

# MATSING®

LENS TECHNOLOGY ENABLED

## MS-12F90

**Multi-Beam Wide Band Spherical Lens Antenna: 1 row of 12 independent high frequency (3300-4200MHz) cross-polarized beams. Each beam has 2X2 MIMO support and 0-15° RET per beam.**

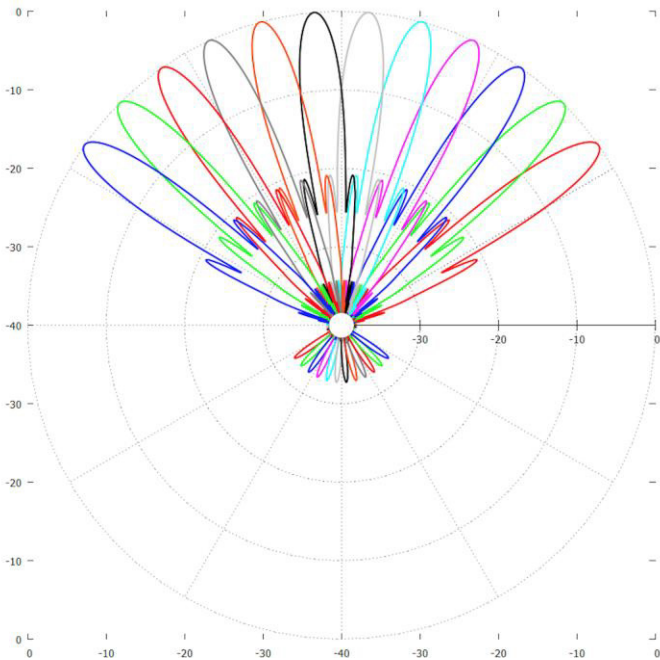
**External RET Controller Part # MS-EXT-RET-12F90**

### BEAM LAYOUT:

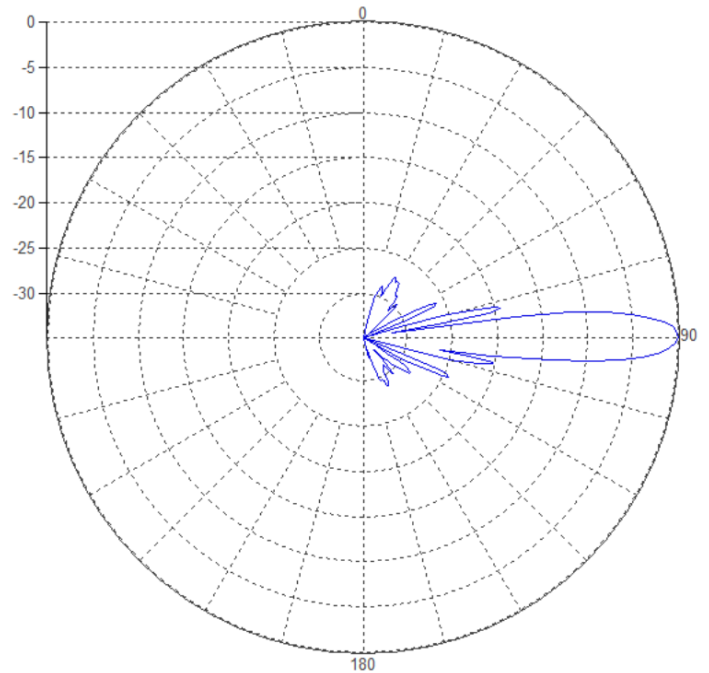


### PATTERN RESULTS:

**Horizontal Pattern (3.6GHz)**



**Vertical Pattern (3.6GHz) 0° Tilt**



### TECHNICAL SPECIFICATIONS PER BEAM

Frequency	3300-4200 MHz
Gain	26dBi
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	12
RET	0 - 15°
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
Intermodulation	<-153dBc
Impedance	50 ohm
Connector Quantity and Type	24 X 4.3-10 female

### MECHANICAL DATA

Dimensions (H x W x D)	Spherical Lens diameter: 90cm/35inch  Antenna dimensions: 105 x 114 x 110 cm 41.5 x 44.8 x 43.3 inch
Antenna Weight	61.65kg 135.5lbs
Radome Material	Fiber Glass
Mounting	Standard 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
Wind load @ 150m/hr	[N/lbf] Frontal: 489 / 110 Lateral: 543 / 122

### SAMPLE CONNECTOR LAYOUT:

