

Ultra Low Profile MiMo 3.6/5.0GHz Antenna

CM[X]-35-55-2SP



- Ultra Low Profile
- Up to 4 x 4 MiMo Dual Band Private LTE / CBRS
- EN45545-2 Certified
- EN50155 Certified
- Certified to IP69K and IK10

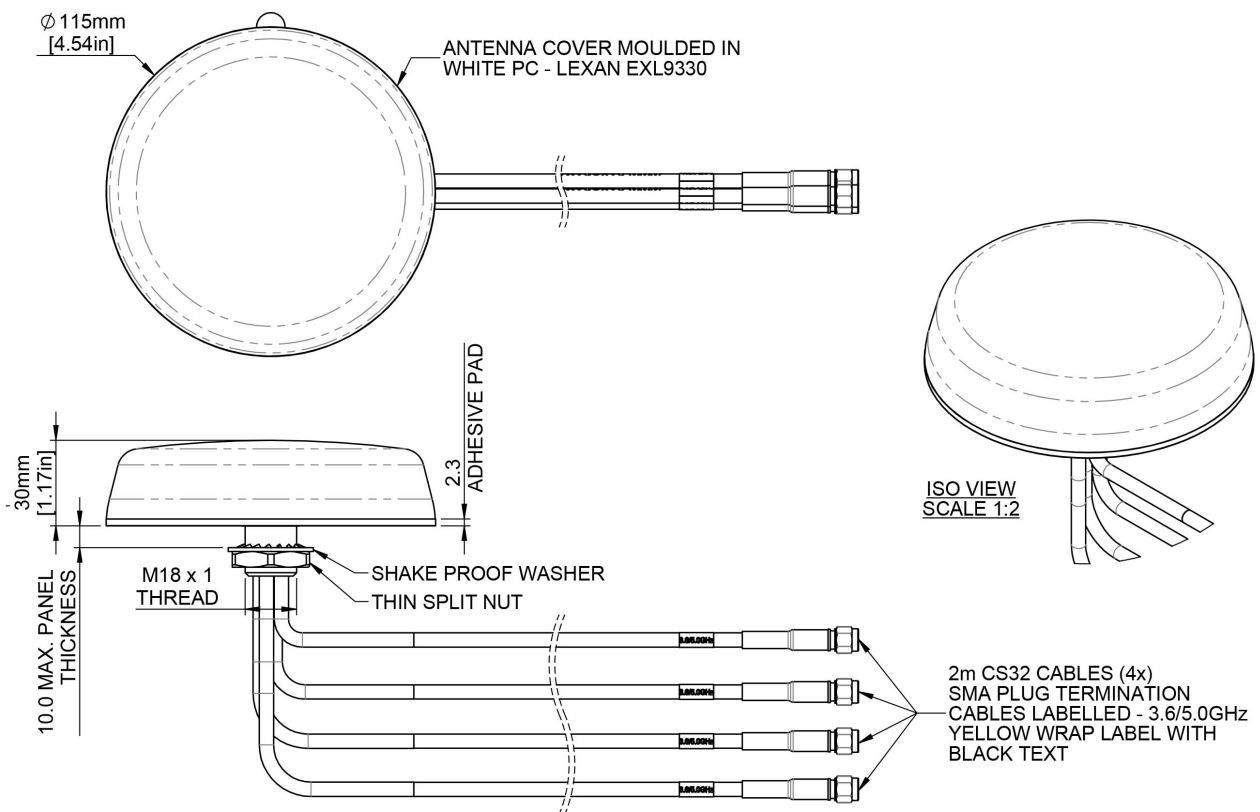
The CM[X]-36-55 range has been designed to provide MiMo dual band 3.6/5.0GHz coverage for private LTE / CBRS in an ultra low profile package. The compact, robust low-profile housing contains up to four antenna elements with effective isolation and low correlation covering 3.4-3.8/4.9-6GHz.

The antenna is designed to be ceiling mounted and can be fitted on a conductive or non-conductive panel. Supplied with integrated flame retardant CS32 cables (Compliant to UNECE 118 and EN45545) and a halogen free flame retardant radome the antenna is suitable for many environments.

EN45545 and EN50155 approvals mean that the antenna is suitable for mounting on and inside rolling stock and the low height make the product suitable for low clearance scenarios including two deck rail cars.

Technical Drawing

CM4-36-55-2SP shown

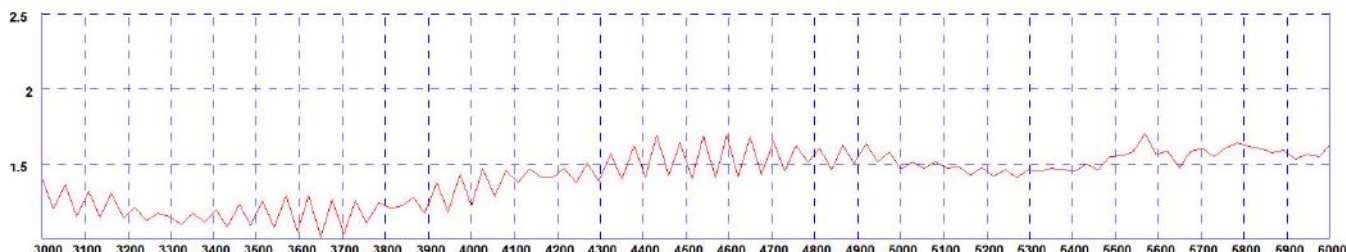


Ultra Low Profile MiMo 3.6/5.0GHz Antenna CM[X]-35-55-2SP

Product Data

Part No.		CM2-36-55-2SP	CM3-36-55-2SP	CM4-36-55-2SP
Electrical Data				
Frequency Range (MHz)		2x 3.6/5GHz	3x 3.5/5GHz	4x 3.6/5.0 GHz
Peak Gain: Isotropic †	3.4-3.8GHz		4dBi	
	4.9-6.0GHz		6dBi	
Typical VSWR*			< 2:1	
Typical Isolation*			> 15dB	
Pattern			Omni-directional	
Nominal Impedance			50Ω	
Max Input Power			10W	
Mechanical Data				
Dimensions (mm)	Length	115mm (4.52")		
	Width	30mm (1.18")		
Operating Temp (°C)		-30° / +70°C (-22° / 158°F)		
Material		LEXAN EXL9330		
Colour		White		
IP Rating		IP66 / IP69K**		
Vandal Protection		IK10		
Regulatory Approvals		EN45545-2 : HL 1-3 / EN50155		
Mounting Data				
Fixing		Panel Mount - 18mm (3/4")		
Cable Data				
		Elements 1&2 (Cell)		
Cable Type		CS32 Flame Retardant to UN ECE 118 / EN6722 / EN45545		
WiFi Cables	Diameter	5mm (0.2")		
	Length	2m (6')		
	Termination	SMA (m)		

Typical VSWR - Elements 1-4*



* VSWR measured with 2m (6') of CS32 cable in free space

† Peak gain simulated with all elements fed in free space excluding cable loss

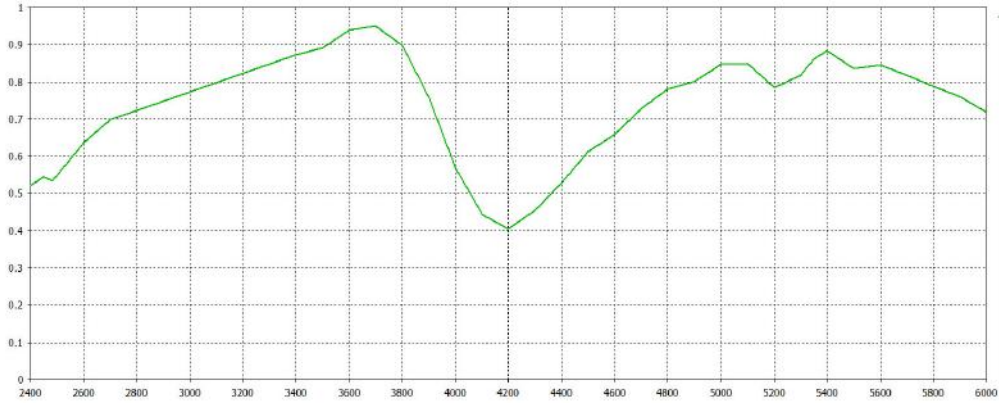
* Typical Isolation and VSWR stated as measured with 2m (6') of cable

**When installed in accordance with SW3-996

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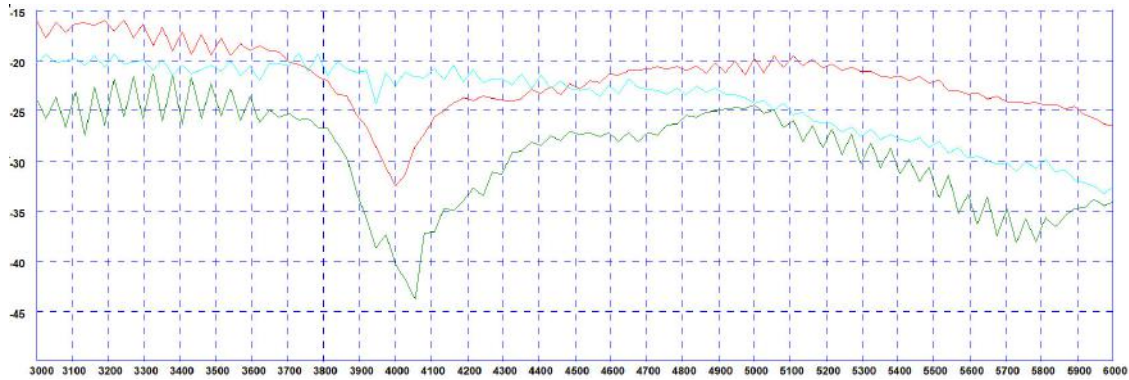
Electrical Data - Cell

Typical Efficiency - Elements 1-4*



* Efficiency simulated in CST Microwave Studio in free space without cable

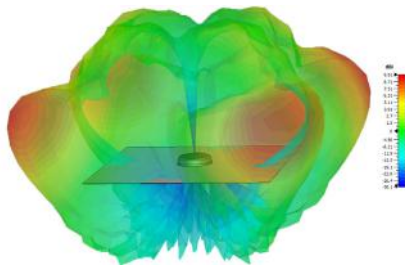
Typical Isolation*



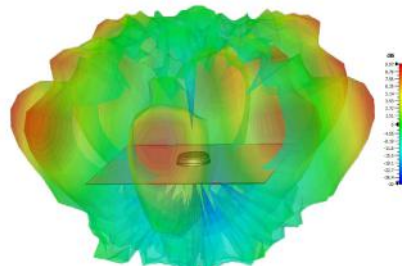
*Typical Isolation measured with 2m CS32 cable in free space Red Trace = elements 1-4 Green Trace= Elements 1-3 Blue Trace = Elements 2-3

3D Patterns - Cell

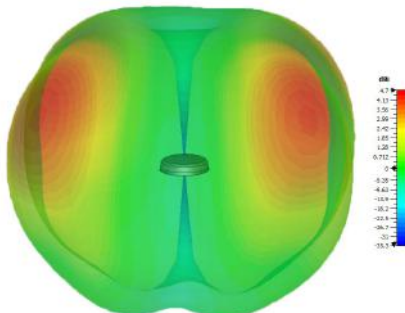
Typical 3D Pattern CM4 Ground Plane (3600MHz)



Typical 3D Pattern CM4 Ground Plane (5500MHz)



Typical 3D Pattern CM4 Free Space (3600MHz)



Typical 3D Pattern CM4 Free Space (5500MHz)

