297 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 3300-4000 MHz 9-Beam Antenna, 6° FET with 36x 4.3-10 (F) Connectors | Gray | Includes 2x MK-07915 mounting kit assemblies | GP3936-08032-112 |
| 4x4 MIMO 3300-4000 MHz 9-Beam Antenna, 6° FET with 36x 4.3-10 (F) Connectors and Heavy Duty Transport Case | Gray | Includes 2x MK-07915 mounting kit assemblies | GP3936-08032-212 |

Mounting Brackets & Optional Accessories

| Description: | Part Number: |
|--|---|
| <p>Heavy Duty Mounting Bracket (wind speed of 150 mph) [2x Included]</p> <p>The MK-07915 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".</p> <p>Note: The MK-07915 mounting bracket can also be ordered separately.</p> |  <p>MK-07915</p> |

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