

# 4x4 MiMo 4G/5G Dome Antenna Kit

## LG-IN2444

### Low Profile 4x4 4G/5G MiMo LTE GPS/GNSS Active Antenna 26dB LNA



The LG-IN2444 range has been designed to provide 4x4 4G/5G MiMo performance from 617-960/1710-6000MHz combined with GPS/GNSS in a compact low profile housing.

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 antenna radome is available in black or white and meets IK10 for vandal resistance and IP69K for ingress protection.

The integrated GPS/GNSS module supports GPS, Glonass, Galileo, QZSS and Compass with 26dB LNA gain. This GPS module features advanced filtering for LTE B13/14 designed to minimise potential in band interference.

LG-IN2444 is supplied as a complete plug and play kit with integrated 5m (16') ultra-low loss TPE extension cables and SMA (m) connectors for 4G/5G and GPS.



**Certified IK10  
Impact Resistant**



**Certified IP69K  
Ingress Protected**



**Flame Retardant  
Halogen Free  
Radome -UL94-V0**

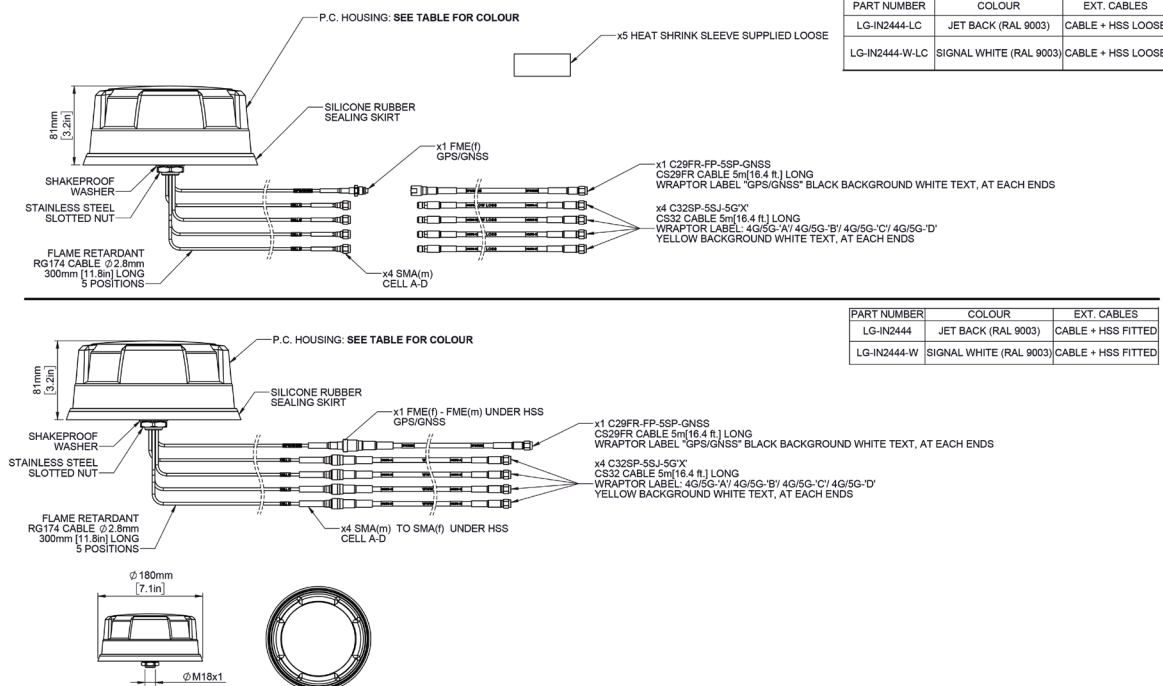


**UV, Ozone, High &  
Low Temperature  
Protected**



**Environmentally  
Compliant - Meets  
RoHS, REACH - PVC  
Free**

### Technical Drawing



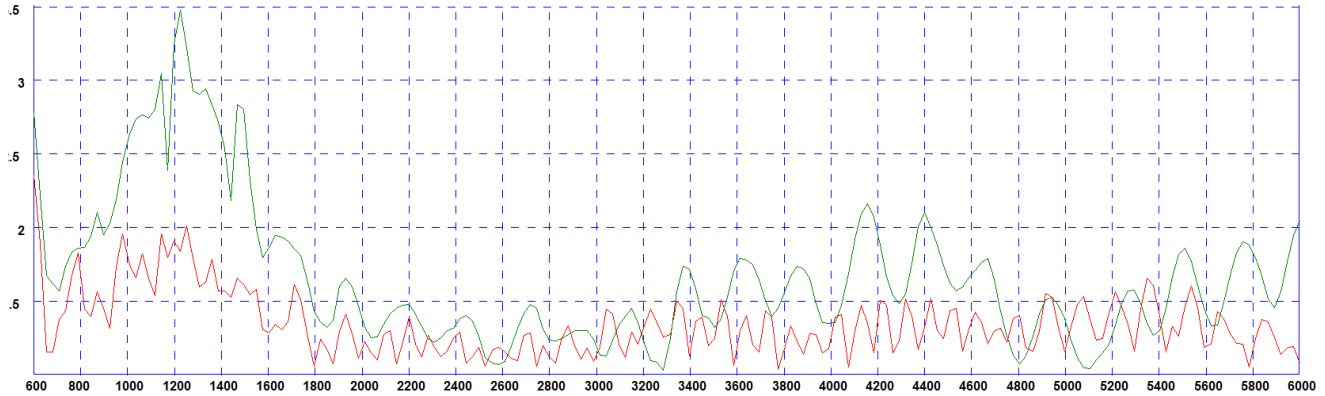
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Part No.		LG-IN2444-W	LG-IN2444-W-LC	LG-IN2444	LG-IN2444-LC
<b>Electrical Data</b>					
Frequency Range (MHz)	4G/5G Elements	4x 617-960 / 1710-6000			
		617-960MHz	4		
Peak Gain: Isotropic : (dBi)†	4G/5G Elements	1710-3800MHz	8		
		4900-6000MHz	9		
Typical Efficiency **	4G/5G Elements	617-960MHz	>50%		
		1710-3800MHz	>75%		
		4900-6000MHz	>85%		
Isolation ***	4G/5G Elements	>10dB			
Correlation Co-efficient	4G/5G Elements	< 0.2			
Nominal Impedance	50Ω				
<b>GPS/GNSS Data</b>					
Frequency Range (MHz)	1562-1612				
VSWR	<2.0:1 ± 4MHz				
Gain: LNA	26dB				
Out of band rejection	>40dB (@ > +/- 100MHz f)				
Typical Noise Figure	-2.7dB				
Notch Filter rejection @787MHz	24dB				
Operating Voltage	3 - 5V DC				
Typical Current (mA)	15				
<b>Mechanical Data</b>					
Dimensions (mm)	Height	80 (3.1")			
	Diameter	180 (7.1")			
Operating Temp	-40° / +80°C (-40° / +176°F)				
Colour	White			Black	
Ingress & Impact Protection	IK10 & IP69K				
<b>Mounting Data</b>					
Mounting type	Panel mount				
Max panel thickness (mm)	7 (0.27")				
Mounting hole (mm)	19 (3/4")				
<b>Extension Cable Data</b>		GPS Cable		All Other Cables	
All Cables	Type	FR CS29 (UN118.03 / EN45545-2 HL2 Compliant)		CS32 (UN118.03 / EN45545-2 Compliant)	
		Fitted	Loose	Fitted	Loose
	Diameter (mm)	5 (0.2")			
	Length (m)	5 (16')			
<b>Terminations</b>					
4G/5G	4x SMA (m)				
GPS/GNSS	1x SMA(m)				

