

MS-4.2DB60-A

Multi-Beam Dual Band Spherical Lens Antenna: 4 independent high-frequency (1710-2690MHz) cross-polarized beams and 2 independent low-frequency (698-896MHz-A, 790-960MHz-B) cross-polarized beams with 15° tilt for each 60° group and 2X2 MIMO support. Group consists of 1 low-band and 2 high-band beams.

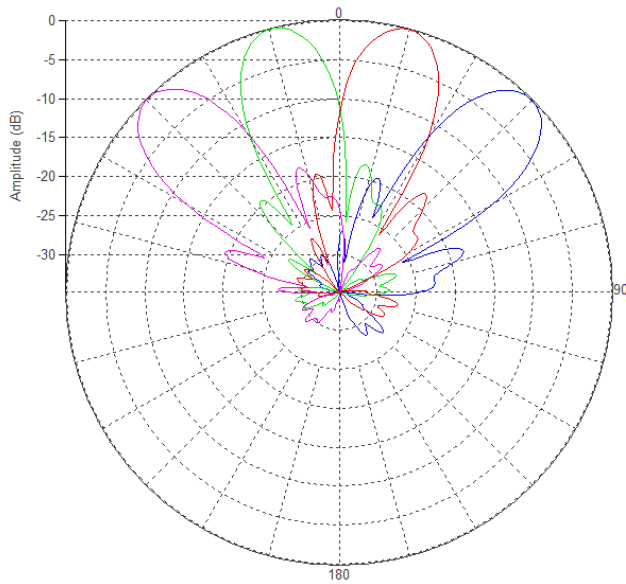
***Optional Packages:**

MS-4.2DB60-B : Low-band frequency range 790-960MHz

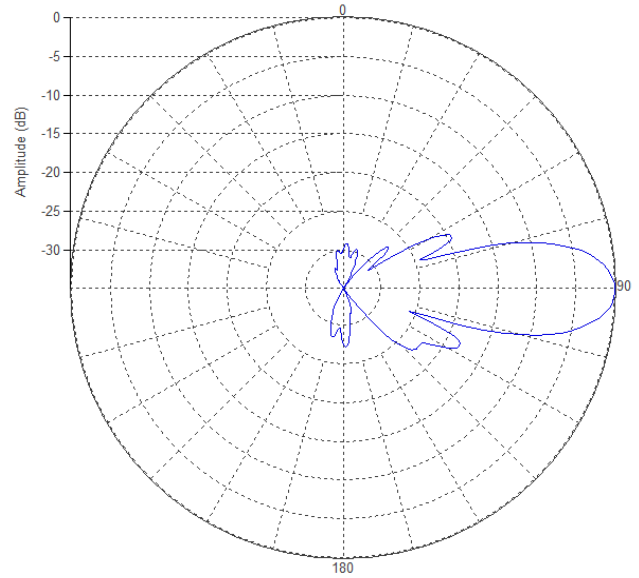
PATTERN RESULTS:



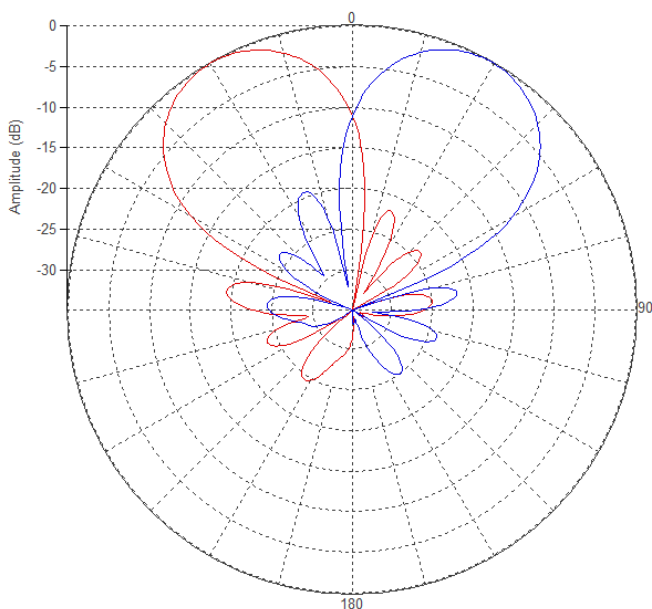
High-band Horizontal Pattern (1.92GHz)



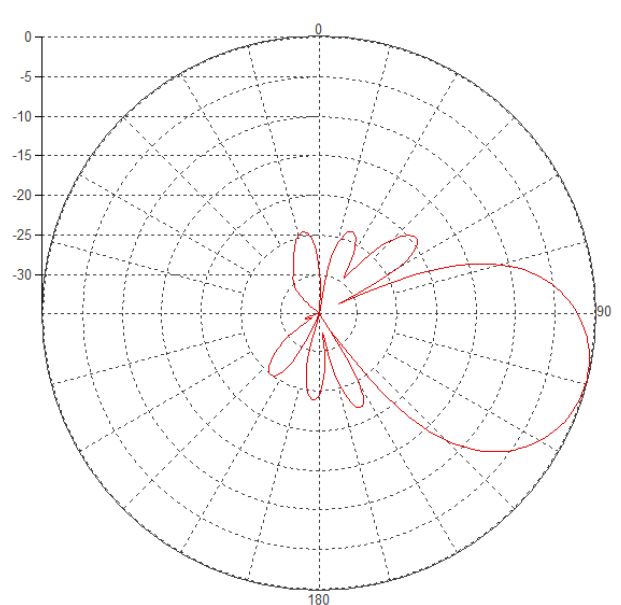
High-band Vertical Pattern (1.92GHz)



Low-band Horizontal Pattern (0.8GHz)



Low-band Vertical Pattern (0.8GHz)





ESTIMATED TECHNICAL SPECIFICATIONS PER BEAM

Frequency	698-898 MHz/A 790-960 MHz/B	1710-2690 MHz
Gain	15dBi	21dBi
Return Loss	>15dB	>15dB
Polarization	Dual Slant ±45°	Dual Slant ±45°
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB level)	60°	30°
Vertical Beamwidth (10dB level)	60°	30°
Beam Cross-over	10dB typical	10dB typical
Total Number of Beams	2	4
Manual Adjustable Tilt per 60° group (each group having 2 high-band beams and 1 low-band beam, low-band beam down 15 degree to high-band beam)	15° to 30°	0° to 15°
Sidelobe Level	<-18dB	<-18dB
Front to Back Ratio	>28dB	>28dB
Isolation Port to Port -Polarization	>28dB	>28dB
Isolation Port to Port – Beam	>28dB	>28dB
Power Rating	400W per port	300W per port
Intermodulation	<-147Bc	<-150dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	4 x 4.3-10 female	8 x 4.3-10 female

ESTIMATED MECHANICAL DATA

Dimensions (H x W x D)	Spherical Lens diameter: 60cm/24inch Antenna dimensions: 70 x 80 x 80 cm 28 x 32 x 32 inch
Antenna Weight	25kg/55lbs
Radome Material	Fibre Glass
Mounting	Adjustable Clamps Compatible pipe diameter: 6.1 – 11.4 cm 2.4 – 4.5 inch

ESTIMATED ENVIRONMENTAL RATINGS

Humidity	95% RH @ +30°C
Temperature	-40°C to +70°C
Wind load (Front)	462 N @ 151km/hr 104 lbf @ 151km/hr

Sample Connector Layout

