

# Low PIM MiMo Omni Ceiling Antenna

CMM-6-60



- Low Profile
- 2x2 MiMo 4G/5G
- Flame Retardant Materials
- Low PIM Construction

The CMM-6-60 range has been designed to provide 2x2 MiMo coverage for 4G & 5G networks in a low profile package. The compact, robust low-profile housing contains two antenna elements with effective isolation and low correlation covering 617-960/1710-6000MHz.

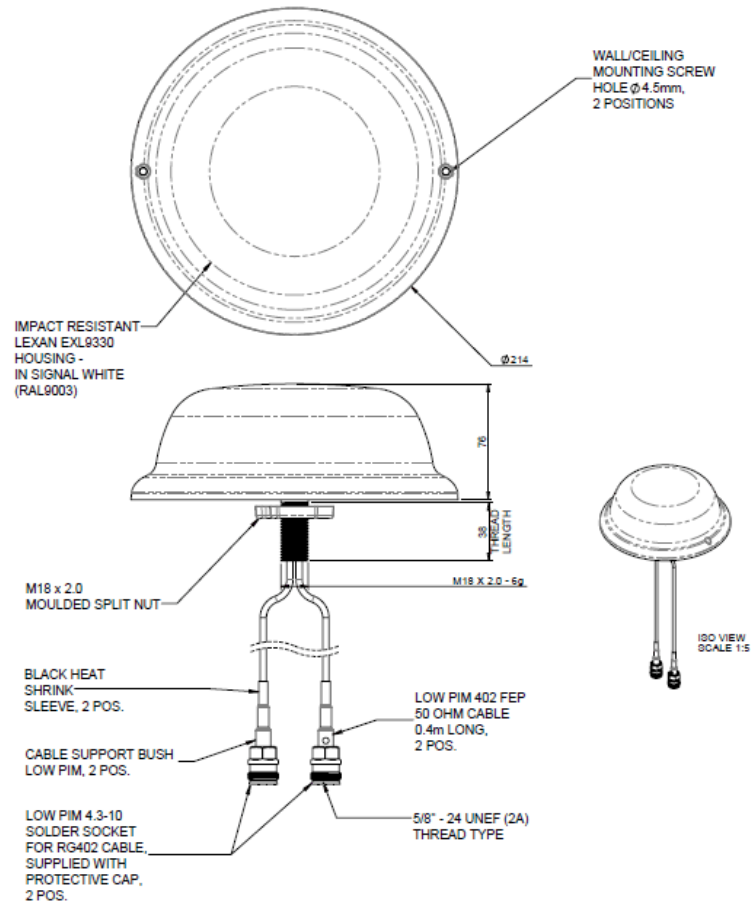
The antenna is designed to be ceiling mounted and can be fitted on a conductive or non-conductive panel. Supplied with integrated flame retardant low PIM RG402 cables and a halogen free flame retardant radome the antenna is suitable for many environments.



This product features Panorama Antennas' PIM Guard Technology and will meet or exceed a third order intermodulation level of < -150dBC (2x 20W carrier)+

## Technical Drawing

CMM-6-60-054310 Shown



# Low PIM MiMo

## Omni Ceiling Antenna

### CMM-6-60

#### Product Data

<b>Part No.</b>		CMM-6-60-05NJ	CMM-6-60-054310
<b>Electrical Data</b>			
Frequency Range	2x 617-960/1710-6000		
Peak Gain:	617-960MHz	3dBi	
Isotropic †	1710-3800MHz	6dBi	
	4900-6000MHz	7dBi	
Pattern	Omni-directional		
Typical VSWR*	617-698 MHz	<2:1	
	698-960/1710-6000	<1.5:1	
Typical Efficiency	>80%		
Correlation Co-efficient	<0.1		
Passive intermod. (2x20W, 3rd ord.) dBc*	< -150		
Nominal Impedance	50Ω		
Max input power (W)	20		
<b>Mechanical Data</b>			
Dimensions (mm)	Diameter	214 (8.4")	
	Height	76 (2.9")	
Operating Temp (°C)	-40° / +80°C (-40° / 176°F)		
Material	LEXAN EXL 9330 (UL94-V0)		
Colour	White		
Typical Weight (g)	530		
<b>Mounting Data</b>			
Fixing	Panel Mount - 18mm (3/4")		
<b>Cable Data</b>			
2G/3G/4G Cables	Cable Type	402 Low PIM Flame Retardant Cable	
	Diameter (mm)	4 (0.16")	
	Length (m)	0.5(1'6")	
	Termination	2x N (f)	2x 4.3-10 (f)

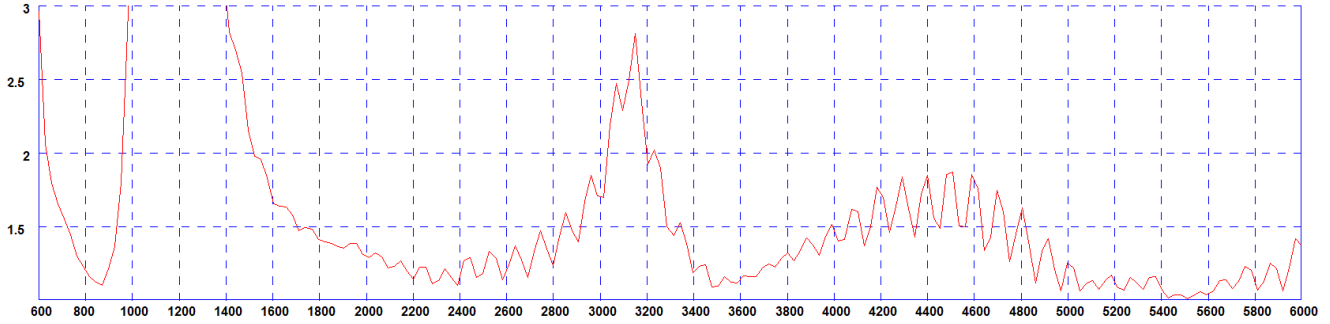
† Peak gain simulated with all elements fed and no ground plane excluding cable loss

\* Typical VSWR stated as measured with 1.2m (6') of cable

# Low PIM MiMo Omni Ceiling Antenna CMM-6-60

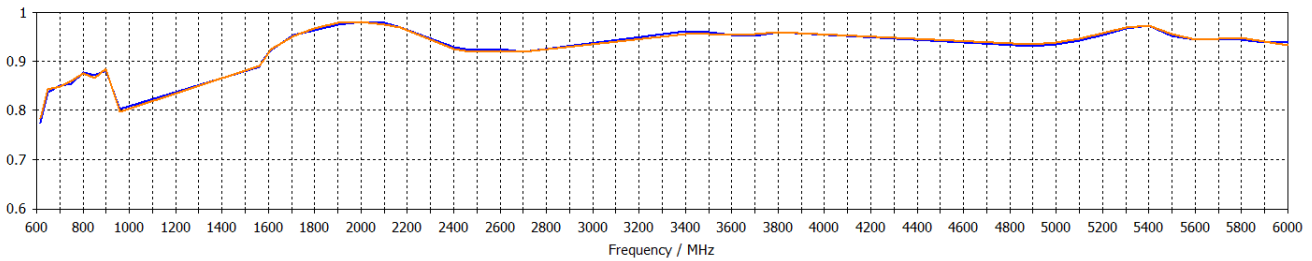
## Electrical Data - Cell

Typical VSWR - Elements 1&2\*



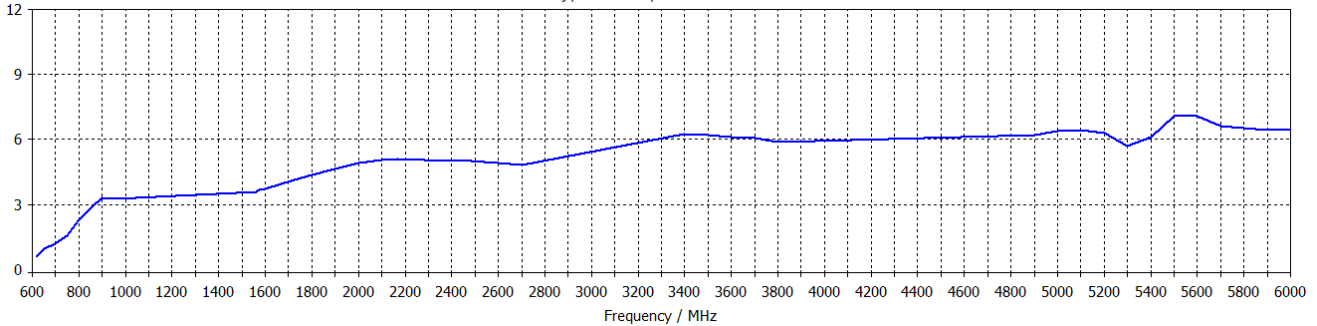
\* VSWR measured with 1.2m (4') of RG402 cable and no ground plane

Typical Efficiency - Elements 1&2\*



\*Element efficiency simulated in CST Microwave Studio with both elements fed and without cable loss.

Typical Swept Peak Gain\*

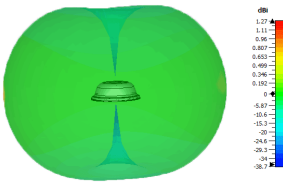


\* Swept peak gain simulated in CST Microwave Studio with both elements fed and without cable loss.

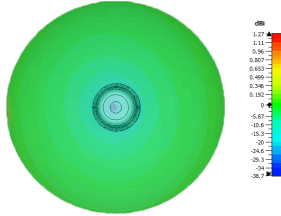
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## CMM-6-60

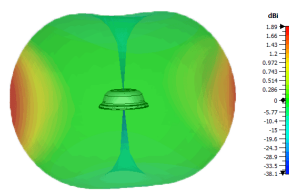
Typical 3D Pattern- Side (617MHz)



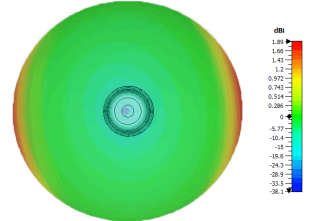
Typical 3D Pattern -Top (617MHz)



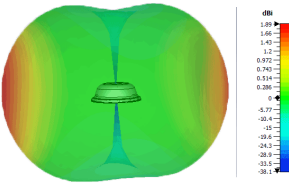
Typical 3D Pattern- Side (700MHz)



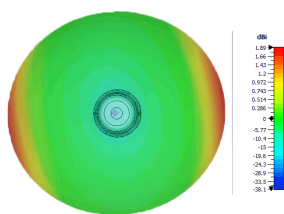
Typical 3D Pattern -Top (700MHz)



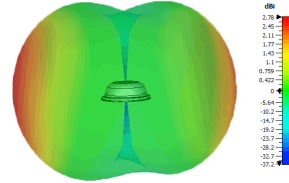
Typical 3D Pattern- Side (800MHz)



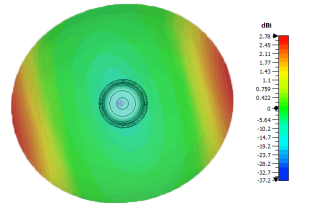
Typical 3D Pattern -Top (800MHz)



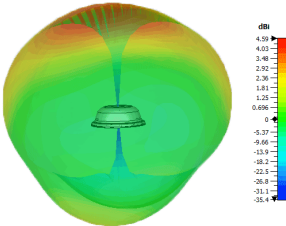
Typical 3D Pattern- Side (900MHz)



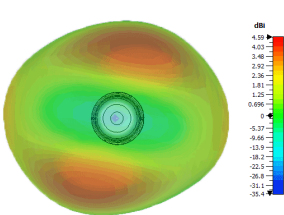
Typical 3D Pattern -Top (900MHz)



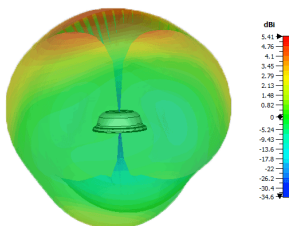
Typical 3D Pattern- Side (1800MHz)



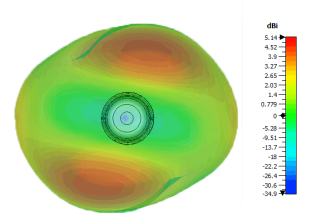
Typical 3D Pattern -Top (1800MHz)



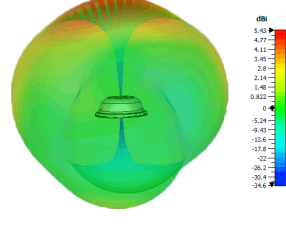
Typical 3D Pattern- Side (1900MHz)



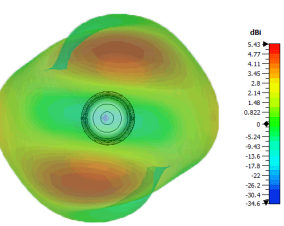
Typical 3D Pattern -Top (1900MHz)



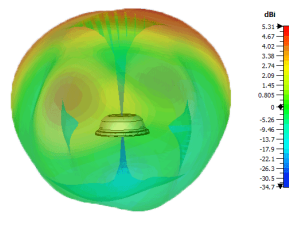
Typical 3D Pattern- Side (2100MHz)



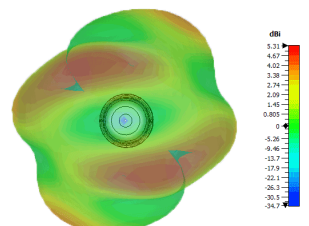
Typical 3D Pattern -Top (2100MHz)



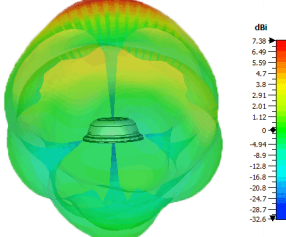
Typical 3D Pattern- Side (2600MHz)



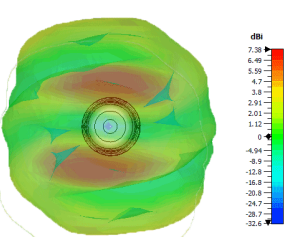
Typical 3D Pattern -Top (2600MHz)



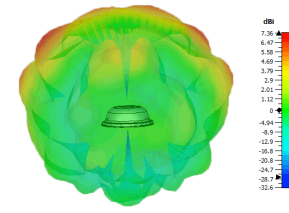
Typical 3D Pattern- Side (3600MHz)



Typical 3D Pattern -Top (3600MHz)



Typical 3D Pattern- Side (5400MHz)



Typical 3D Pattern -Top (5400MHz)

