

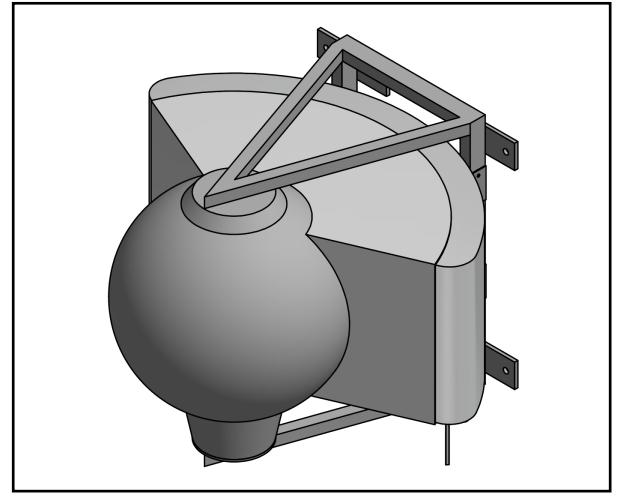
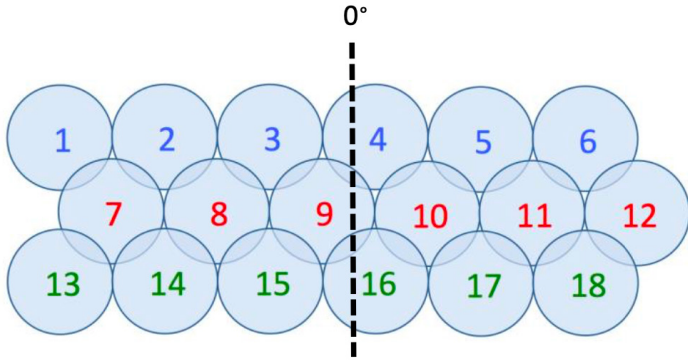
# MATSING<sup>®</sup>

LENS TECHNOLOGY ENABLED

## MS-18C45

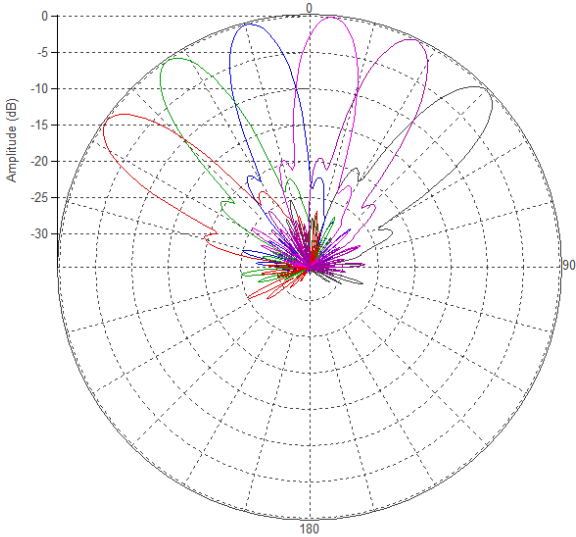
Multi-Beam Spherical Lens Antenna: 3 rows of 6 independent high frequency (3.7GHz – 4.2GHz) cross-polarized beams.

### BEAM LAYOUT:

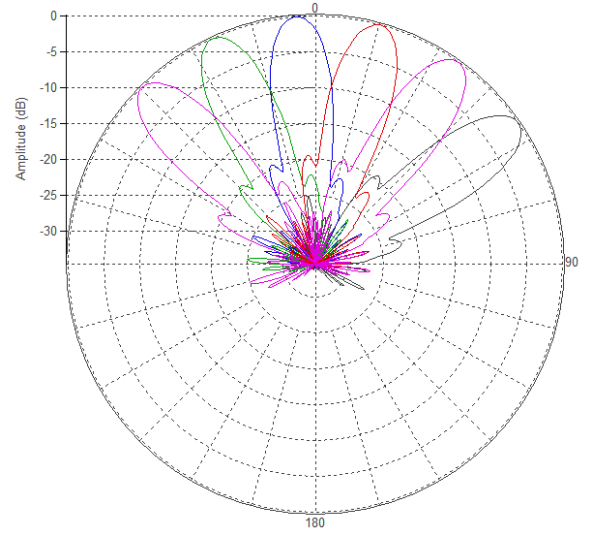


### PATTERN RESULTS (3.7GHz):

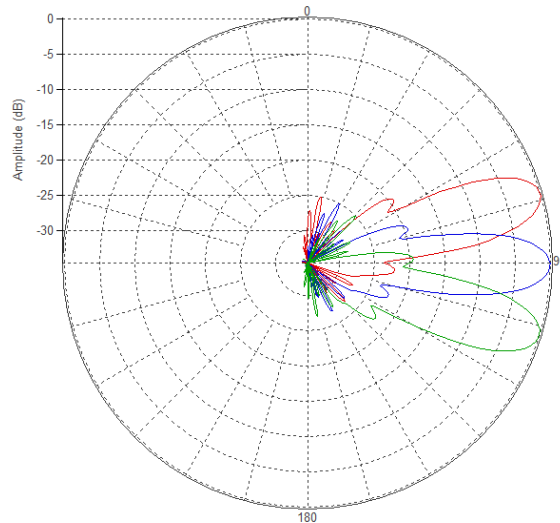
Horizontal Pattern Row 1 and 3



Horizontal Pattern Row 2



Vertical Pattern



+17.3°

0

-17.3°

### TECHNICAL SPECIFICATIONS PER BEAM

Frequency	3.7GHz – 4.2GHz
Gain	22dBi
VSWR	<1.5:1
Polarization	Dual Slant ±45°
Horizontal Coverage	120°
Horizontal Beamwidth (10dB level) Horizontal Beamwidth (3dB level)	20° 12°
Vertical Beamwidth (10dB level) Vertical Beamwidth (3dB level)	20° 12°
Beam Cross-over	10dB typical
Total Number of Beams	18
Tilt	Factory Set
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	36 x 4.3-10 female

### MECHANICAL DATA

Dimensions (H x W x D)	Spherical Lens diameter: 45 cm/18 inch  Antenna dimensions: 61 x 61 x 70 cm 24 x 24 x 27.5 inch
Antenna Weight	22kg 48.5lbs
Radome Material	Fiber Glass
Mounting	2 position 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

### SAMPLE CONNECTOR LAYOUT:

