

Multifunction Magnetic MiMo Antenna

L[G]AMM-7-27-24-58



- Low Profile Design
- MiMo 5G/4G/3G/2G + Single or 2x2 MiMo 2.4/ 5GHz
- Optional GPS/GNSS
- Magnetic Mounting

The L[G]AMM has a compact housing that contains 2x2 MiMo antenna function for 5G/4G/3G/2G and either single or 2x2 MiMo antenna function for 2.4/5GHz.

The LGAMM version also includes an active antenna for GPS/GLONASS/Galileo/BeiDou with 26dB gain LNA.

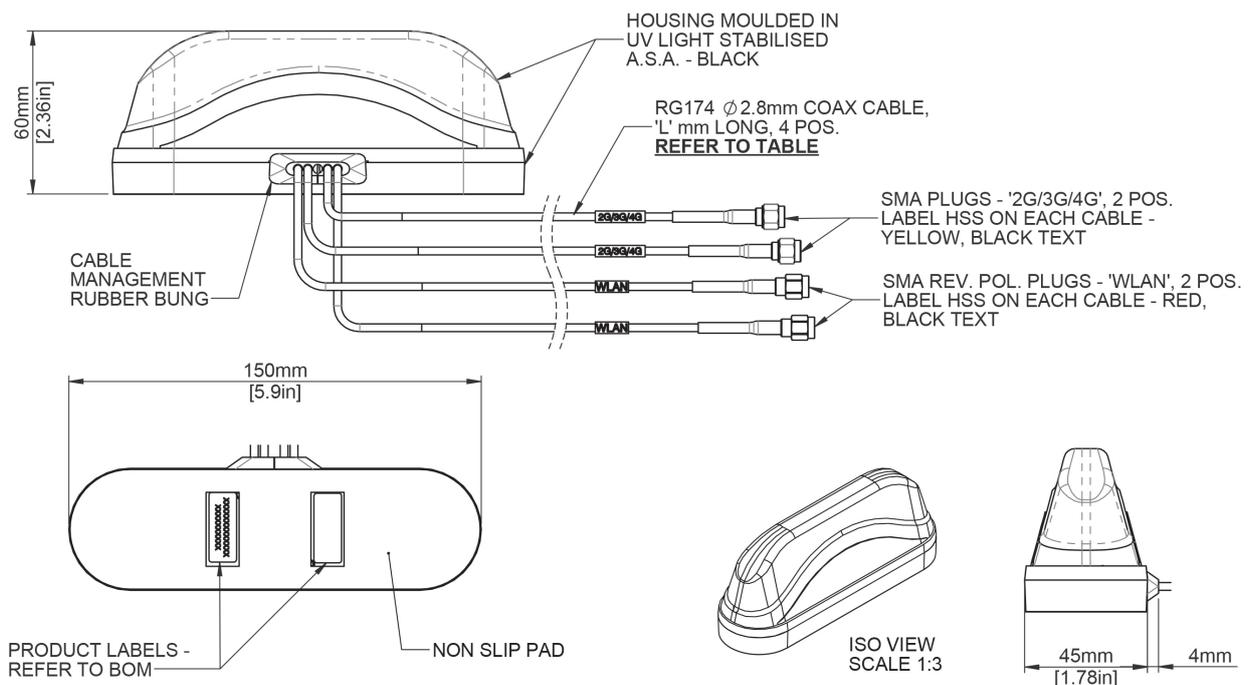
The antenna is designed to be mounted magnetically. This antenna range is ideal for vending machines, payment terminals and other M2M or IoT applications where installation without drilling a hole is desired.



Technical Drawing

LPAMM-7-27-24-58 shown

OPERATING FREQUENCIES:
2G/3G/4G: 698 - 960 / 1710 - 2700 MHz
WIFI: 2400 - 2485 / 4900 - 6000 MHz



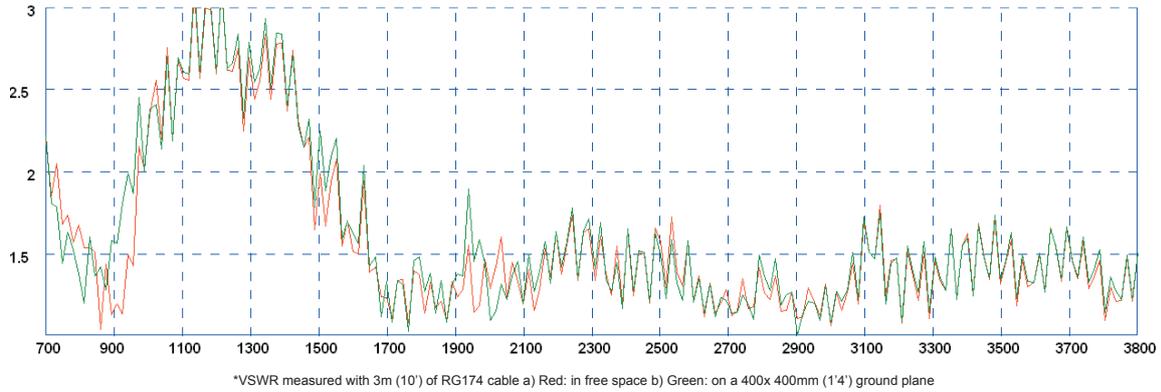
Product Data

Part No.		LPAMM-7-27-24-58	LPAMM-7-27-S24-58	LGAMM-7-27-24-58	LGAMM-7-27-S24-58
Electrical Data					
Frequency Range (MHz)	Element 1 (G Version)	-	-	1562-1612	
	Elements 2 & 3	698-960, 1710-2170, 2500-3800			
	Elements 4 & 5	2300-2500 & 4900-6000			
Operational Bands	Elements 1 (G)	-	-	GPS/GNSS/Galileo/BeiDou	
	Elements 2 & 3	5G/4G/3G/2G			
	Elements 4 & 5	2x cell			
	Elements 4 & 5	2.4 / 5.0GHz WiFi			
Peak gain: Isotropic*	Elements 2 & 3	2dBi (698-960MHz) 5dBi (1710-3800MHz)			
	Elements 4 & 5	4dBi (2.4GHz), 6dBi (5.0GHz)			
Isolation (with 5m (16') of)	Cellular	> 12dB			
	WiFi	> 20dB			
Typical Efficiency*	Elements 2 & 3	> 50%			
Correlation Co-efficient	Elements 2 & 3	< 0.2			
Polarisation	Vertical				
Pattern	Omni-directional				
Impedance	50Ω				
Max Input Power (W)	25W				
GPS/GNSS Data					
Frequency Range (MHz)	1562-1612				
VSWR	<2:1 ± 4MHz				
Gain: LNA	26dB				
Polarisation	Right Hand Circular				
Operating Voltage	3-5V DC (fed via coax)				
Current	Typical <20mA				
Mechanical Data					
Dimensions (mm)	Total Height	60 (2.36")			
	Length	150 (5.9")			
	Width	44 (1.47")			
Operating Temp (°C)	-40° / +80°C (-40° / 176°F)				
Material	ASA				
Colour	Black				
Mounting Data					
Fixing	Magnetic mount				
Cable Data					
Cable Type - All Feeds	RG174				
Dimensions (mm)	Diameter	2.8 (0.11")			
	Length	3000 (10')			
Termination	GPS/GNSS	SMA Plug		SMA Plug	
	2 x Cell	2 x SMA Plug			
WiFi	2 x SMA Rev Pol Plug	1 x SMA Rev Pol Plug	2 x SMA Rev Pol Plug	1 x SMA Rev Pol Plug	

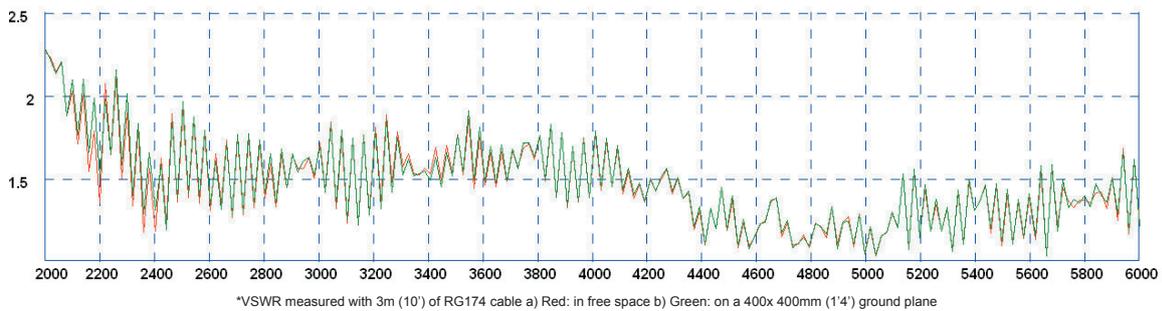
* without cable loss

Electrical Data - Cell

Typical VSWR - 4G/3G/2G Elements 2&3*

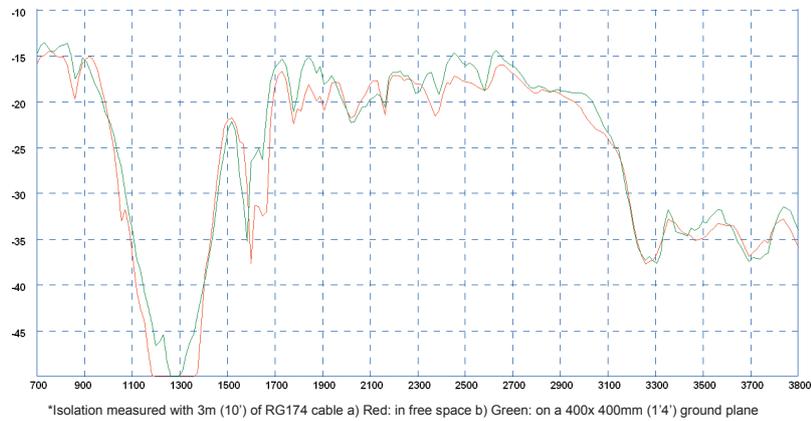


Typical VSWR - WiFi Elements 4&5*

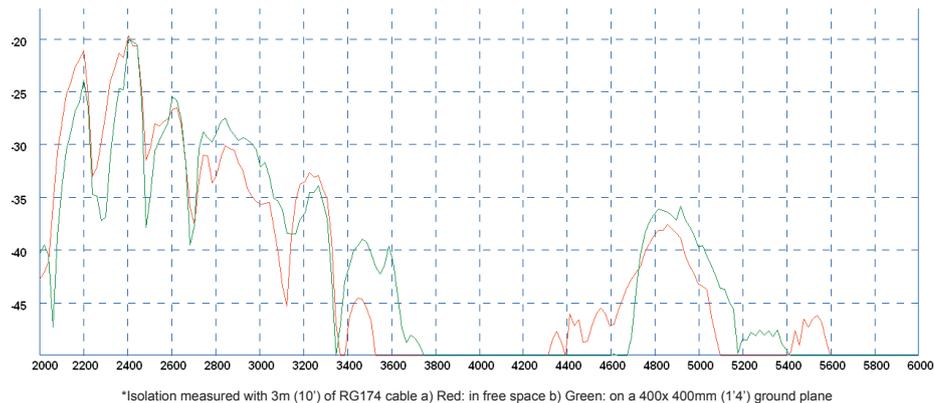


Isolation

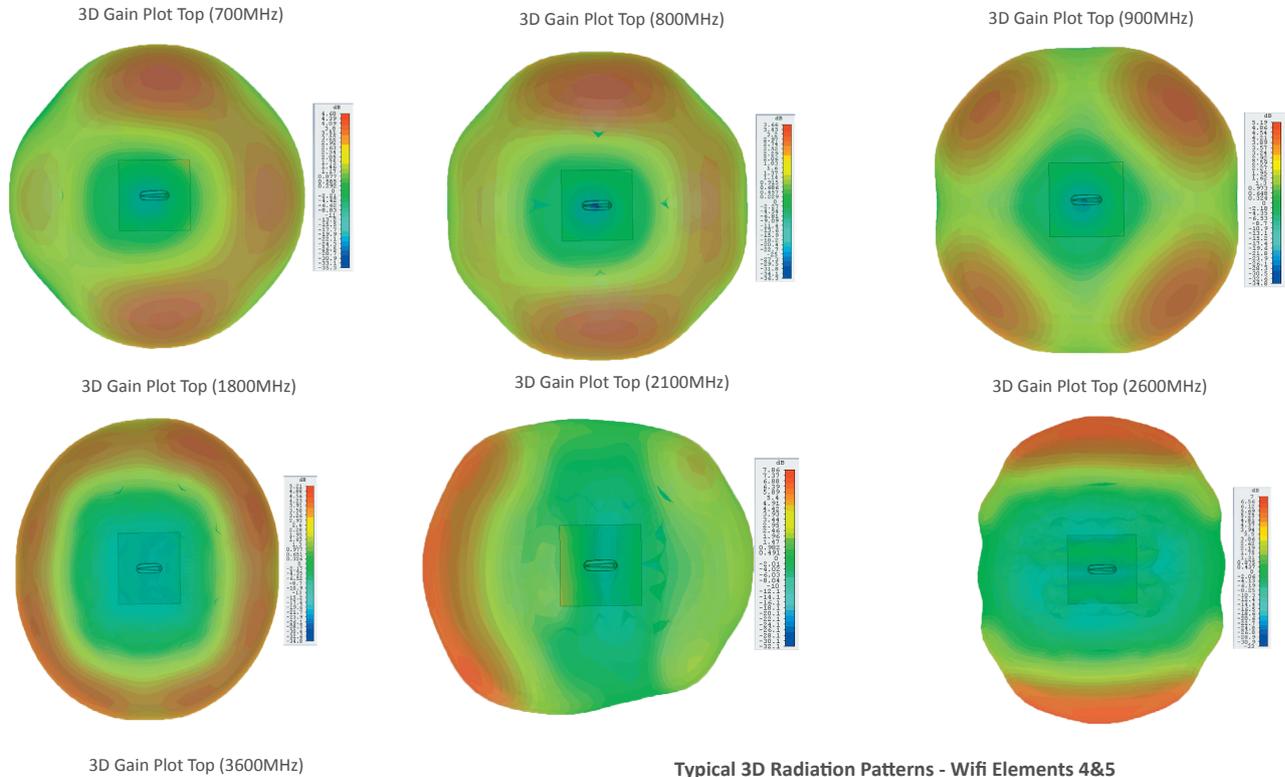
Typical Isolation - Cellular Elements 2&3*



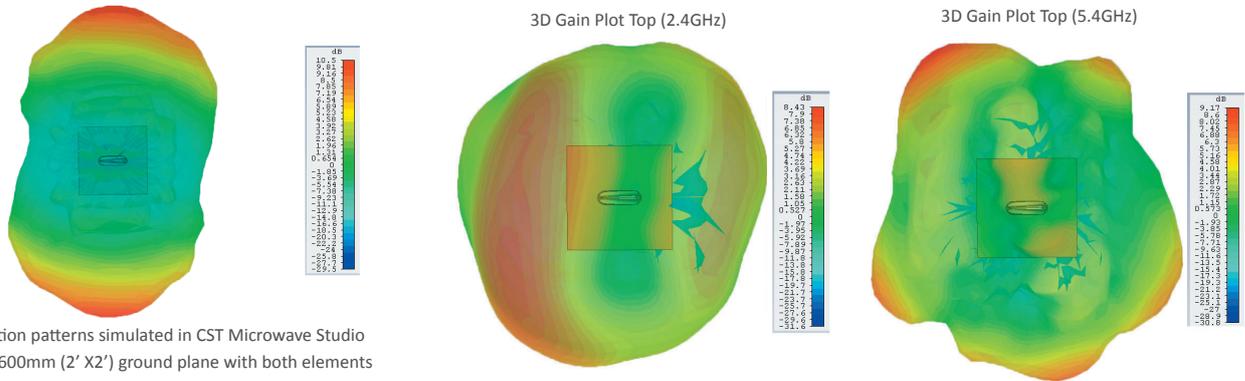
Typical Isolation - WiFi Elements 4&5*



Typical 3D Radiation Patterns - Cell / LTE Elements 2&3



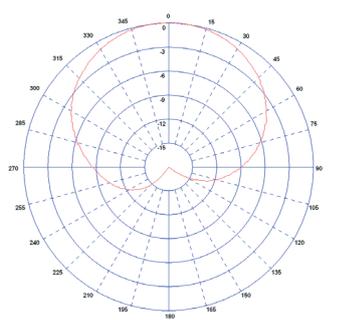
Typical 3D Radiation Patterns - Wifi Elements 4&5



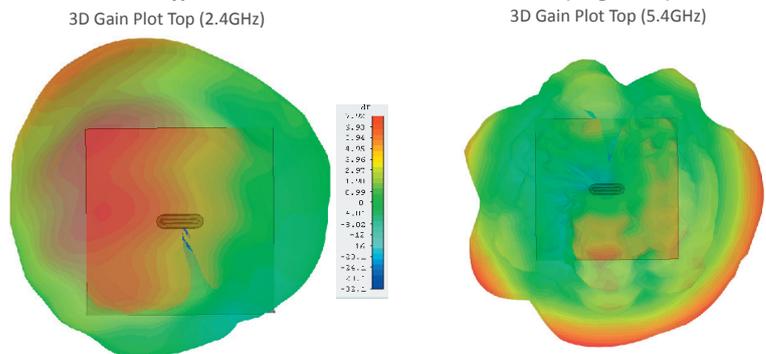
*3D radiation patterns simulated in CST Microwave Studio on a 600x600mm (2' X2') ground plane with both elements fed together.

Typical Radiation Patterns - GPS/GNSS Element 1

Element 3: Typical E Plane Pattern



Typical 3D Radiation Patterns - Wifi Elements (Single Wifi)



*3D radiation patterns simulated in CST Microwave Studio on a 600x600mm (2' X2') ground plane with a single element feed.