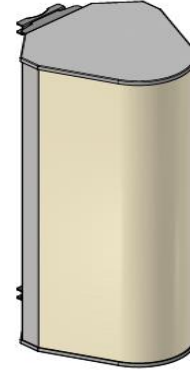


3 BEAMS | 1695-2690MHz | 2T2R

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

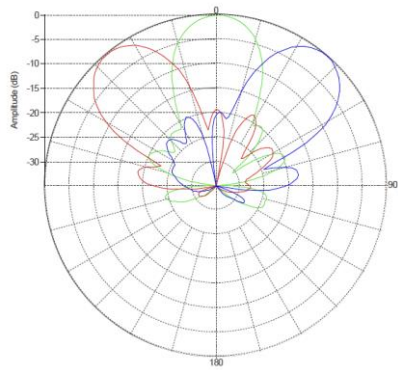
FREQUENCY, MHZ	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
GAIN, BY ALL TILTS/PORTS, DBI	18.3+/-0.5	18.6+/-0.5	19.2+/-0.5	19.5+/-0.5	19.5+/-0.7
VSWR	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1
HORIZONTAL COVERAGE, DEG	120	120	120	120	120
HORIZONTAL BEAM CENTERS, DEG	-40±1.5; 0±1.5; 40±1.5				
HORIZONTAL BEAMWIDTH, 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

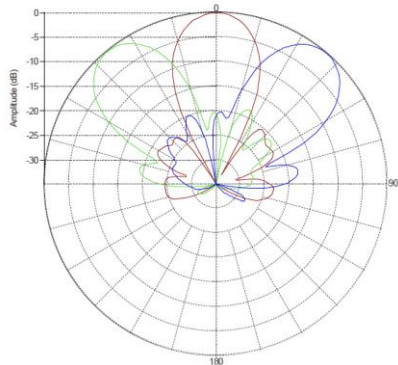
IMPEDANCE	50 Ohm
OPERATING FREQUENCY BAND	1695-2690MHz
POLARIZATION	±45°
NUMBER OF BEAMS	3
NUMBER OF PORTS PER BEAM	2
CONNECTOR QUANTITY AND TYPE	6 x 4.3-10 female
TOTAL POWER, MAX	800W

PATTERN RESULTS

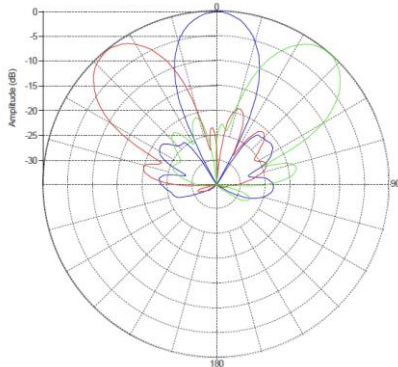
Horizontal Patterns



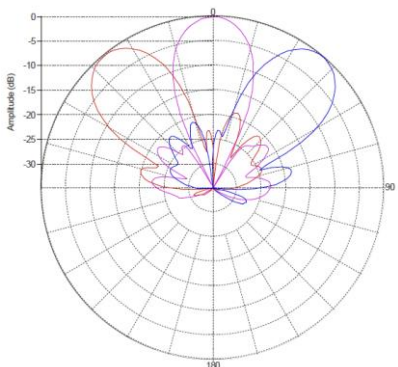
1.80GHz



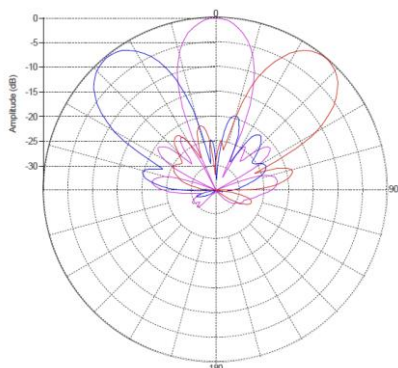
1.95GHz



2.1GHz

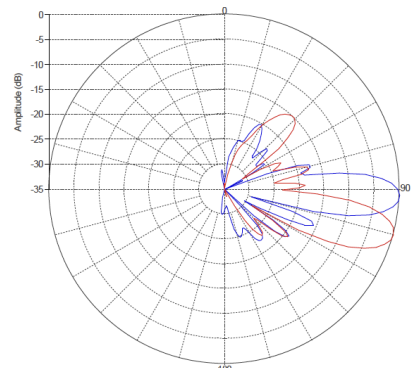
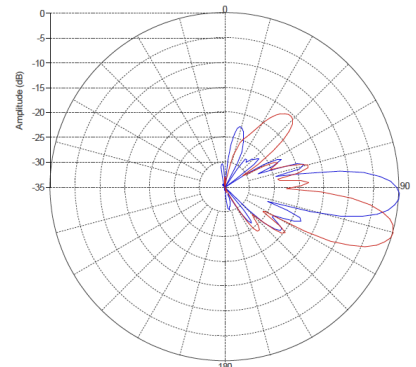
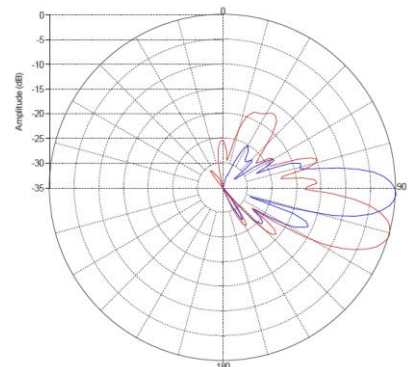
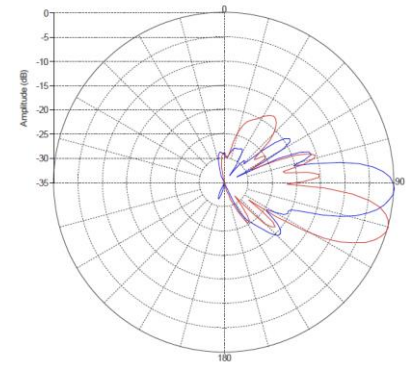
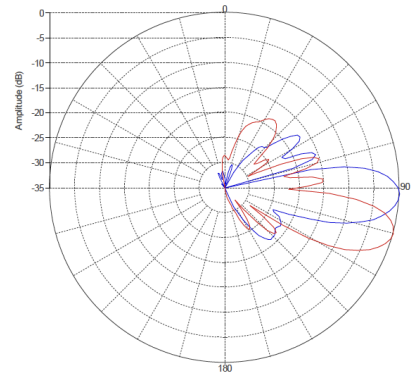


2.36GHz



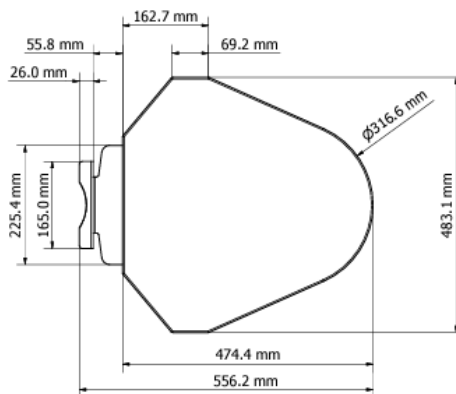
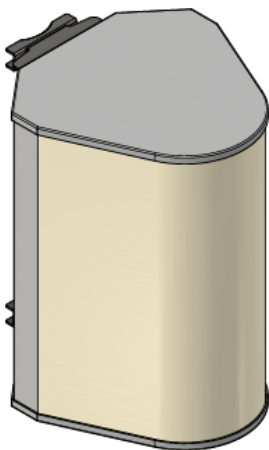
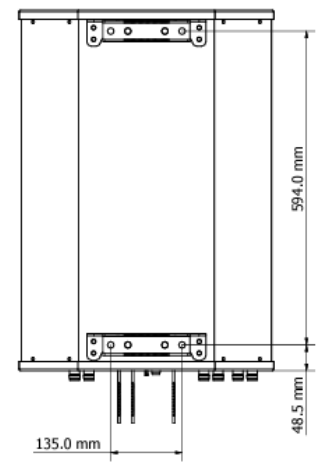
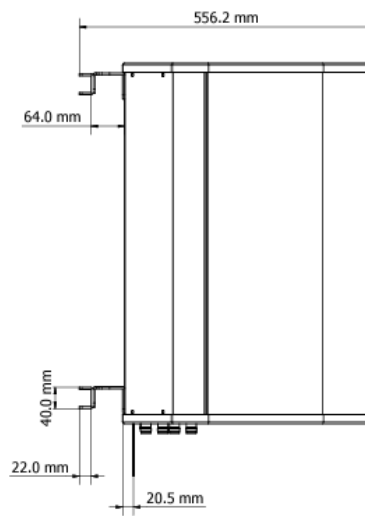
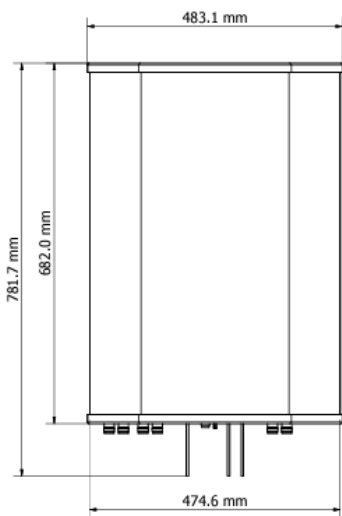
2.59GHz

Vertical Patterns (2°, 15°)



MECHANICAL SPECIFICATIONS

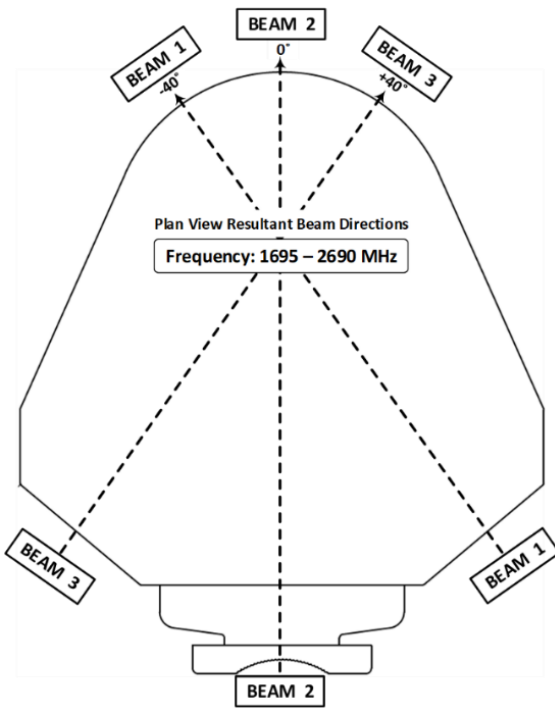
ANTENNA WEIGHT (WITHOUT BRACKET)	43lbs	19.5kg
ANTENNA WEIGHT (WITH BRACKET)	46.48lbs	21.08kg
HEIGHT	30.7inch	78cm
WIDTH	19inch	48.2cm
DEPTH	21.9inch	55.6cm
RADOME MATERIAL	Fiberglass	
RADOME COLOR	RAL 7005	
WIND LOADING @150KM/HR FRONTAL	-	-
WIND LOADING @150KM/HR LATERAL	-	-
WIND LOADING @150KM/HR REAR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



