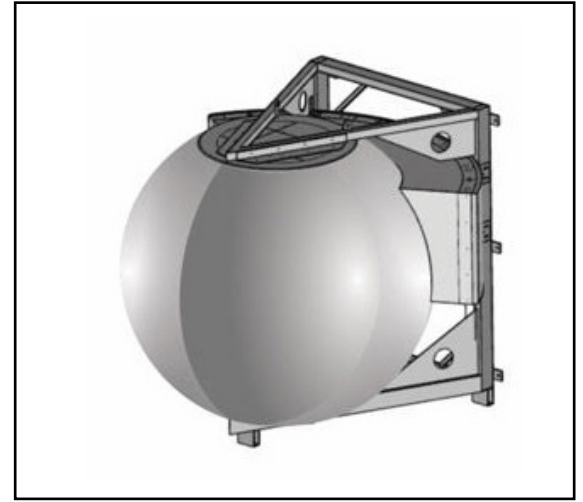


## MS-8H120

**Multi-Beam Spherical Lens Antenna: 8 independent high frequency (1695-2690MHz) cross-polarized beams, with 0-15° tilt for each beam and 2X2 MIMO support per beam.**

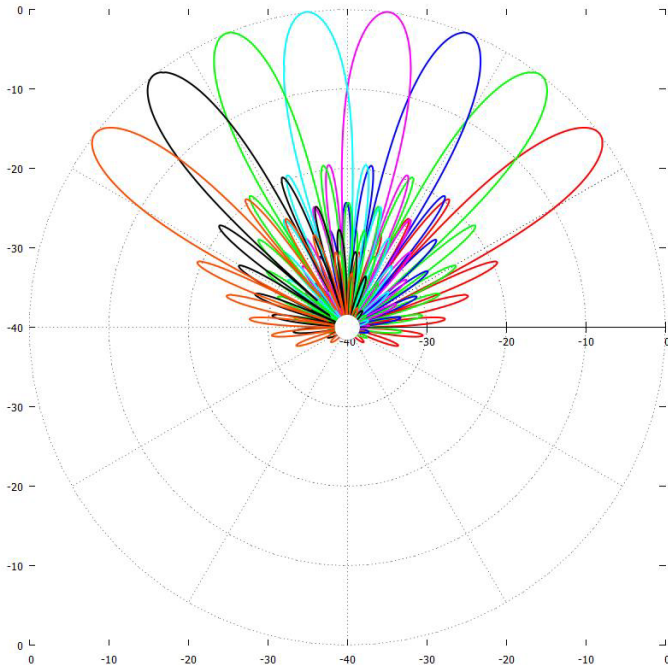
**\*Optional Packages:**

- a) MS-8H120-RET  
AISG 2.0 Remote Electrical Tilt

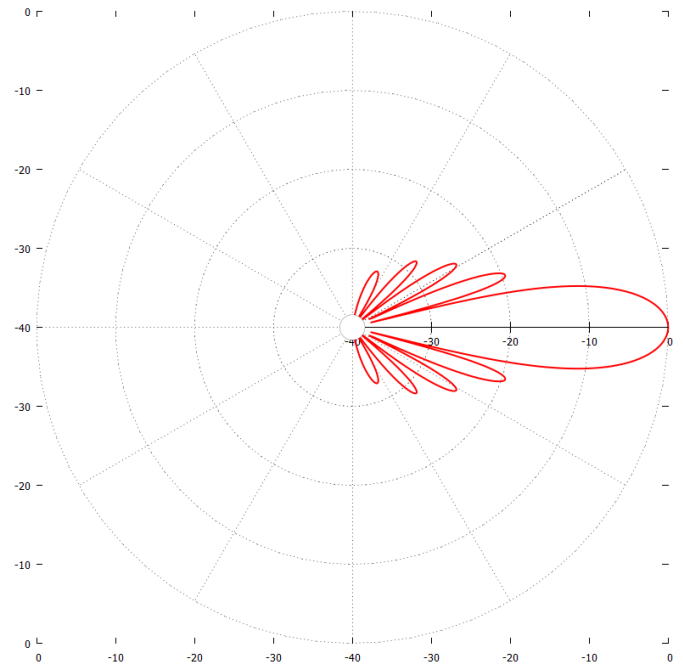


### PATTERN RESULTS:

**High-Band Horizontal Pattern (1.80GHz)**



**High-Band Vertical pattern (1.80GHz)**



### TECHNICAL SPECIFICATIONS

|                                                                       |                           |
|-----------------------------------------------------------------------|---------------------------|
| Frequency                                                             | 1695-2690 MHz             |
| Gain                                                                  | 24.5dBi                   |
| VSWR                                                                  | <1.5:1                    |
| Polarization                                                          | Dual Slant $\pm 45^\circ$ |
| Horizontal Coverage                                                   | 120°                      |
| Horizontal Beamwidth (10dB level)<br>Horizontal Beamwidth (3dB level) | 15°<br>8.5°               |
| Vertical Beamwidth (10dB level)<br>Vertical Beamwidth (3dB level)     | 15°<br>8.5°               |
| Beam Cross-over                                                       | 10dB typical              |
| Total Number of Beams                                                 | 8                         |
| Adjustable Tilt per Beam                                              | 0° to 15°                 |
| First Sidelobe level                                                  | <-16dB                    |
| Front to Back Ratio                                                   | >28dB                     |
| Isolation Port to Port - Polarization                                 | >28dB                     |
| Isolation Port to Port - Beam                                         | >28dB                     |
| Power Rating                                                          | 250W per port             |
| Intermodulation                                                       | <-153dBc                  |
| Impedance                                                             | 50 ohm                    |
| Connector Quantity and Type                                           | 16 x 4.3-10 female        |

### MECHANICAL DATA

|                        |                                                                                                                |
|------------------------|----------------------------------------------------------------------------------------------------------------|
| Dimensions (H x W x D) | Spherical Lens diameter:<br>120cm/47inch<br><br>Antenna dimensions:<br>140 x 147 x 155 cm<br>55 x 58 x 61 inch |
| Antenna Weight         | 75kg<br>165lbs                                                                                                 |
| Radome Material        | Fiber Glass                                                                                                    |
| Mounting               | 2 position pipe mount<br><br>Compatible pipe diameter:<br>6.1 – 11.4 cm<br>2.4 – 4.5 inch                      |

### ENVIRONMENTAL RATINGS

|                      |                                |
|----------------------|--------------------------------|
| Humidity             | 95% RH @ +30°C                 |
| Temperature          | -40°C to +70°C                 |
| Wind load @150 km/hr | N/lbf<br>Frontal: 1108.5/249.2 |

### SAMPLE CONNECTOR LAYOUT:

