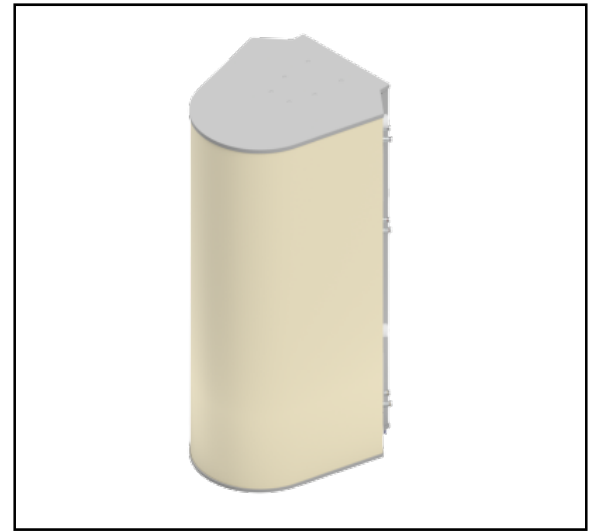


MS-MBA-3.3.2-C2-H2-L2

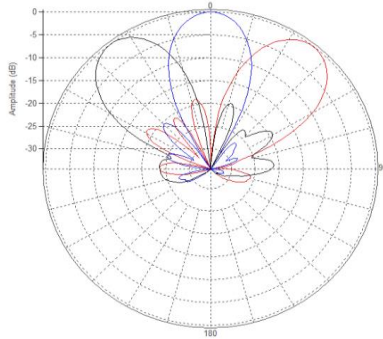
Lens Technology Enabled™ Multi-Beam Tri-Band Base – Station Antenna utilizes a patented spherical lens design with 3 isolated C-Band (3700 - 4200 MHz) cross-polarized beams, 3 isolated H-Band (1695 - 2690 MHz) cross-polarized beams & 2 isolated Low-Band (698 - 960 MHz) cross-polarized beams. Each C, H & L-Band beams have 2 ports to support 2x2 MIMO. There are three independent tilt settings per beam (0-30° for C Band, 0-30° for H-Band and 0-40° for Low-Band) for each pair of cross-polarized elements.



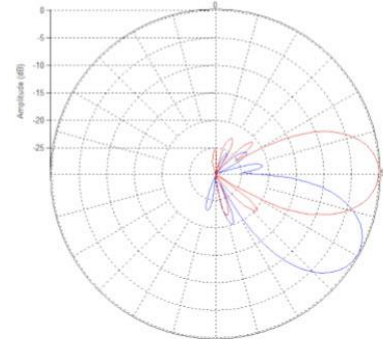
PATTERN RESULTS:



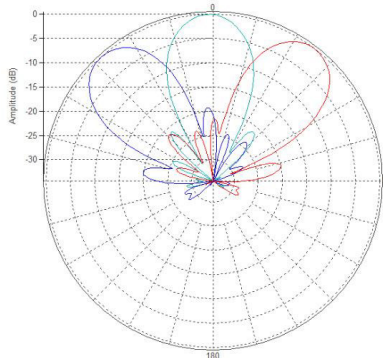
C-Band Horizontal Pattern (3.7GHz)



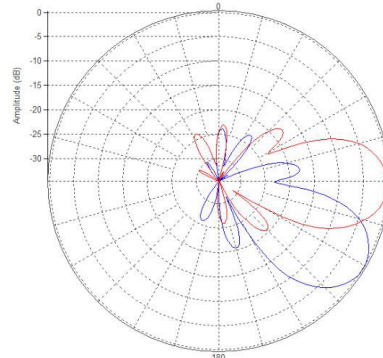
C-Band Vertical Pattern at 0° and 30° Tilt (3.7GHz)



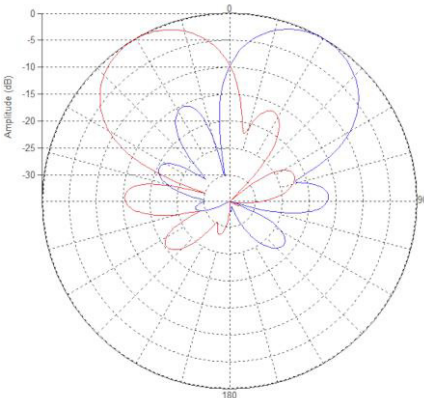
High-Band Horizontal Pattern (1.92GHz)



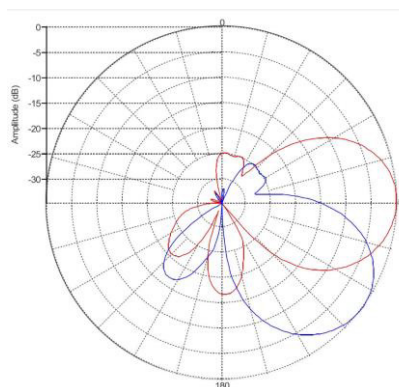
High-Band Vertical Pattern 0° tilt and 30° tilt (1.92GHz)



Low-Band Horizontal Pattern (0.8GHz)



Low-Band Vertical Pattern 0° tilt and 40° tilt (0.8GHz)



TECHNICAL SPECIFICATIONS PER BEAM

| | 3700-4200MHz | 1695-2690MHz | 698-960MHz |
|---------------------------------------|-------------------|-------------------|-------------------|
| Frequency | 3700-4200MHz | 1695-2690MHz | 698-960MHz |
| Gain | 17dBi | 17.8dBi | 13.5dBi |
| VSWR | <1.5:1 | <1.5:1 | <1.5:1 |
| Polarization | Dual Slant ±45° | Dual Slant ±45° | Dual Slant ±45° |
| Horizontal Coverage | 120° | 120° | 120° |
| Horizontal Beamwidth (10dB) | 45° | 40° | 60° |
| Horizontal Beamwidth (3dB) | 25° | 23° | 34° |
| Vertical Beamwidth (10dB) | 45° | 40° | 60° |
| Vertical Beamwidth (3dB) | 25° | 23° | 34° |
| Beam Cross-over | 8dB typical | 10dB typical | 10dB typical |
| Total Number of Beams | 3 | 3 | 2 |
| Number of Ports per Beam | 2 | 2 | 2 |
| Number of Ports Total | 6 | 6 | 4 |
| RET Per Cross-Pol; | 0° - 30° | 0° - 30° | 0° - 40° |
| First Sidelobe Level | < -18dB | < -16dB | < -15dB |
| Front to Back Ratio | 28dB | >28dB | >28dB |
| Isolation Port to Port - Polarization | 28dB | >28dB | >28dB |
| Isolation Port to Port - Beam | 28dB | >28dB | >26dB |
| Power Rating | 150W per port | 200W per port | 250W per port |
| Intermodulation | <-153dBc | <-153dBc | <-153dBc |
| Impedance | 50 ohm | 50 ohm | 50 ohm |
| Connector Quantity and Type | 6 x 4.3-10 female | 6 x 4.3-10 female | 4 x 4.3-10 female |

MECHANICAL DATA

| | |
|------------------------|---|
| Dimensions (H x W x D) | 139.1 x 61.7 x 72.1 cm 54.8 x 24.3 x 28.4 inch |
| Antenna Weight | 47 kg 103.6 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 / hr | N/1bf Frontal: 604 / 135.8 Lateral: 940 / 211.3 Rear: 867 / 194.9 |

CONNECTOR LAYOUT:

