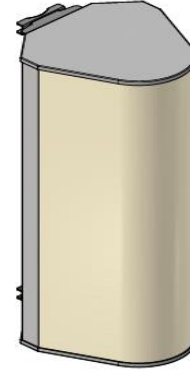


3 BEAMS | 1695-2690MHz | 2T2R

Lens Technology Enabled™ Multi-Beam Cylindrical Base-Station Lens Antenna:

- Utilizes a patented cylindrical lens design
- 3 isolated cross-polarized beams for Mid-Band
- 120° coverage with highest beam stability
- 2x2 MIMO capability per beam
- RET AISG 2.0 & Smart Bias Tee
- Independent tilt per beam from 2° to 15°
- No beam squinting as compared to Butler matrix antennas
- Low sidelobes for all beam tilts
- Excellent Front-to-Back and CPR performance
- High-capacity solution for stadiums, arenas & special events
- Rugged mechanical design



ELECTRICAL SPECIFICATIONS, BASTA

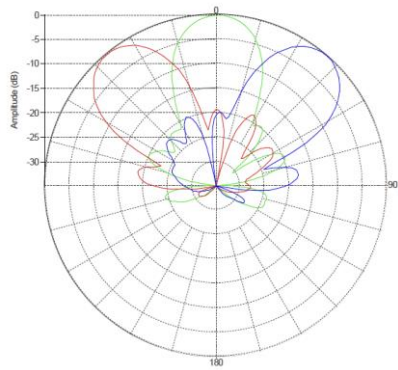
| FREQUENCY, MHZ | 1695-1880 | 1850-1990 | 1920-2170 | 2300-2400 | 2490-2690 |
|--|-----------------------------------|------------|------------|------------|------------|
| GAIN, BY ALL TILTS/PORTS, DBI | 18.3+/-0.5 | 18.6+/-0.5 | 19.2+/-0.5 | 19.5+/-0.5 | 19.5+/-0.7 |
| VSWR | 1.5:1 | 1.5:1 | 1.5:1 | 1.5:1 | 1.5:1 |
| HORIZONTAL COVERAGE, DEG | 120 | 120 | 120 | 120 | 120 |
| HORIZONTAL BEAM CENTERS, DEG | -40±1.5; 0±1.5; 40±1.5 | | | | |
| HORIZONTAL BEAMWIDTH, DEG | 25±1 | 24±1 | 23±1 | 22±0.5 | 21±0.7 |
| BEAM CROSSOVER, DB | 8 | 9 | 10 | 11 | 12 |
| HORIZONTAL SIDELOBE, DB | -17.5 | -17 | -16.5 | -17 | -17 |
| FRONT-TO-BACK RATIO TOTAL POWER AT 180±30°, DB | 30 | 30 | 30 | 30 | 30 |
| CPR AT BORESIGHT, DB | 23 | 22 | 20 | 20 | 21 |
| CPR AT 10DB BEAMWIDTH, DB | 13 | 12 | 11 | 11 | 11 |
| REMOTE ELECTRICAL BEAM TILT, DEG | 2 - 15 | | | | |
| VERTICAL BEAMWIDTH, DEG | 16±1 | 15±0.7 | 14±0.7 | 12.7±0.5 | 11.5±0.6 |
| USLS, BEAMPEAK TO 20° ABOVE BEAMPEAK, DB | 15 | 16 | 16 | 16 | 16 |
| ISOLATION PORT TO PORT, POLARIZATION, DB | 26 | 26 | 26 | 26 | 26 |
| ISOLATION PORT TO PORT, BEAM, DB | 24 | 24 | 24 | 24 | 24 |
| PIM, 3 RD ORDER, 2X20W, DBC | -153 | | | | |
| MAX. POWER PER PORT, W | 150 (at 40°C ambient temperature) | | | | |

ELECTRICAL SPECIFICATIONS

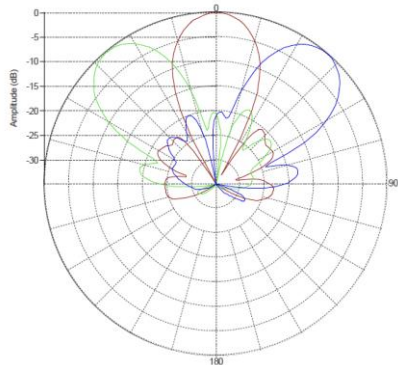
| | |
|------------------------------------|-------------------|
| IMPEDANCE | 50 Ohm |
| OPERATING FREQUENCY BAND | 1695-2690MHz |
| POLARIZATION | $\pm 45^\circ$ |
| NUMBER OF BEAMS | 3 |
| NUMBER OF PORTS PER BEAM | 2 |
| CONNECTOR QUANTITY AND TYPE | 6 x 4.3-10 female |
| TOTAL POWER, MAX | 800W |

PATTERN RESULTS

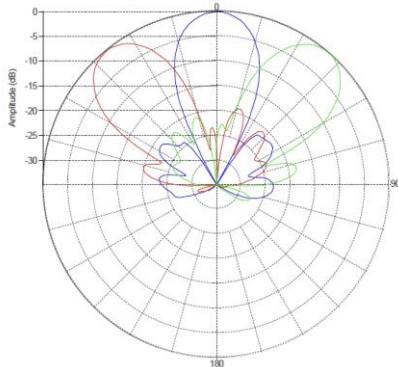
Horizontal Patterns



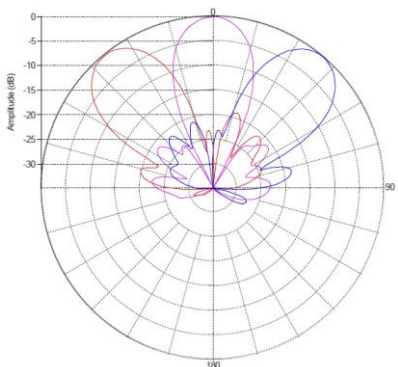
1.80GHz



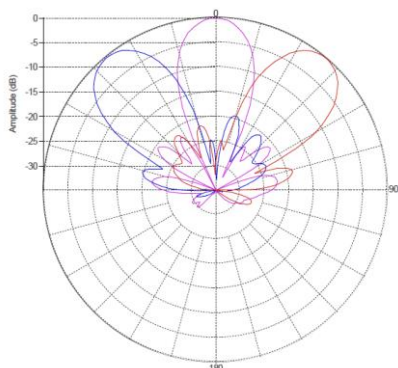
1.95GHz



2.1GHz

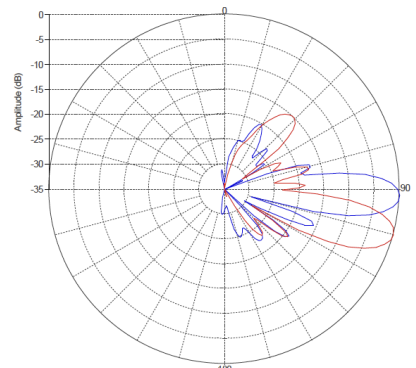
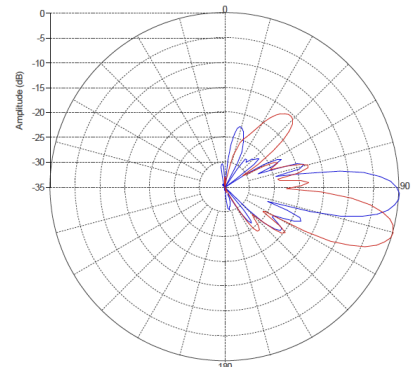
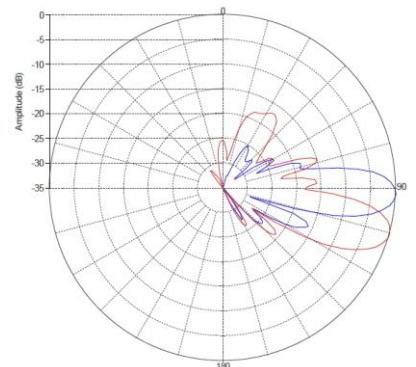
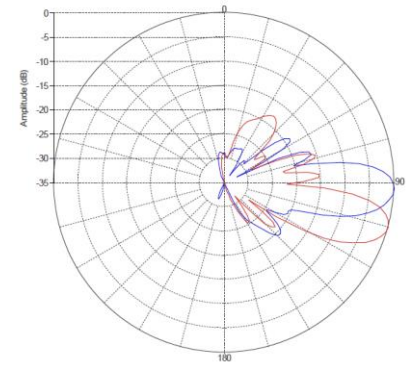
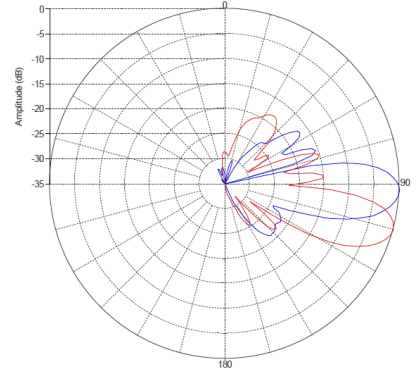


