

- Low Profile 2x2 4G/5G MiMo
- Up to 6x6 MiMo Dual Band WiFi 6E
- Optional GPS/GNSS Active Antenna 26dB LNA

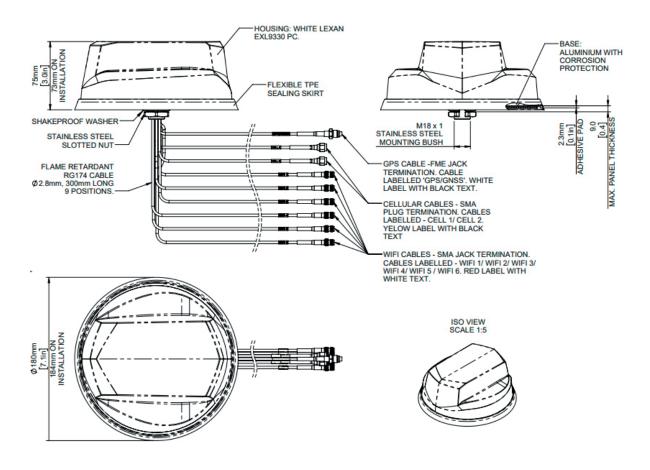
The L[G]M[X]M[X]-6-60[-24-58] range has been designed to provide 2x2 4G/5G MiMo performance from 617-960/1710-6000MHz in a robust low profile package. The flexible platform allows the main elements to be combined with a number of other functions including GPS/GNSS and up to 6x6 MiMo WiFi 2.4/4.9-7.2GHz.

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 UN ECE R118 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 interference.

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

Technical Drawing LGMHM-6-60-24-58 Shown



MiMo 4G/5G Dome Combination Antenna Range L[G]M[X]M[X]-6-60[-24-58]



Product Data

Part No.									
				LGMHM-6-60-24-58	LGMHMB-6-60-24-58	LGMQM-6-60-24-58	LGMQMB-6-60-24-58		
Electrical Data	a								
Frequency Ra	requency Range WHz) WiFi Elements 4G/5G Elements 4G/5G Elements 4G/5G Elements WiFi Ele			2x 617-960	1710-6000				
(MHz)	١	WiFi Elements		6x 2.4/4	9-7.2GHz	4x 2.4/4	I.9-7.2GHz		
			617-960MHz	5					
	4	4G/5G Elements	1710-3800MHz	9					
			4900-6000MHz		1	0			
	reu	WiFi Elements	2.4GHz	8					
	١		4.9-7.2GHz	10					
	4	4G/5G Elements		>70%					
Typical Efficiend	ncy	су		>80%					
Isolation				>20dB					
Correlation	4	4G/5G Elements		< 0.1					
Co-efficient	١	WiFi Elements			<0	.1			
Nominal Impe	dance				50	Ω			
GPS/GNSS D	Data								
Frequency Ra	inge (MHz)			1562-1	612			
VSWR				<2.0:1 ± 4MHz -					
Gain: LNA				26dB					
Out of band re	ejection			>40dB (@ > +/- 100MHz f)					
Typical Noise	Figure			-2.7dB					
Notch Filter re	ejection @7	787MHz		23dBm					
Operating Volt	tage			3 - 5V DC					
Typcal Curren	it (mA)			15					
Mechanical Da	ata								
Dimensions	Height	Height		75 (3")					
(mm)	Diameter		180 (7.1")						
Operating Ten	np				-40°/ +80°C (-	40° / +176°F)			
Colour				White	Black	White	Black		
Ingress Protec					IP6	9K			
Mounting Data	a								
Mounting type	;			Panel mount					
	Max panel thickness (mm)			7 (0.27")					
Mounting hole	e (mm)				19 (3	3/4")			
Cable Data									
Туре			RG174 -FR (UN ECE R118 Compliant)						
All Cables	Diameter (mm)		2.8 (0.1")						
	Length	Length (m)		0.3 (1')					
Terminations									
4G/5G					SMA				
	WiFi		SMA (f)						
GPS/GNSS					FME	(f)			

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Product Data

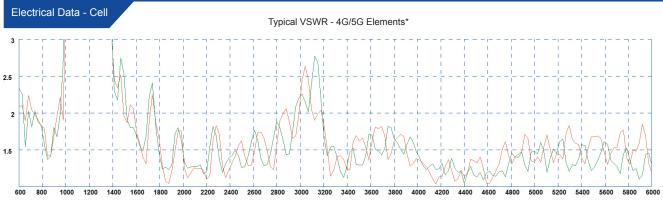
Part No.									
				LGMTM-6-60-24-58	LGMTMB-6-60-24-58	LGMDM-6-60-24-58	LGMDMB-6-60-24-58		
Electrical Dat	ta								
Frequency R	ange	nge 4G/5G Elements		2x 617-960 / 1710-6000					
(MHz)		WiFi Elements		3x 2.4/4.	9-7.2GHz	2x 2.4/4	.9-7.2GHz		
			617MHz-960MHz	5					
Peak Gain: Isotr : All Elements Fe		4G/5G Elements	1710-3800MHz	9					
		Liomonto	4900-6000MHz		10	0			
	3100		2.4GHz		8	.			
		WiFi Elements	4.9-7.2GHz	10					
		4G/5G Elements	•	>70%					
Typical Efficie	ency	WiFi Elements			>80	0%			
		4G/5G Elements	;		>12	dB			
Isolation		Wifi Elements		>20dB					
Correlation C	Co-	4G/5G Elements	3	< 0.1					
efficient		WiFi Elements			<0	.1			
Nominal Impe	edance				50	Ω			
GPS/GNSS	Data								
Frequency R	ange (MH	lz)		1562-1612					
VSWR				<2.0:1 ± 4MHz					
Gain: LNA				26dB					
Out of band r	rejection			>40dB (@ > +/- 100MHz f)					
Typical Noise	Figure			-2.7dB					
Notch Filter re	ejection @	0787MHz		23dBm					
Operating Vo				3 - 5V DC					
Typcal Curre				15					
Mechanical D						- II			
Dimensions	Height			75 (3")					
O T.	Diameter			180 (7.1") -40°/ +80°C (-40° / +176°F)					
Operating Ter	mp			\A/l=:4=	,	,	Disale		
Colour Ingress Prote	oction			White	Black IP6	White	Black		
Mounting Dat					IFO	910			
Mounting type					Panel	mount			
Max panel thi		mm)		Panel mount 7 (0.27")					
Mounting hole		11111)		7 (0.27) 19 (3/4")					
Cable Data	e (IIIIII)				19 (3	5/ +)			
- Oabic Data	Туре	Type		RG174 -FR (UN ECE R118 Compliant)					
All Cables	Diameter (mm)			2.8 (0.1")					
, ai Gabies	Length (m)			0.3 (1')					
Terminations		(/			0.0				
4G/5G					SMA	. (m)			
WiFi			SMA (f)						
GPS/GNSS				FME (f)					

MiMo 4G/5G Dome Combination Antenna Range L[G]M[X]M[X]-6-60[-24-58]

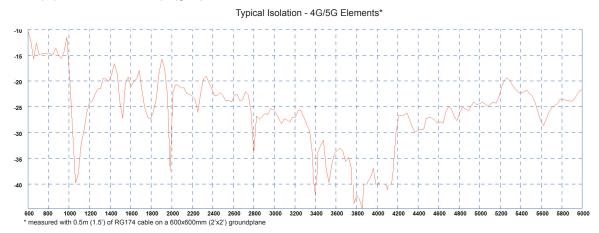


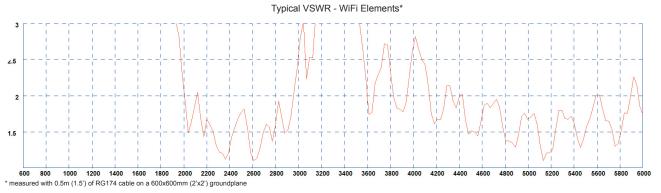
	Data

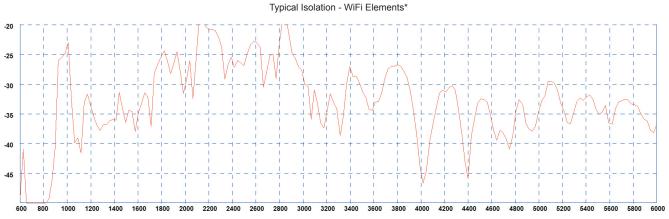
Part No.							
			LGMM-6-60	LGMMB-6-60	LPMM-6-60	LPMMB-6-60	
Electrical Data							
Frequency Range	e (MHz) 4G/5G Eler			2x 617-960 /			
		617-960MHz	5				
Peak Gain: Isotro Elements Fed	pic : All 4G/5G Eler	nents 1710-3800MHz	9				
		4900-6000MHz	10				
Typical Efficiency	pical Efficiency 4G/5G Elements		>70%				
Isolation	4G/5G Eler	nents		>12	dB		
Correlation Co-eff	ficient 4G/5G Eler	nents		< 0).1		
Nominal Impedan	ce			50	Ω		
GPS/GNSS Data							
Frequency Range	e (MHz)		1562	2-1612		-	
/SWR			<2.0:1 ± 4MHz -				
Gain: LNA			26dB -				
Out of band reject	tion		>40dB (@ > +/- 100MHz f)				
Гурісаl Noise Figi	ure		-2.7dB -				
Notch Filter rejection @787MHz			23dBm -				
Operating Voltage)		3 - 5V DC -				
Typcal Current (m	ıA)						
Mechanical Data							
Dimensions	Height			75 ((3")		
JIII CII SI OI I S	Diameter		180 (7.1")				
Operating Temp			-40°/ +80°C (-40° / +176°F)				
Colour			White	Black	White	Black	
Ingress Protection				IP6	9K		
Mounting Data							
Mounting type			Panel mount				
Max panel thickne	ess (mm)		7 (0.27")				
Mounting hole (m	m)		19 (3/4")				
Cable Data							
	Туре		RG174 -FR (UN ECE R118 Compliant)				
All Cables	Diameter (mm)		2.8 (0.1")				
	Length (m)			0.3	(1')		
Terminations							
4G/5G				SMA	(m)		
GPS/GNSS			FME (f)				



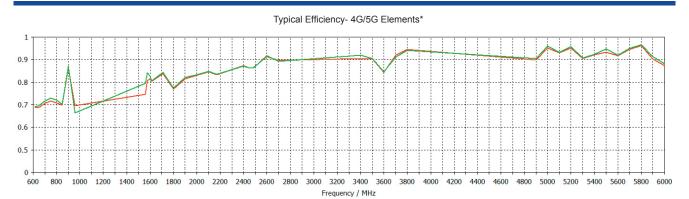






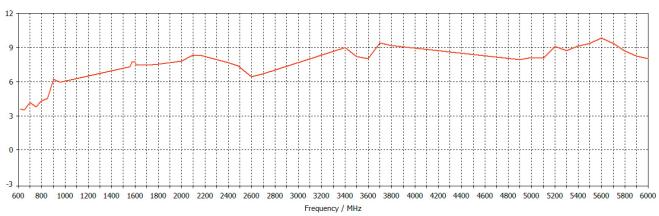


^{*} measured with 0.5m (1.5') of RG174 cable on a 600x600mm (2'x2') groundplane



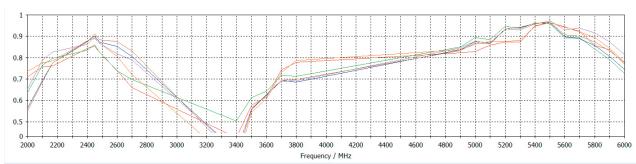
^{*} Efficiency modelled with CST Microwave Studio and ignores cable losses

Typical Peak Gain - 4G/5G Elements*

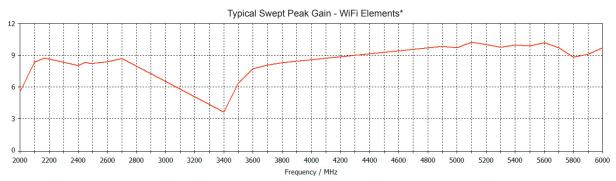


*Swept peak gain modelled with all elements fed in CST Microwave Studio on a 600x600mm (2'x2') ground plane excluding cable loss

Typical Efficiency - WiFi Elements*



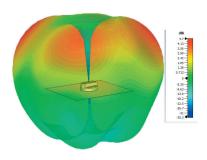
^{*} Efficiency modelled with CST Microwave Studio and ignores cable losses



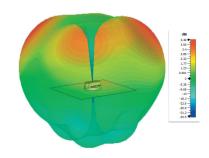
^{*}Swept peak gain modelled with all elements fed in CST Microwave Studio on a 600x600mm (2'x2') ground plane excluding cable loss

4G/5G Pattern Data

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

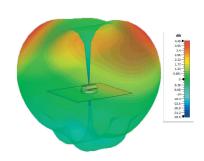


Typical 3D Pattern - 4G/5G Elements 900MHz



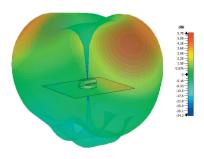
TTypical 3D Pattern - 4G/5G Elements 700MHz

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

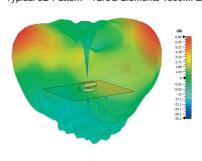


Typical 3D Pattern - 4G/5G Elements 800MHz

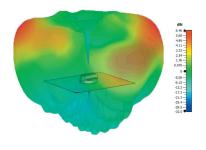
Typical 3D Pattern -4G/5G Elements 2000MHz



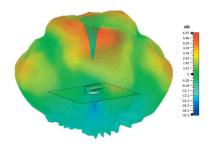
Typical 3D Pattern - 4G/5G Elements 2600MHz

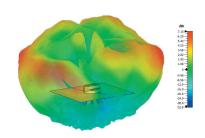


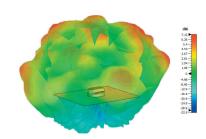
Typical 3D Pattern - 4G/5G Elements 3600MHz



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

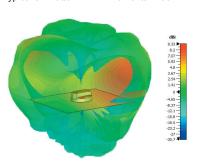




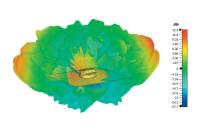


WiFi Pattern Data

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.