MiMo 4G/5G Dome Combination Antenna Range PANORAMA PANTENNAS



L[G]M[X]M[X]-6-60[-24-58]



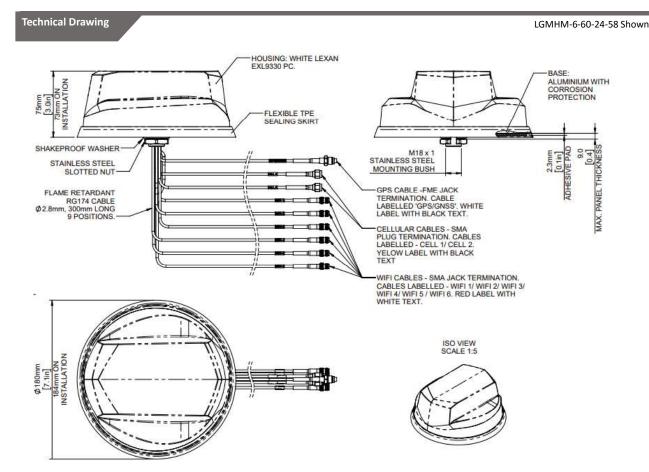
Low Profile 2x2 4G/5G MiMo Up to 6 x 6 MiMo Dual Band WiFi Optional GPS/GNSS Active Antenna 26dB LNA

The L[G]M[X]M[X]-6-60[-24-58] range has been designed to provide 2x2 4G/5G MiMo performance from 617-960/1710-6000MHz in a robust low profile package. The flexible platform allows the main elements to be combined with a number of other functions including GPS/GNSS and up to 6x6 MiMo WiFi

The antenna is designed to be panel mounted and can be fitted on a conductive or non- conductive panel. Supplied with integrated flame retardant RG174 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 supporting GPS, Glonass, Galileo and Compass with 26dB LNA gain. This GPS module features advanced filtering for LTE B13/14 designed to minimise potential in band

The antenna is available with a black or white radome which meets IK10 for vandal resistance and IP69K for ingress protection.





Frogmore, London, SW18 1HF, United Kingdom T: +44 (0)20 8877 4444 | F: +44 (0)20 8877 4477 E: sales@panorama-antennas.com W: www.panorama-antennas.com



MiMo 4G/5G Dome Combination Antenna Range PANORAMA PANTENNAS

L[G]M[X]M[X]-6-60[-24-58]

Part No.								
				LGMHM-6-60-24-58	LGMHMB-6-60-24-58	LGMQM-6-60-24-58	LGMQMB-6-60-24-58	
Electrical Data								
5 0 (2411)		4G/5G Elements		2x 617-960 / 1710-6000				
Frequency Range (N	1Hz)	WiFi Elements		6x 2.4/4.9-6GHz 4x 2.4/4.9-6GHz				
			617-960MHz	5				
		4G/5G Elements	1710-3800MHz	9				
Peak Gain: Isotropic : All Elements Fed	: All		4900-6000MHz	10				
		WiFi Elements 4G/5G Elements	2.4GHz					
			4.9-6.0GHz	8 10				
			4.5 0.00112	>70%				
Typical Efficiency		WiFi Elements		>70%				
		4G/5G Elements		>80% >12dB				
Isolation		Wifi Elements		>20dB				
		4G/5G Elements		<0.1				
Correlation Co-effici	ent	WiFi Elements			<0.	1		
Nominal Impedance	!				50	Ω		
GPS/GNSS Data								
Frequency Range (M	1Hz)				1562-	1612		
VSWR		<2.0:1 ± 4MHz -						
Gain: LNA					260	IB		
Out of band rejectio	n				>40dB (@ > +,	/- 100MHz f)		
Typical Noise Figure					-2.7	dB		
Notch Filter rejection	n @787MHz				23di	3m		
Operating Voltage					3 - 5\	' DC		
Typcal Current (mA)					15	5		
Mechanical Data								
Dimensions (mm)	Height			75 (3")				
. ,	Diameter			180 (7.1")				
Operating Temp					-40°/ +80°C (-4	10° / +176°F)		
Colour				White	Black	White	Black	
Ingress Protection					IP69	9K		
Mounting Data								
Mounting type				Panel mount				
Max panel thickness (mm)		7 (0.27")						
Mounting hole (mm)				19 (3,	/4")		
Cable Data								
All Cables [Туре			RG174 -FR (UN ECE118.01 Compliant)				
	Diameter (mm)			2.8 (0.1")				
	Length (m)				0.3 (1')		
Terminations						4 >		
4G/5G					SMA			
WiFi					SMA			
GPS/GNSS					FME	(f)		



MiMo 4G/5G Dome Combination Antenna Range



L[G]M[X]M[X]-6-60[-24-58]

Down No.					_			
Part No.				LGMTM-6-60-24-58	LGMTMB-6-60-24-58	LGMDM-6-60-24-58	LGMDMB-6-60-24-58	
Electrical Data				EGIVITIVI-0-00-24-38	EGW11WIB-0-00-24-38	EGIVIDIVI-0-00-24-38	EGIVIDIVIB-0-00-24-38	
Frequency Range (MHz)		4G/5G Elements		2x 617-960 / 1710-6000				
		WiFi Elements		3x 2.4/4.9-6GHz 2x 2.4/4.9-6GHz				
Peak Gain: Isotropic : All Elements Fed			67-960MHz	5				
		4G/5G Elements	1710-3800MHz	9				
	:: All							
			4900-6000MHz	10				
		WiFi Elements	2.4GHz	8				
			4.9-6.0GHz	10				
Typical Efficiency		4G/5G Elements		>70%				
		WiFi Elements		>80%				
Isolation		4G/5G Elements		>12dB >20dB				
	Wifi Elements 4G/5G Elemen			<0.1				
Correlation Co-effici	ient	WiFi Elements			<0			
Nominal Impedance	<u>,</u>	Will Elements			50			
GPS/GNSS Data								
Frequency Range (N	ЛHz)				1562-	1612		
VSWR	•				<2.0:1 ±	: 4MHz		
Gain: LNA					260	dB		
Out of band rejection	on				>40dB (@ > +	/- 100MHz f)		
Typical Noise Figure	:				-2.7			
Notch Filter rejectio	tch Filter rejection @787MHz			23dBm				
Operating Voltage				3 - 5V DC				
Typcal Current (mA)					15	5		
Mechanical Data								
Dimensions	Height			75 (3")				
	Diameter			180 (7.1")				
Operating Temp					-40°/ +80°C (-4	40°/+176°F)		
Colour				White	Black	White	Black	
Ingress Protection					IP6	9K		
Mounting Data								
Mounting type				Panel mount				
Max panel thickness (mm)		7 (0.27")						
Mounting hole (mm	1)				19 (3	/4")		
Cable Data	_							
All Cables	Type			RG174 -FR (UN ECE118.01 Compliant)				
	Diameter (mm)			2.8 (0.1")				
+ · · · ·	Length (m)				0.3 ((1')		
Terminations						()		
4G/5G					SMA			
WiFi					SMA			
GPS/GNSS					FME	: (†)		



MiMo 4G/5G Dome Combination Antenna Range PANORAMA PANTENNAS

L[G]M[X]M[X]-6-60[-24-58]

David Nic							
Part No.			LCMAN C CC	LCMAND 5 50	LDMANA C CO	LDMAAD C CO	
Flootsian Data			LGMM-6-60	LGMMB-6-60	LPMM-6-60	LPMMB-6-60	
Electrical Data	1Hz) 4G/5G Elements			2, 617, 060 /	1710 6000		
Frequency Range (M	4G/3G Elements	C17 OCOMUL		2x 617-960 /			
Peak Gain: Isotropic : A Elements Fed	·· ΔII	617-960MHz		5			
	4G/5G Elements	1710-3800MHz		9			
		4900-6000MHz		10			
Typical Efficiency	4G/5G Elements		>70%				
Isolation	4G/5G Elements		>12dB				
Correlation Co-effici	ent 4G/5G Elements		< 0.1				
Nominal Impedance	2		50Ω				
GPS/GNSS Data							
Frequency Range (MHz)			1562-	-1612		-	
VSWR			<2.0:1:	± 4MHz		-	
Gain: LNA			26	dB		-	
Out of band rejection		>40dB (@ > +/- 100MHz f) -					
Typical Noise Figure			-2.7	7dB		-	
Notch Filter rejection @787MHz			23dBm -			-	
Operating Voltage			3 - 5V DC -			-	
Typcal Current (mA)			15 -			-	
Mechanical Data							
Dimensions	Height			75 (3	3")		
	Diameter	180 (7.1")					
Operating Temp				-40°/ +80°C (-40° / +176°F)			
Colour			White	Black	White	Black	
Ingress Protection				IP69	Ж		
Mounting Data							
Mounting type		Panel mount					
Max panel thickness (mm)		7 (0.27")					
Mounting hole (mm)		19 (3/4")					
Cable Data							
All Cables	Туре	RG174 -FR (UN ECE118.01 Compliant)					
	Diameter (mm)	2.8 (0.1")					
	Length (m)			0.3 (1')		
Terminations							
4G/5G				SMA	(m)		
GPS/GNSS FME (f)				-			

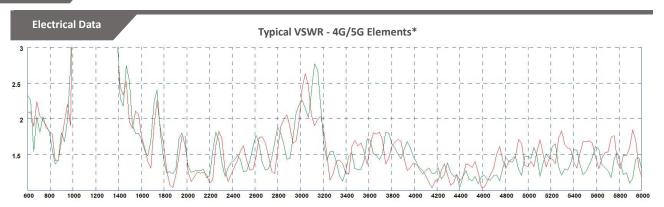
^{*} Typical Isolation and VSWR stated as measured with 0.5m (1.5') of cable

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

MiMo 4G/5G Dome Combination Antenna Range

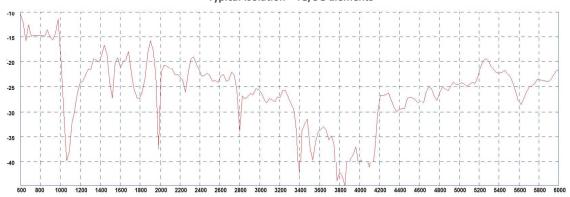


L[G]M[X]M[X]-6-60[-24-58]



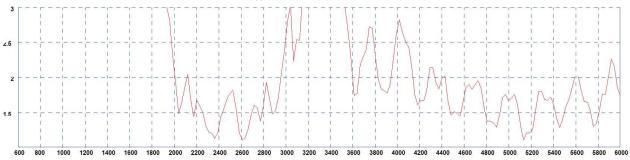
^{*} measured with 0.5m (1.5') of RG174 cable on a 600x600mm (2'x2') groundplane

Typical Isolation - 4G/5G Elements*



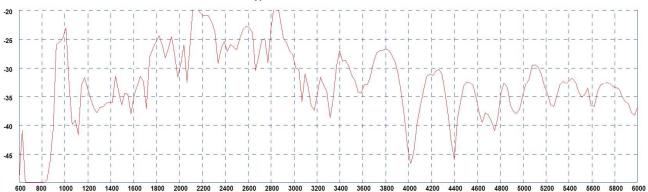
* measured with 0.5m (1.5') of RG174 cable on a 600x600mm (2'x2') groundplane

Typical VSWR - WiFi Elements*



* measured with 0.5m (1.5') of RG174 cable on a 600x600mm (2'x2') groundplane

Typical Isolation - WiFi Elements*

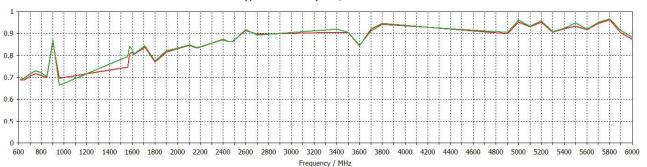


^{*} measured with 0.5m (1.5') of RG174 cable on a 600x600mm (2'x2') groundplane

MiMo 4G/5G Dome Combination Antenna Range PANORAMA ANTENNAS

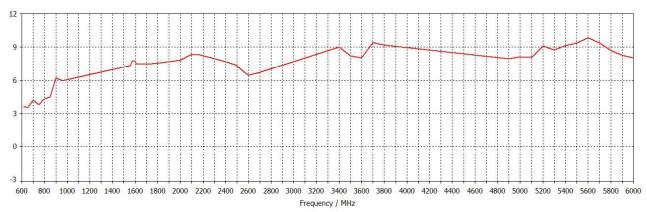
L[G]M[X]M[X]-6-60[-24-58]

Typical Efficiency- 4G/5G Elements*



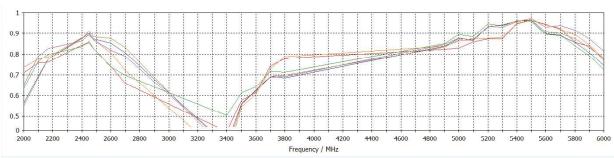
^{*} Efficiency modelled with CST Microwave Studio and ignores cable losses

Typical Peak Gain - 4G/5G Elements*



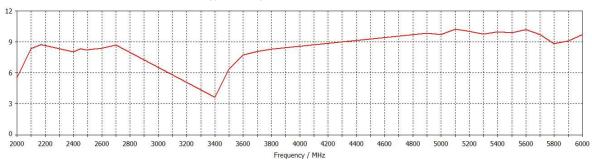
^{*}Swept peak gain modelled with all elements fed in CST Microwave Studio on a 600x600mm (2'x2') ground plane excluding cable loss

Typical Efficiency - WiFi Elements*



^{*} Efficiency modelled with CST Microwave Studio and ignores cable losses

Typical Swept Peak Gain - WiFi Elements*



^{*}Swept peak gain modelled with all elements fed in CST Microwave Studio on a 600x600mm (2'x2') ground plane excluding cable loss





W: www.panorama-antennas.com

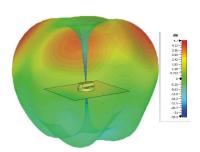
MiMo 4G/5G Dome Combination Antenna Range PANORAMA ANTENNAS



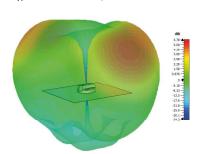
L[G]M[X]M[X]-6-60[-24-58]

4G/5G Pattern Data

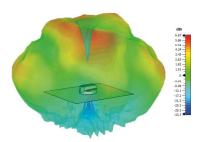
Typical 3D Pattern - 4G/5G Elements 617MHz



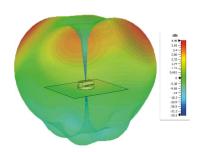
Typical 3D Pattern - 4G/5G Elements 900MHz



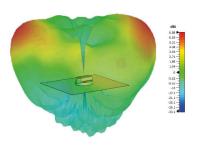
Typical 3D Pattern - 4G/5G Elements 2600MHz



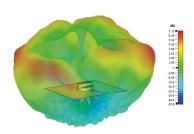
TTypical 3D Pattern - 4G/5G Elements 700MHz



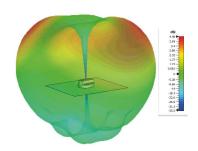
Typical 3D Pattern - 4G/5G Elements 1800MHz



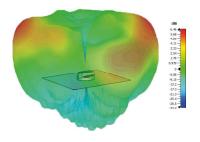
Typical 3D Pattern - 4G/5G Elements 3600MHz



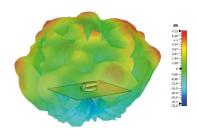
Typical 3D Pattern - 4G/5G Elements 800MHz



Typical 3D Pattern -4G/5G Elements 2000MHz

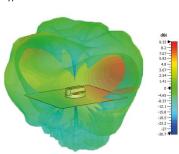


Typical 3D Pattern - 4G/5G Elements 5400MHz

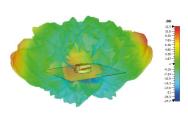


WiFi Pattern Data

Typical 3D Pattern - WiFi Elements 2400MHz



Typical 3D Pattern - WiFi Elements 5400MHz



^{*}Patterns are LGMHM-6-60-24-58 modelled in CST Microwave Studio with all elements of each type fed.

Frogmore, London, SW18 1HF, United Kingdom T: +44 (0)20 8877 4444 | F: +44 (0)20 8877 4477 E: sales@panorama-antennas.com W: www.panorama-antennas.com