2.36GHz



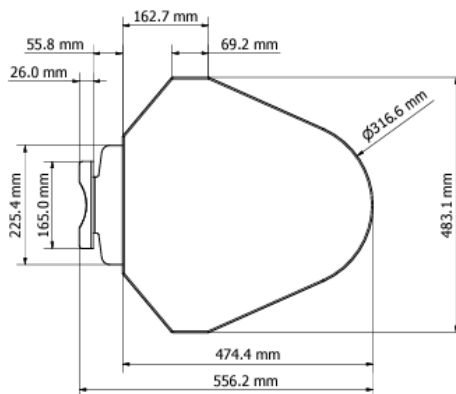
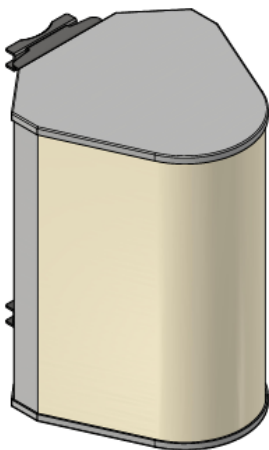
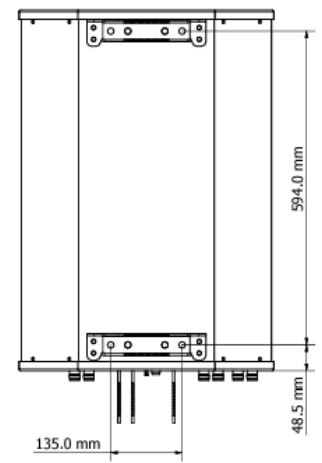
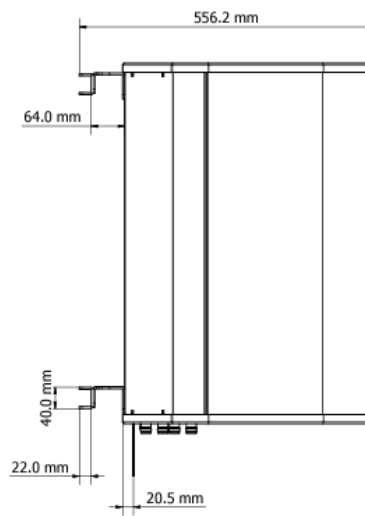
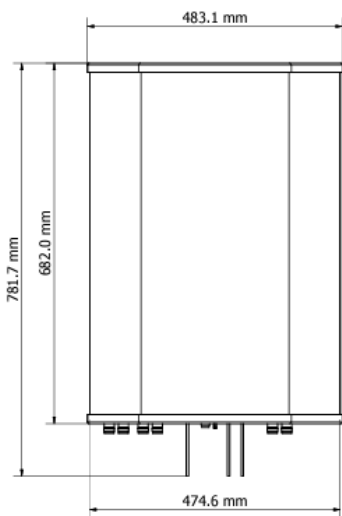
2.59GHz

Vertical Patterns (2°, 15°)



MECHANICAL SPECIFICATIONS

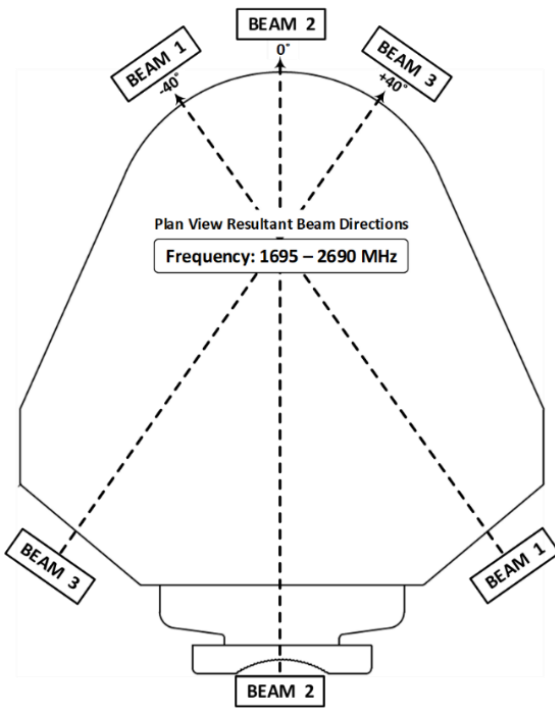
| | | |
|----------------------------------|------------|---------|
| ANTENNA WEIGHT (WITHOUT BRACKET) | 43lbs | 19.5kg |
| ANTENNA WEIGHT (WITH BRACKET) | 46.48lbs | 21.08kg |
| HEIGHT | 30.7inch | 78cm |
| WIDTH | 19inch | 48.2cm |
| DEPTH | 21.9inch | 55.6cm |
| RADOME MATERIAL | Fiberglass | |
| RADOME COLOR | RAL 7005 | |
| WIND LOADING @150KM/HR FRONTAL | 244.8N | 55lbf |
| WIND LOADING @150KM/HR LATERAL | 411N | 92lbf |
| WIND LOADING @150KM/HR REAR | 292N | 66lbf |



ENVIRONMENTAL RATINGS

| | |
|-------------|----------------|
| HUMIDITY | 95% RH @ +30°C |
| TEMPERATURE | -40°C to +70°C |

BEAM, PORT, RF CONNECTOR & RET LAYOUT

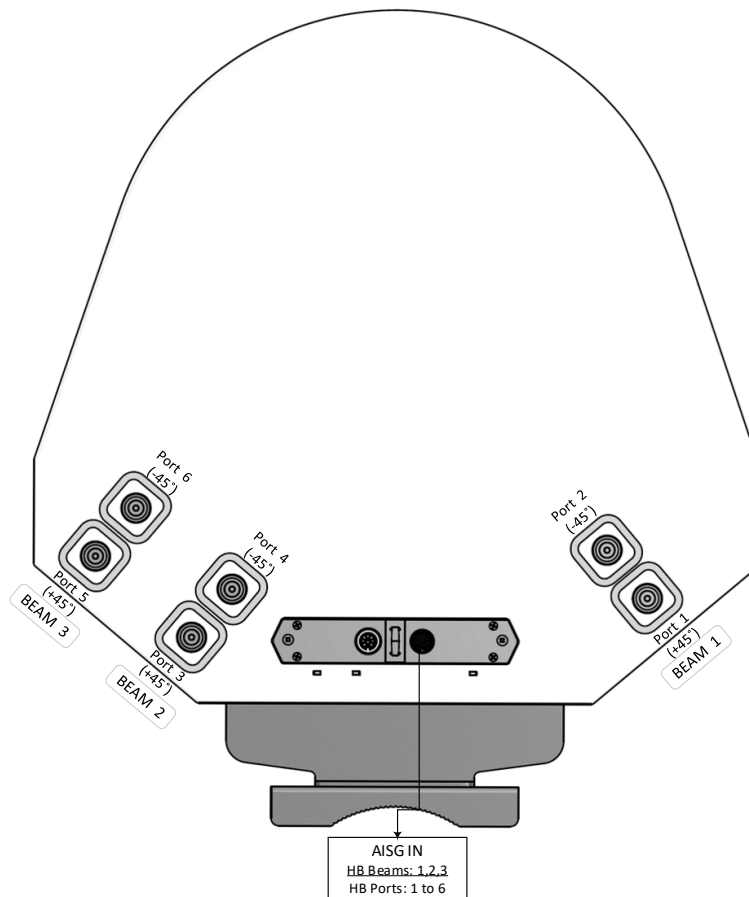


Antenna top view

| BEAM 3 | BEAM 2 | BEAM 1 |
|---------------|---------------|---------------|
| Port 6 (-45°) | Port 4 (-45°) | Port 2 (-45°) |
| Port 5 (+45°) | Port 3 (+45°) | Port 1 (+45°) |

Connector port table

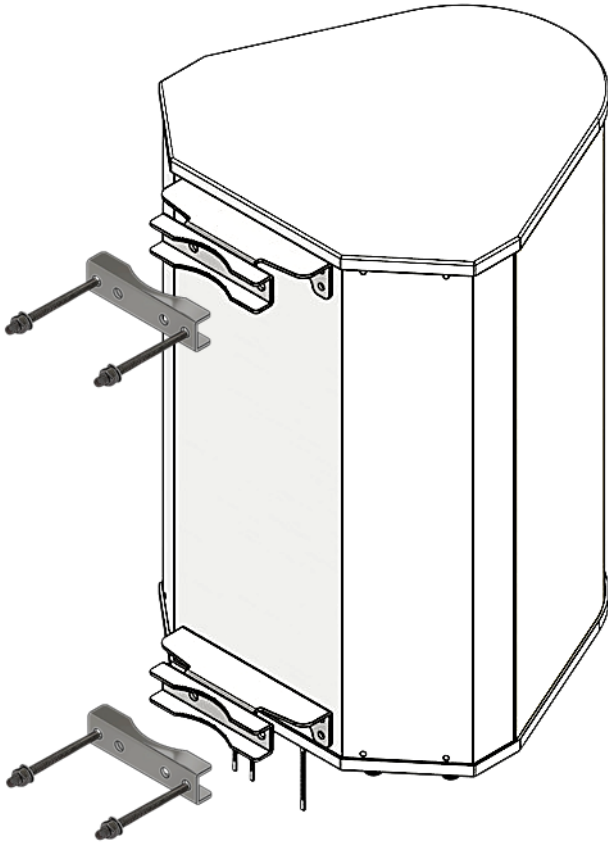
MS-MBC-3-H2-12
PLAN VIEW CONNECTOR LAYOUT



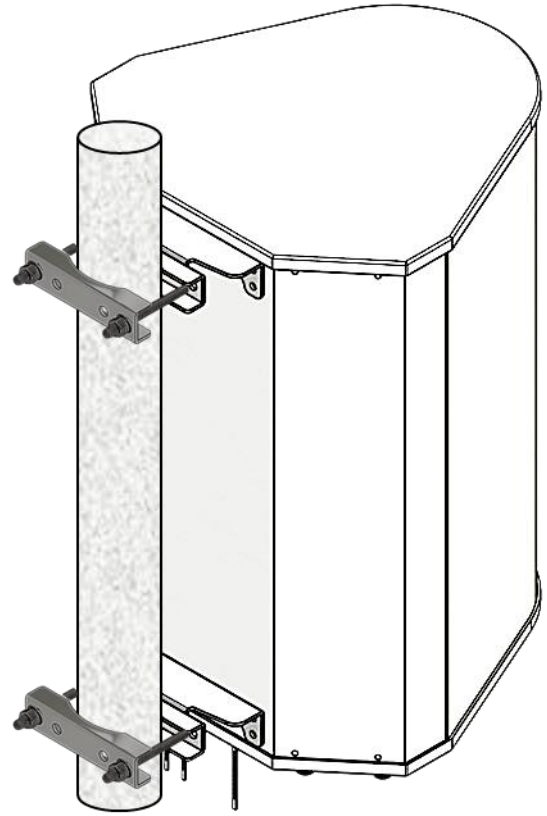
Antenna top view

MOUNTING

| | | |
|--------------------------|----------------|---------------|
| COMPATIBLE PIPE DIAMETER | 2.4 – 4.5 inch | 6.1 – 11.4 cm |
| BRACKET WEIGHT | 3.48lbs | 1.58kg |



Before Installation



After Installation

REVISION HISTORY

| DATE | DOCUMENT | |
|------------|----------------------------------|--|
| 11/15/2024 | Initial BASTA Datasheet Released | |
| 11/26/2024 | Windloading Updated | |