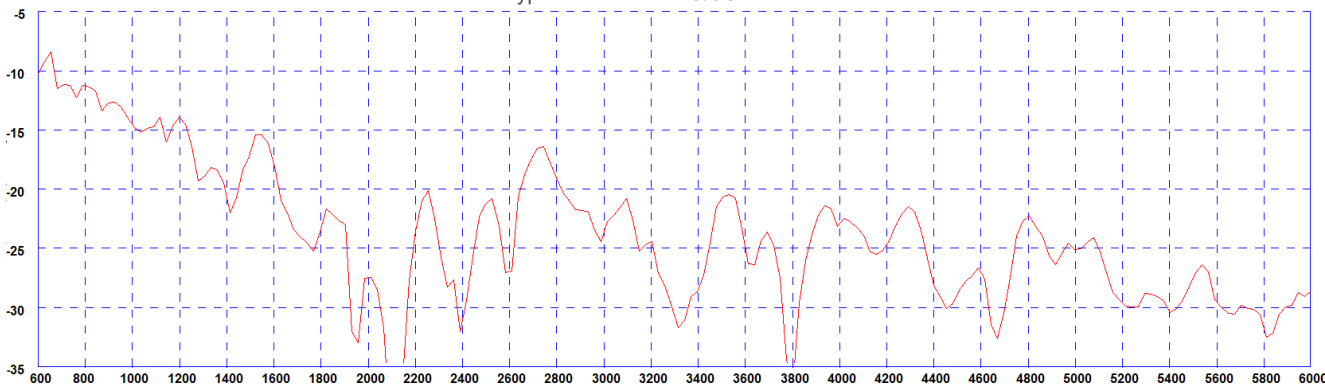
Electrical Data

Typical VSWR - 4G/5G Elements\*



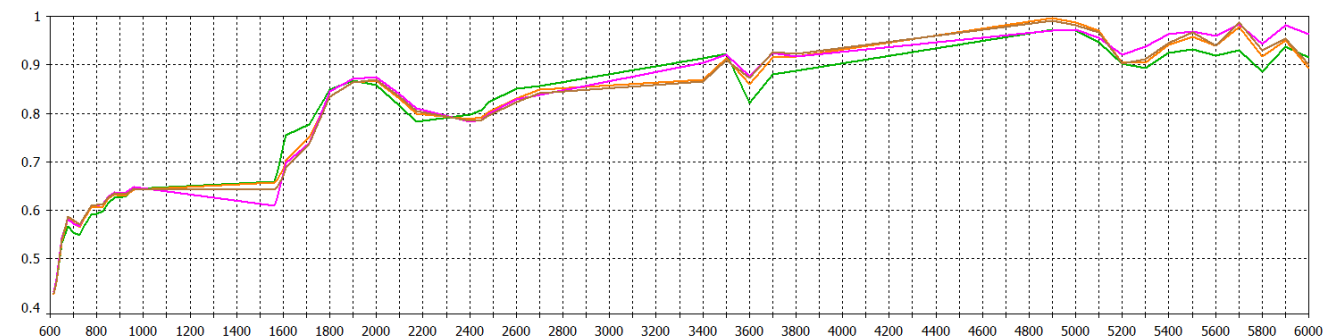
\* Green Trace measured with 0.5m (1.5') of RG174 cable Red Trace measured with 5m(17') of CS32 Cable both on a 600x600mm (2'x2') groundplane

Typical Isolation - 4G/5G Elements\*



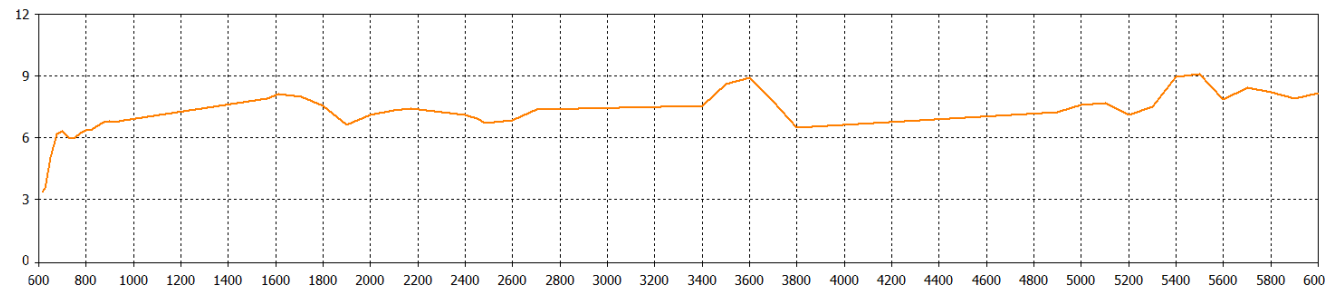
\* measured with 0.5m (1.5') of RG174 cable on a 600x600mm (2'x2') groundplane

Typical Efficiency- 4G/5G Elements\*



\* Efficiency modelled with CST Microwave Studio with antenna mounted on 600x600mm (2'x2') ground plane and ignores cable losses

Typical Peak Gain - 4G/5G Elements\*



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