ENVIRONMENTAL RATINGS

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

BEAM, PORT, RF CONNECTOR & RET LAYOUT

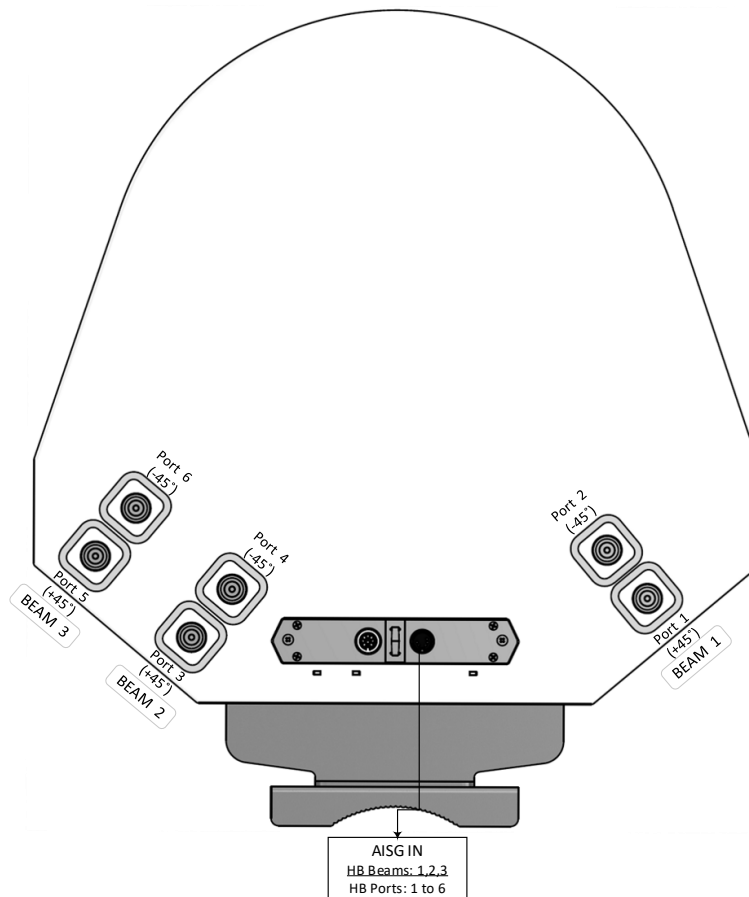


Antenna top view

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

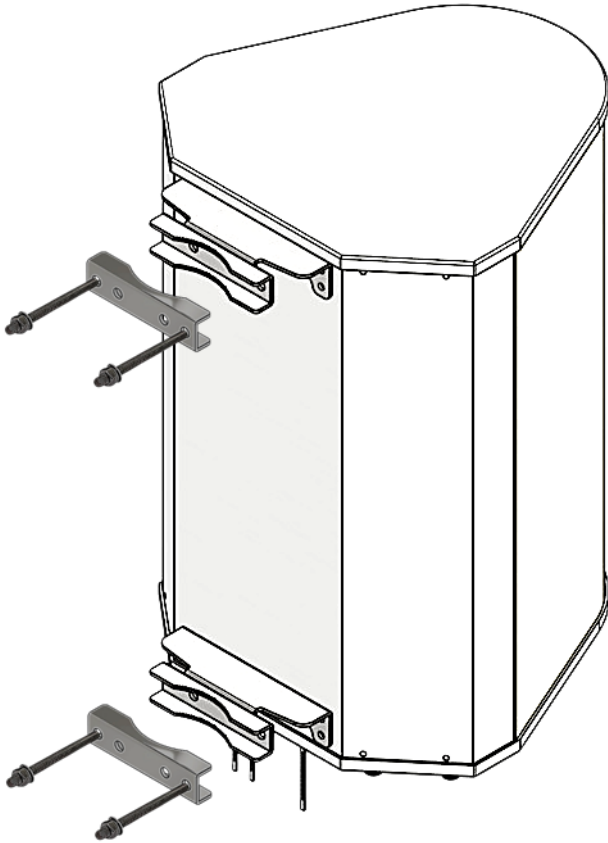
MS-MBC-3-H2-12
PLAN VIEW CONNECTOR LAYOUT



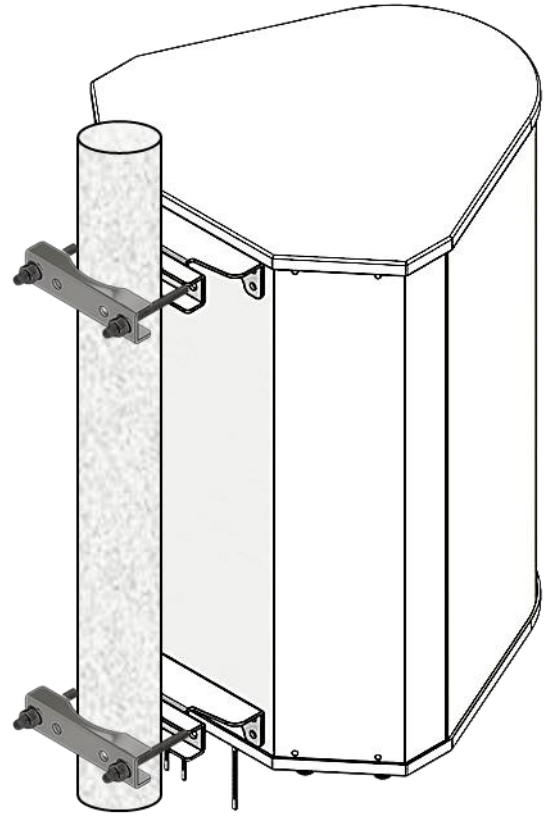
Antenna top view

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	