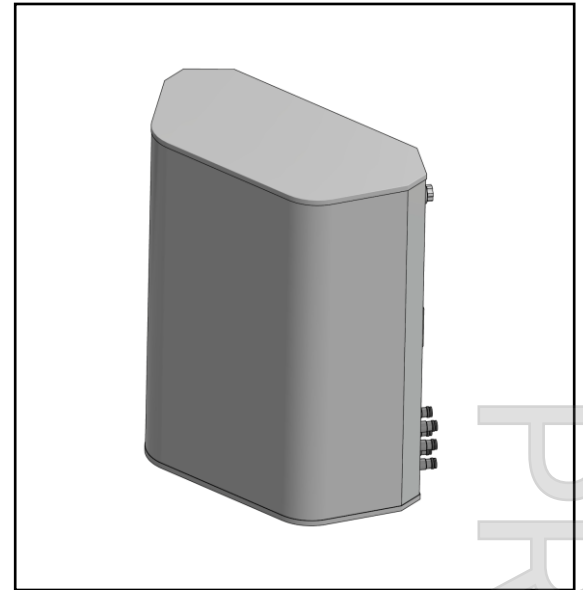


MS-MBA-3.2-C4A3-H4A3

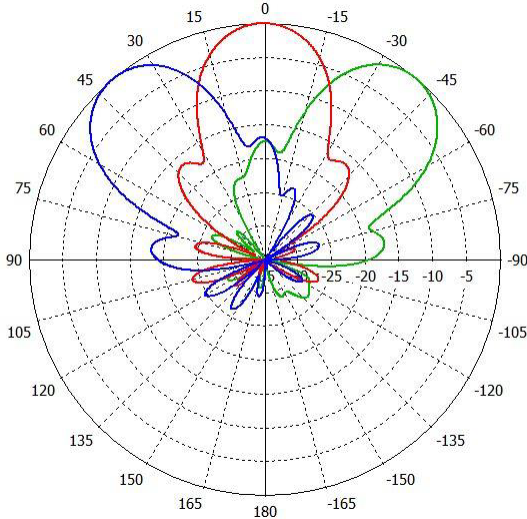
Multi-beam Base-Station Antenna (MBA)

Lens Technology Enabled™ Multi-Beam Base-Station Antenna perfect for 3 to 9 sectors of C-band LTE cell site deployment and 2 to 6 sectors of H-band LTE cell site deployment for best CINR results. Utilizes a patented spherical lens design with 3 isolated C-band frequency (3700 - 4200MHz) cross-polarized beams and 2 isolated H-band frequency (1695-2690MHz) cross-polarized beams. Each beam has 4 ports, or 4X4 MIMO. C-Band has RET capability from 0-15° and H-Band from 0-20°.

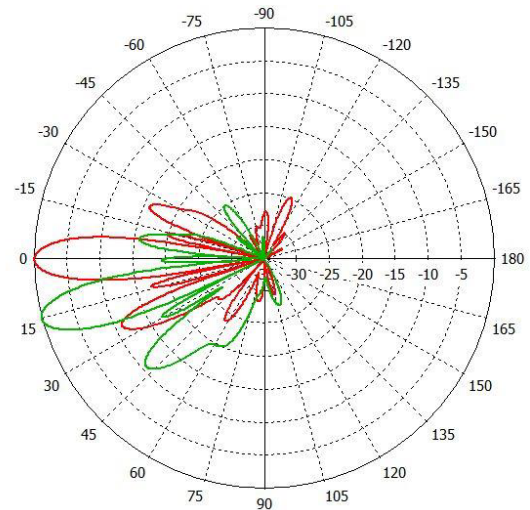


PATTERN RESULTS:

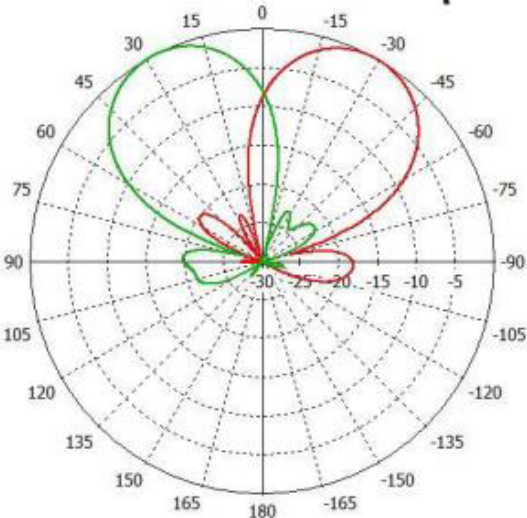
Horizontal Pattern (3.7GHz)



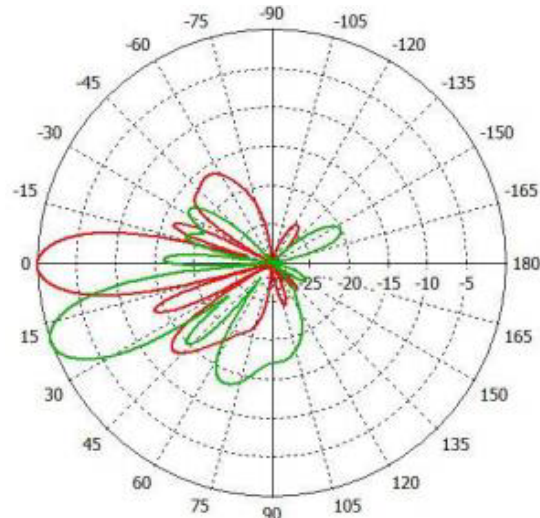
Vertical Pattern at 0° and 15° Tilt (3.7GHz)



Horizontal Pattern (1.92GHz)



Vertical Pattern 0° and 20° Tilt (1.92GHz)



TECHNICAL SPECIFICATIONS PER BEAM

Frequency	3700-4200 MHz	1695-2690 MHz
Gain	21dBi	18dBi
VSWR	<1.5:1	<1.5:1
Polarization	Dual Slant ±45°	Dual Slant ±45°
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB level)	44°	60°
Horizontal Beamwidth (3dB level)	25°	34°
Vertical Beamwidth (10dB level)	44°	60°
Vertical Beamwidth (3dB level)	25°	34°
Beam Cross-over	8 dB typical	10dB typical
Total Number of Beams	3	2
Number of Ports per Beam	4	4
Number of Ports Total	12	8
Tilt Per Cross-Pol	0° - 15°	0° - 20°
Azimuth Sidelobe Level	-18dB	<-15dB
1st Upper Sidelobe Suppression	16dB typical	17dB typical
Front to Back Ratio	>28dB	>28dB
Isolation Port to Port - Polarization	>28dB	>28dB
Isolation Port to Port - Beam	>28dB	>25dB
Isolation Port to Port - Inter-band	>30dB	>30dB
Power Rating	150W per port	200W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	12 x 4.3-10 female	8 x 4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)	122 x 61 x 35 cm 48 x 24 x 14 inch
Antenna Weight	25 kg 55 lbs
Radome Material	Fiber Glass
Mounting	Standard 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	TBD