

Ultra Low Profile MiMo WiFi Antenna

L[G]M[X]-24-58-5RPSP



- Ultra Low Profile
- Up to 4 x 4 MiMo Dual Band WiFi
- Optional GPS/GNSS Active Antenna 26dB LNA
- Ideal for M2M and IoT applications

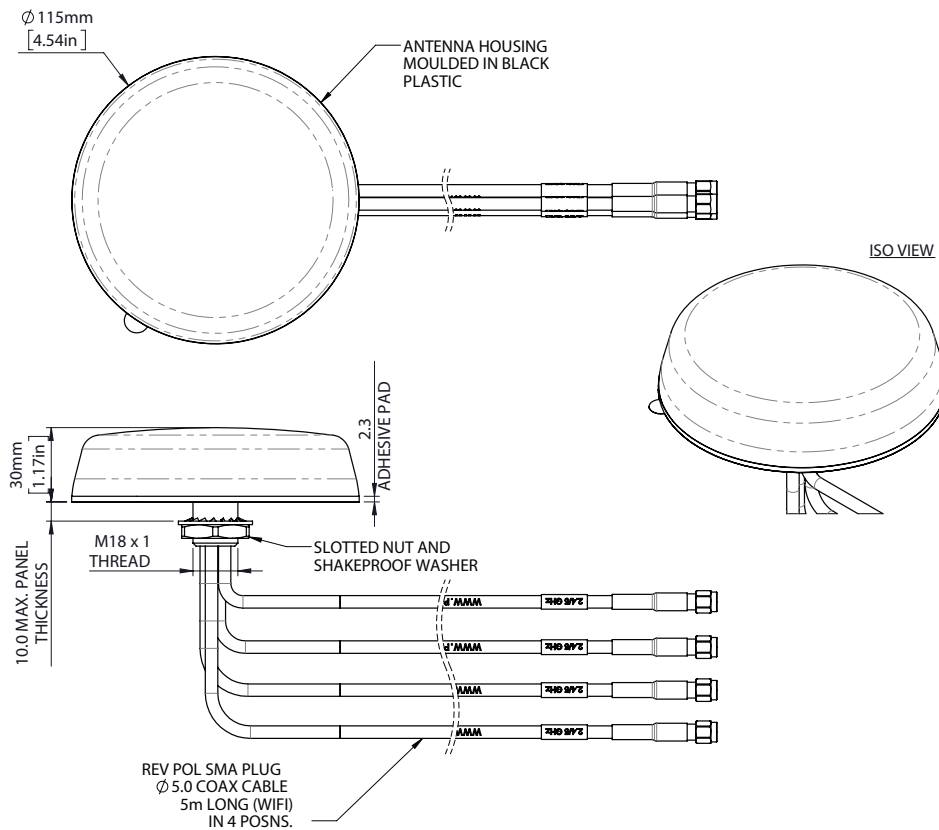
The L[G]M[X]-24-58 range has been designed to provide MiMo dual band WiFi coverage in an ultra low profile package. The compact, robust low-profile housing contains up to four antenna elements with effective isolation and low correlation covering 2.4-2.5/4.9-6GHz.

The antenna is designed to be panel mounted on vehicles or devices 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 and applications.

The LGM variants have an integrated GPS/GNSS module with 26dB LNA gain. The antenna is available with a black or white radome.

Technical Drawing

LPM4B-24-58-5RPSP



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Product Data

Part No.	LPM2-24-58-5RPSP	LPM3-24-58-5RPSP	LPM4-24-58-5RPSP	LGM2-24-58-5RPSP	LGM3-24-58-5RPSP	LGM4-24-58-5RPSP	
Frequency Range	Elements 1 -4		2.4/5.0 GHz				
	Element 5		1562-1612MHz				
Peak Gain: Isotropic †	Element 1 -4: 2.4-2.5GHz	4dBi	4dBi	6dBi	4dBi	4dBi	6dBi
	Elements 1 -4: 4.9- 6.0GHz	5dBi	6dBi	9dBi	5dBi	6dBi	9dBi
Typical VSWR*	<2:1						
Typical Isolation*	>12dB						
Pattern	Omni-directional						
Nominal Impedance	50Ω						
Max Input Power (W)	10						
GPS/GNSS Data - Element 5							
Frequency Range			1562-1612MHz				
LNA Gain			26dB				
Polarisation			Right Hand Circular				
Operating Voltage			3-5VDC (Fed via Coax)				
Current			Typical <20mA				
Mechanical Data							
	Diameter	115 (4.52")					
	Height	30 (1.18")					
Operating Temp	-30° / +70°C (-22° / 158°F)						
Material	UV Stable ASA Plastic (Black) Geloy PC/ASA (White)						
Colour	Black or White (Add 'W' to part number for White i.e. LPM2W-24-58-5RPSP)						
Typical Weight	175g	200g	225g	200g	225g	250g	
Mounting Data							
Fixing	Panel Mount - 18mm (3/4")						
Cable Data							
Elements 1 - 4: WiFi	Cable Type	CS32					
	Diameter	5mm (0.2")					
	Length	5m (17')					
	Termination	4x Rev Pol SMA Plugs					
Element 5: GPS/GNSS	Cable Type			RG174			
	Diameter			2.8mm (0.1")			
	Length			5m (17')			
	Termination			SMA Plug			

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

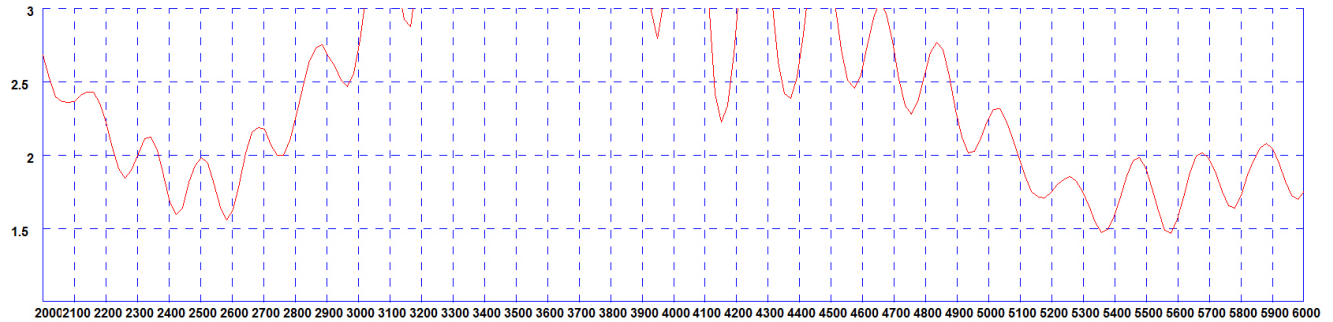
* Typical Isolation and VSWR stated as measured with 0.5m (1.5') of cable

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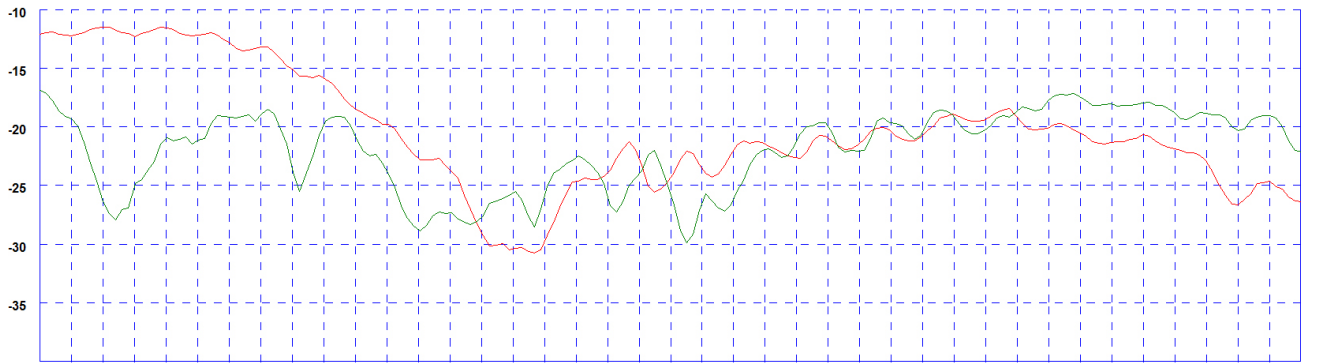
Electrical Data

Typical VSWR - Elements 1-[3]4*



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

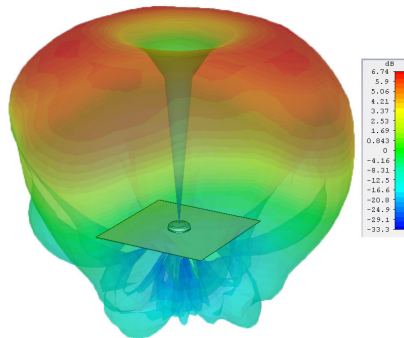
Typical Isolation - Elements 1-[3]4*



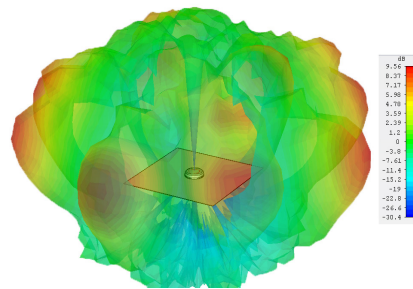
*Isolation measured with 0.5m (1.5') of CS32 cable Red Plot = Adjacent Elements Green Plot =Opposite Elements

Pattern Data

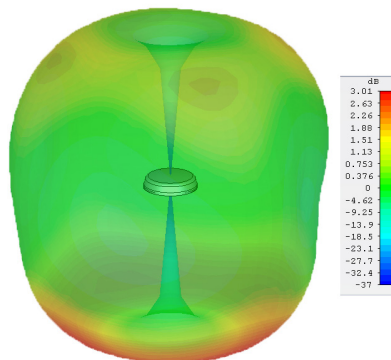
Typical 3D Pattern CM4 Ground Plane (2450MHz)



Typical 3D Pattern CM4 Ground Plane (5400MHz)



Typical 3D Pattern CM4 Free Space (2450MHz)



Typical 3D Pattern CM4 Free Space (5400MHz)

