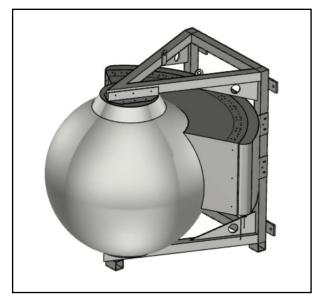


LENS TECHNOLOGY ENABLED

MS-6.3DB90-T

Multi-Beam Dual Band Spherical Lens Antenna: 3 independent low frequency (617-896 MHz) cross-polarized beams and 6 independent high-frequency (1695-2690MHz) cross-polarized beams, with 0-15° tilt for each 40° sector and 2X2 MIMO support per beam. Sector consists of 1 low-band beam and 2 high-band beams.

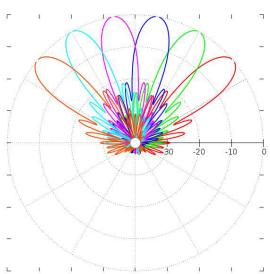
Standard RET Configuration.



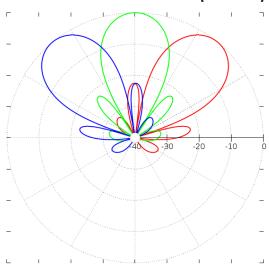


PATTERN RESULTS:

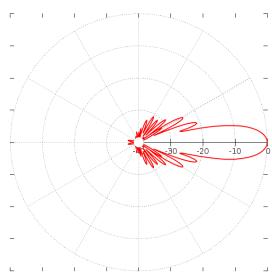
High-Band Horizontal Pattern (1.80GHz)



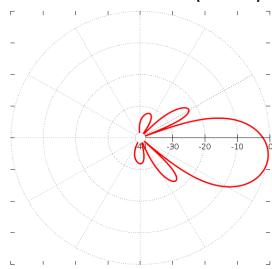
Low-Band Horizontal Pattern (0.85GHz)



High-Band Vertical pattern (1.80GHz)



Low-Band Vertical Pattern (0.85GHz)





TECHNICAL SPECIFICATIONS PER BEAM		
Frequency	617-896 MHz	1695-2690 MHz
Gain	16.5dBi	22.8dBi
VSWR	<1.5:1	<1.5:1
Polarization	Dual Slant ±45°	Dual Slant ±45°
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB level) Horizontal Beamwidth (3dB level)	40° 23°	20° 12°
Vertical Beamwidth (10dB level) Vertical Beamwidth (3dB level)	42° 23°	21° 12°
Beam Cross-over	10dB typical	10dB typical
Total Number of Beams	3	6
Manual Adjustable Tilt per 40° sector (each sector having 2 high-band beams and 1 low-band beam)	10° to 25°	0° to 15°
First Sidelobe level	<-15dB	<-16dB
Front to Back Ratio	>28dB	>28dB
Isolation Port to Port - Polarization	>28dB	>28dB
Isolation Port to Port - Beam	>26dB	>28dB
Power Rating	250W per port	250W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	6 X 4.3-10 female	12 X 4.3-10 female

MECHANICAL DATA		
Dimensions (H x W x D)	Spherical Lens diameter: 90cm/35inch Antenna dimensions: 105.4 x 116.5 x 113.2 cm 41.5 x 45.9 x 44.6 inch	
Antenna Weight	53kg/117lbs [Without RET] 59.3kg/130.7lbs [With RET]	
Radome Material	Fiber Glass	
Mounting	Adjustable Clamps 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 (Front)	754 N @ 151 km/hr 170 lbf @ 151 km/hr	

CONNECTOR LAYOUT:

