

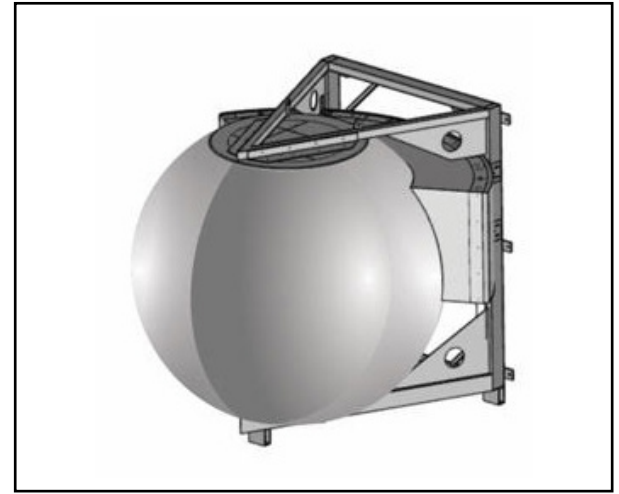
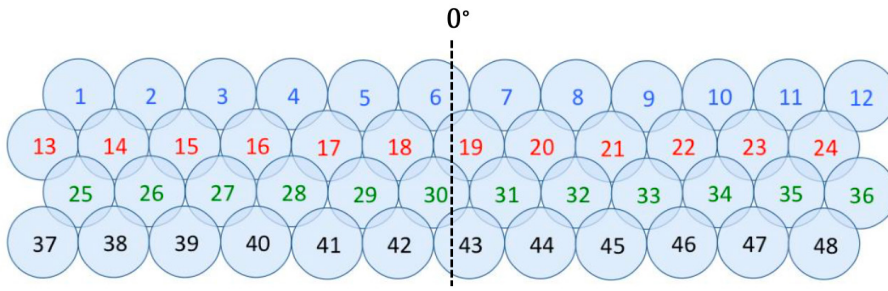
MATSING®

LENS TECHNOLOGY ENABLED

MS-48H180

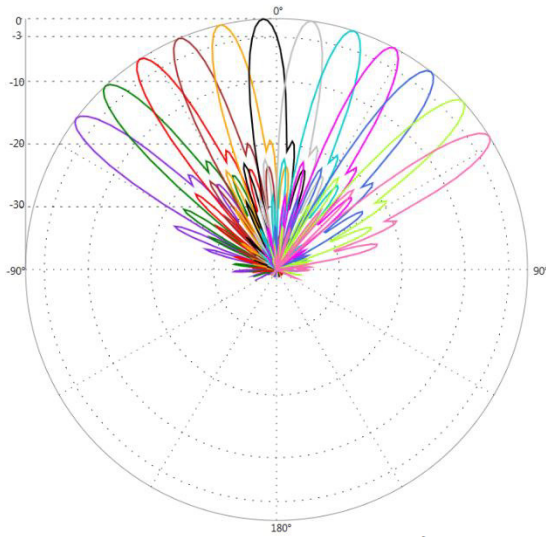
Multi-Beam Wide Band Spherical Lens Antenna:
4 rows of 12 independent high frequency (1695 - 2690MHz)
full-band cross-polarized beams.

BEAM LAYOUT:

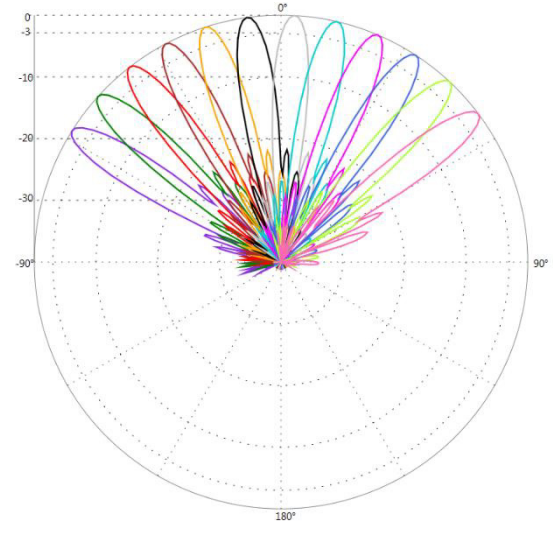


PATTERN DIAGRAMS @ 1.9GHz :

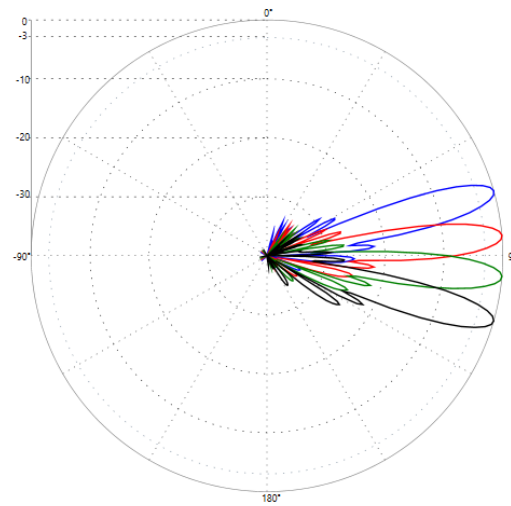
Horizontal pattern top/third



Horizontal pattern second/bottom



Vertical pattern



Top Row +12.9°
Second Row +4.3°
Third Row -4.3°
Fourth Row -12.9°

TECHNICAL SPECIFICATIONS PER BEAM

Frequency	1695 - 2690 MHz
Gain	27.5dBi
VSWR	<1.5:1
Polarization	Dual Slant ±45°
Horizontal Coverage	120°
Horizontal Beamwidth (10dB level)	10°
Horizontal Beamwidth (3dB level)	6°
Vertical Beamwidth (10dB level)	10°
Vertical Beamwidth (3dB level)	6°
Beam Cross-over	10dB typical
Total Number of Beams	48
Tilt (Factory Set)	Fixed
First Sidelobe level	<-16dB
Front to Back Ratio	>28dB
Isolation Port to Port - Polarization	>28dB
Isolation Port to Port - Beam	>28dB
Power Rating	100W per port
Intermodulation	<-153dBc
Impedance	50 ohm
Connector Quantity and Type	96 X 4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)	Spherical Lens diameter: 180cm/70inch Antenna dimensions: 187.1 X 207 X 206.5 cm 73.7 X 81.5 X 81.3 inch
Antenna Weight	258.3kg 569.4lbs
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	N /lbf Frontal: 1838/413 Lateral: 2053/462

CONNECTOR LAYOUT:

