

# Ultra Low Profile MiMo WiFi Antenna

CM[X]-24-58-2[VAR]



- Ultra Low Profile
- Up to 4 x 4 MiMo Dual Band WiFi
- EN45545-2 Certified
- EN50155 Certified
- Certified to IP69K and IK10

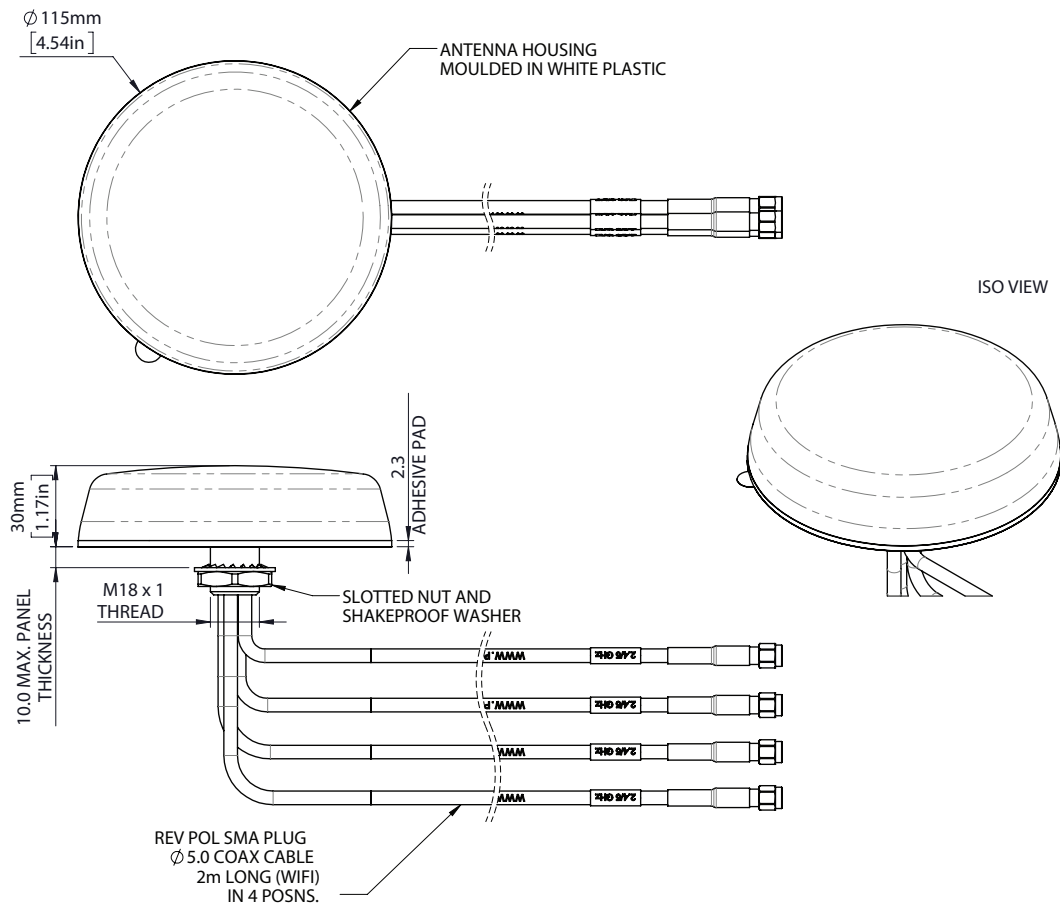
The CM[X]-24-58 range has been designed to provide MiMo dual band WiFi coverage in an ultra low profile package. The compact, robust low-profile housing contains up to four antenna elements with effective isolation and low correlation covering 2.4-2.5/4.9-6GHz.

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 118.01 and EN45545-2) and a halogen free flame retardant radome the antenna is suitable for many environments.

EN45545-2 and EN50155 approvals mean that the antenna is suitable for mounting on and inside rolling stock and the low height makes the product suitable for low clearance scenarios including two deck rail cars.

## Technical Drawing

CM4-24-58-2RPSP Shown



# Ultra Low Profile MiMo WiFi Antenna

## CM[X]-24-58-2[VAR]

### Product Data

Part No.	CM2-24-58-2[VAR]	CM3-24-58-2[VAR]	CM4-24-58-2[VAR]	
	2x 2.4/5.0 GHz	3x 2.4/5.0 GHz	4x 2.4/5.0 GHz	
Peak Gain: 2.4-2.5GHz	4dBi	4dBi	6dBi	
Isotropic † 4.9-6.0GHz	5dBi	6dBi	9dBi	
Typical VSWR*	< 2:1			
Typical Isolation*	> 12dB			
Pattern	Omni-directional			
Nominal Impedance	50Ω			
Max Input Power	10W			
Mechanical Data				
Dimensions	Diameter	115mm (4.52")		
	Height	30mm (1.18")		
Operating Temp.	-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				
WiFi Cables	Cable Type	CS32 Flame Retardant to UN118.01 / EN6722 / EN45545-2		
	Diameter	5mm (0.2")		
	Length	2m ( 6')		
	Termination			
	Rev Pol SMA Plug	CM2-24-58-2RPSP	CM3-24-58-2RPSP	CM4-24-58-2RPSP
	Right Angled N Plug	CM2-24-58-2RANP	CM3-24-58-2RANP	CM4-24-58-2RANP

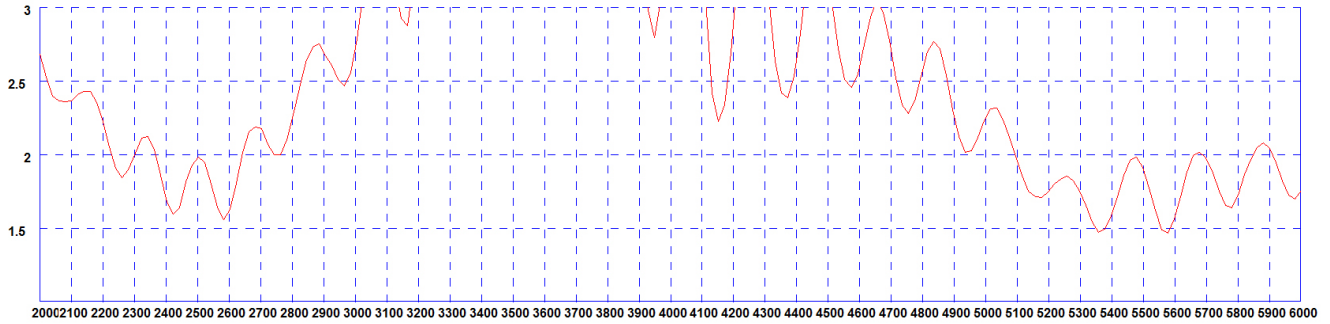
† Peak gain simulated with all elements fed on 600x600mm ground plane excluding cable loss

\* Typical Isolation and VSWR stated as measured with 0.5m (1.5') of cable

\*\*When installed in accordance with SW3-996

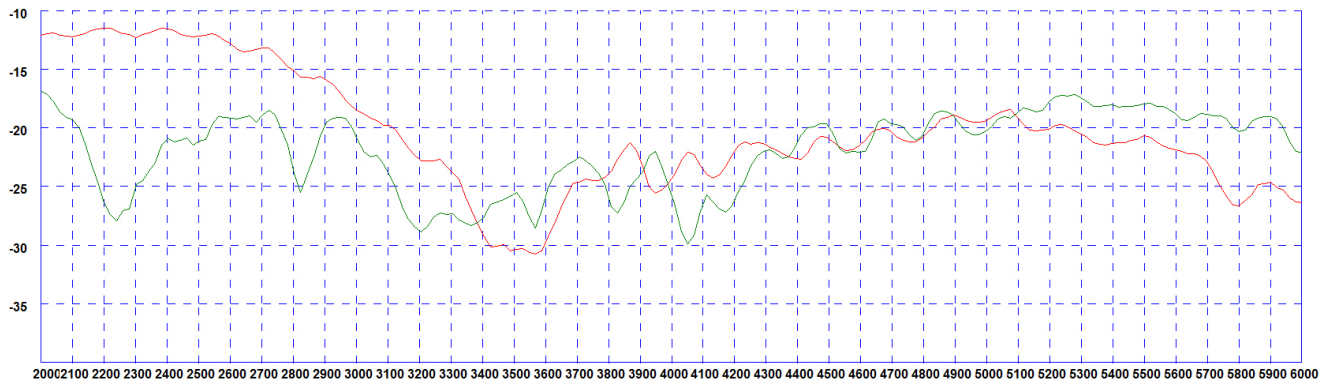
## Electrical Data - Cell

Typical VSWR - Elements 1-[3]4\*



\* VSWR measured with 0.5m (1.5') of CS32 cable

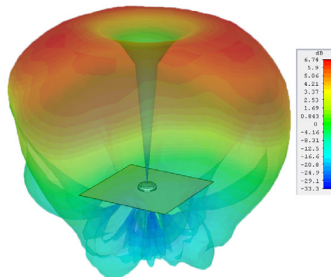
Typical Isolation - Elements 1-[3]4\*



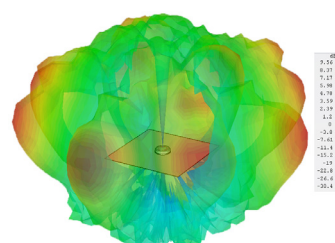
\*Isolation measured with 0.5m (1.5') of CS32 cable Red Plot = Adjacent Elements Green Plot =Opposite Elements

## 3D Patterns - Cell

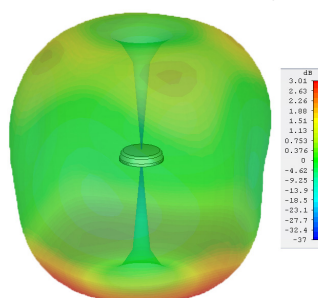
Typical 3D Pattern CM4 Ground Plane (2450MHz)



Typical 3D Pattern CM4 Ground Plane (5400MHz)



Typical 3D Pattern CM4 Free Space (2450MHz)



Typical 3D Pattern CM4 Free Space (5400MHz)

