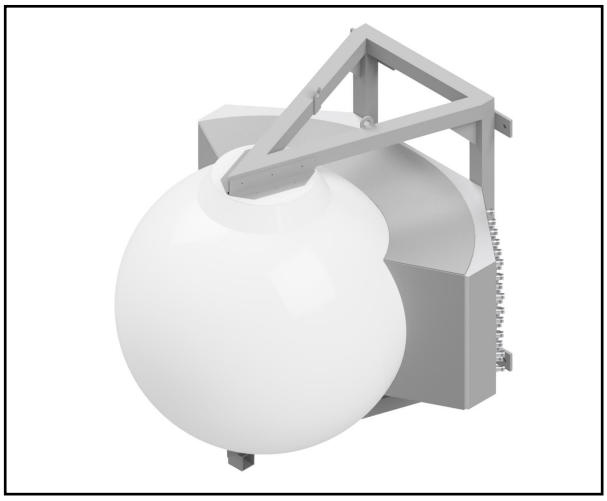
MATSING®

LENS TECHNOLOGY ENABLED

MS-48C90

Multi-Beam Wide Band Spherical Lens Antenna:
4 rows of 12 independent high frequency (3700-4200MHz) cross-polarized beams.



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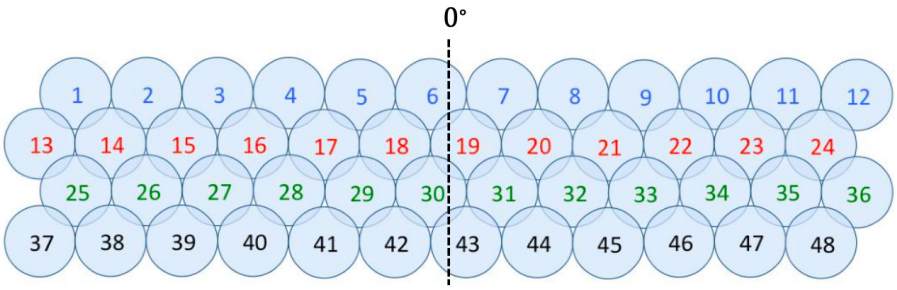
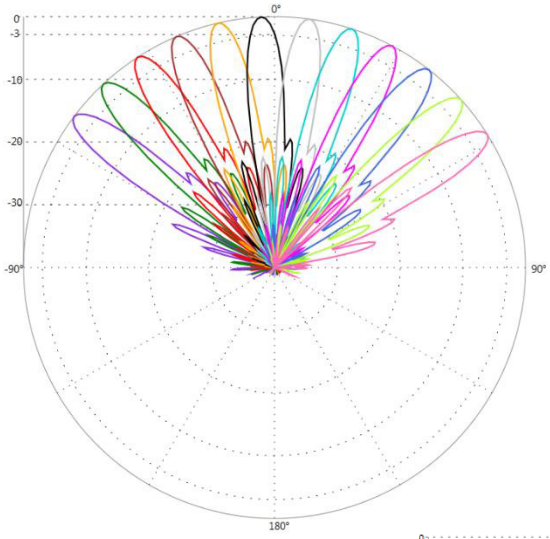
BEAM LAYOUT:

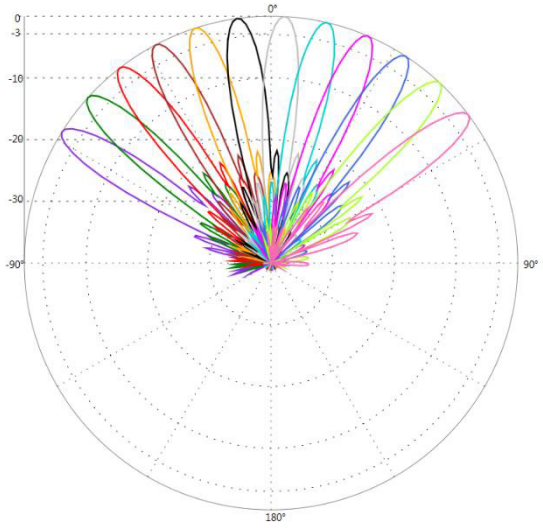


PATTERN DIAGRAMS @ 3.95GHz :

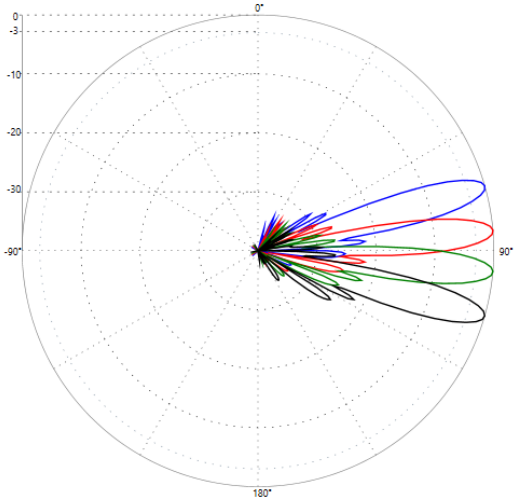
Horizontal pattern top/third



Horizontal pattern second/bottom



Vertical pattern



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

EMAIL: info@matsing.com **WEBSITE:** www.matsing.com **PHONE:** (949)585-5144

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TECHNICAL SPECIFICATIONS PER BEAM

Frequency	3700-4200 MHz
Gain	27dBi
VSWR	<1.5:1
Polarization	Dual Slant ±45°
Horizontal Coverage	120°
Horizontal Beamwidth (10dB level) Horizontal Beamwidth (3dB level)	10° 6°
Vertical Beamwidth (10dB level) Vertical Beamwidth (3dB level)	10° 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	50W per port Total power ≤ 3000W
Intermodulation	<-153dBc
Impedance	50 ohm
Connector Quantity and Type	96 X MQ4

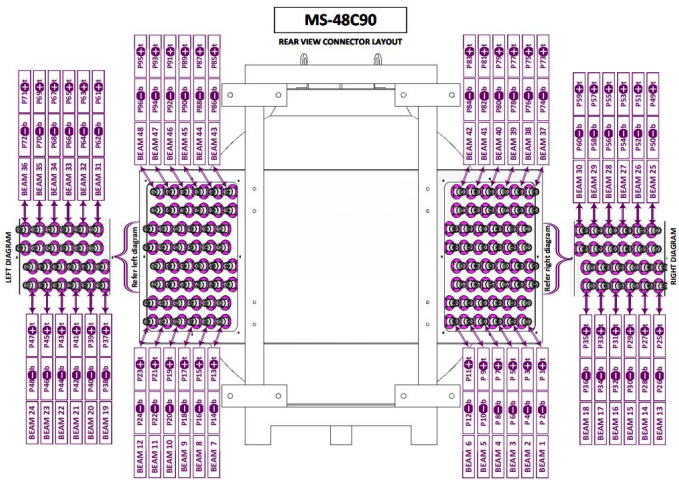
MECHANICAL DATA

Dimensions (H x W x D)	Spherical Lens diameter: 90cm/35inch Antenna dimensions: 105.4 X 108.4 X 110 cm 41.5 X 42.7 X 43.3 inch
Antenna Weight	54.2 kg 119.4 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 @ 150 km/h	N/lbf Frontal: 574/129 Lateal: 753/169

CONNECTOR LAYOUT:



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