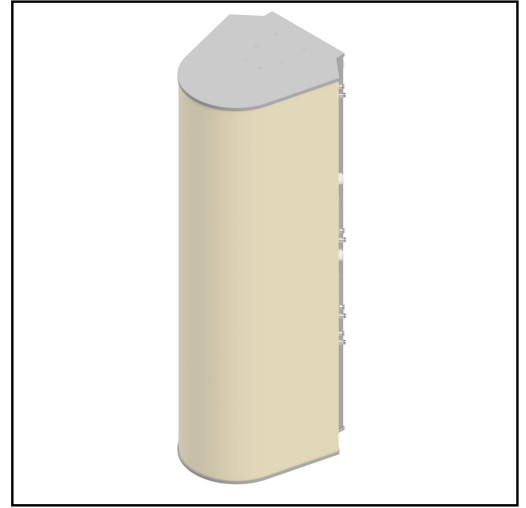


MS-MBA-6.3-H4-L4

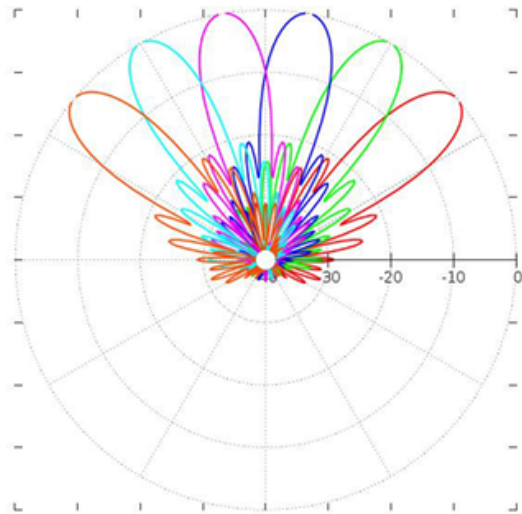
Multi-beam Base-Station Antenna (MBA)

Lens Technology Enabled™ Multi-Beam Base-Station Antenna perfect for 6 high-band sectors and 3 low-band LTE cell site deployment for best CINR results. Utilizes a patented spherical lens design with 6 isolated high-frequency (1695- 2690MHz) cross-polarized beams and 3 isolated low-frequency (698- 960MHz) cross-polarized beams. Each high-frequency beam and low-frequency beam is made of two independent antennas and has 4 ports. There are two independent tilt settings per beam (0-15° for HB and 0-20° for LB) for each pair of cross-polarized elements.

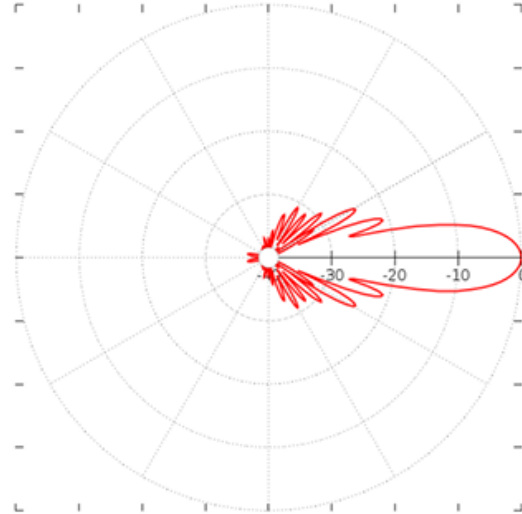


PATTERN RESULTS:

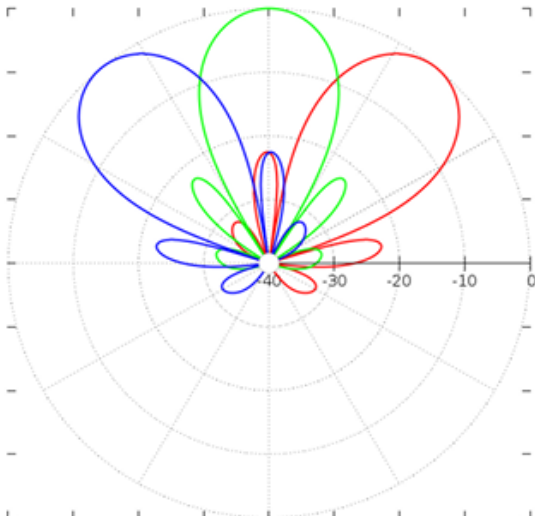
High-Band Horizontal Pattern (1.80GHz)



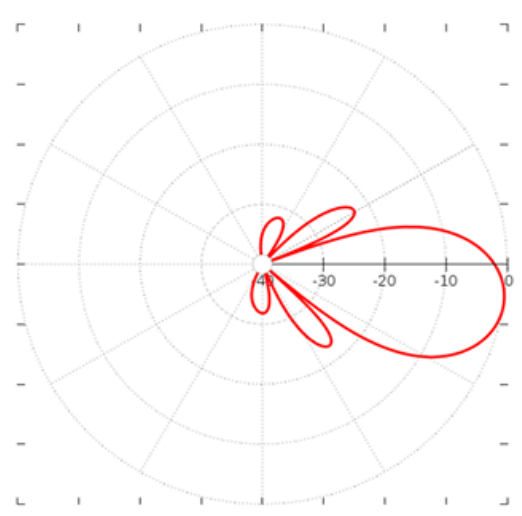
High-Band Vertical pattern 0° tilt and 15° tilt (1.80GHz)



Low-Band Horizontal Pattern (750MHz)



Low-Band Vertical Pattern 0° tilt and 20° tilt (750MHz)



PRELIMINARY

TECHNICAL SPECIFICATIONS PER BEAM

Frequency	1695-2690 MHz	698-960MHz
Gain	21dBi	16dBi
VSWR	<1.5:1	<1.5:1
Polarization	Dual Slant ±45°	Dual Slant ±45°
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB level)	22°	43°
Horizontal Beamwidth (3dB level)	13°	25°
Vertical Beamwidth (10dB level)	22°	43°
Vertical Beamwidth (3dB level)	13°	25°
Beam Cross-over	10dB typical	10dB typical
Total Number of Beams	6	3
Number of Ports per Beam	4	4
Number of Ports Total	24	12
Tilt Per Cross-Pol	0° to 15°	0° to 20°
First Sidelobe Level	<-16dB	<-15dB
Front to Back Ratio	>28dB	>28dB
Isolation Port to Port - Polarization	>28dB	>28dB
Isolation Port to Port - Beam	>28dB	>26dB
Power Rating	200W per port	250W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	24 x 4.3-10 female	12x4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)	244 x 91 x91cm 96 x 36 x 36 inch
Antenna Weight	130 kg 287 lbs
Radome Material	Fiber Glass
Mounting	2 position pipe mount Compatible pipe diameter: 6.1 – 11.4 cm 2.4 – 4.5 inch

ENVIRONMENTAL RATINGS

Humidity	95% RH @ +30°C
Temperature	-40°C to +70°C
Wind load @ 150km/h	Frontal: TBD Lateral: TBD Rear: TBD

CONNECTOR LAYOUT: