Directional 2x2MiMo 4G/5G Antenna with GNSS

WMM2GG-6-60

2x2 MiMo High Gain Directional Antenna for 4G/5G

Frequency range 617-960/1710-6000MHz

Integrated High Performance GPS/GNSS Antenna Module

Suitable for wall or mast mounting

The WMM2GG-6-60 is a high gain directional 2x2 MiMo antenna for 4G and 5G networks. It incorporates two wideband element assemblies in a single housing and is designed to support fixed site client devices. It offers 6dBi peak gain for 617- 960MHz and 9dBi peak gain for 1710-6000MHz.

The antenna also includes an active, high performance GPS/GNSS antenna module with advanced filtering to give satellite acquisition resilience when used in LTE B13/14 and enables the user to have real time location of their asset.

The weather resistant housing is designed for wall or mast mounting with the supplied hardware.

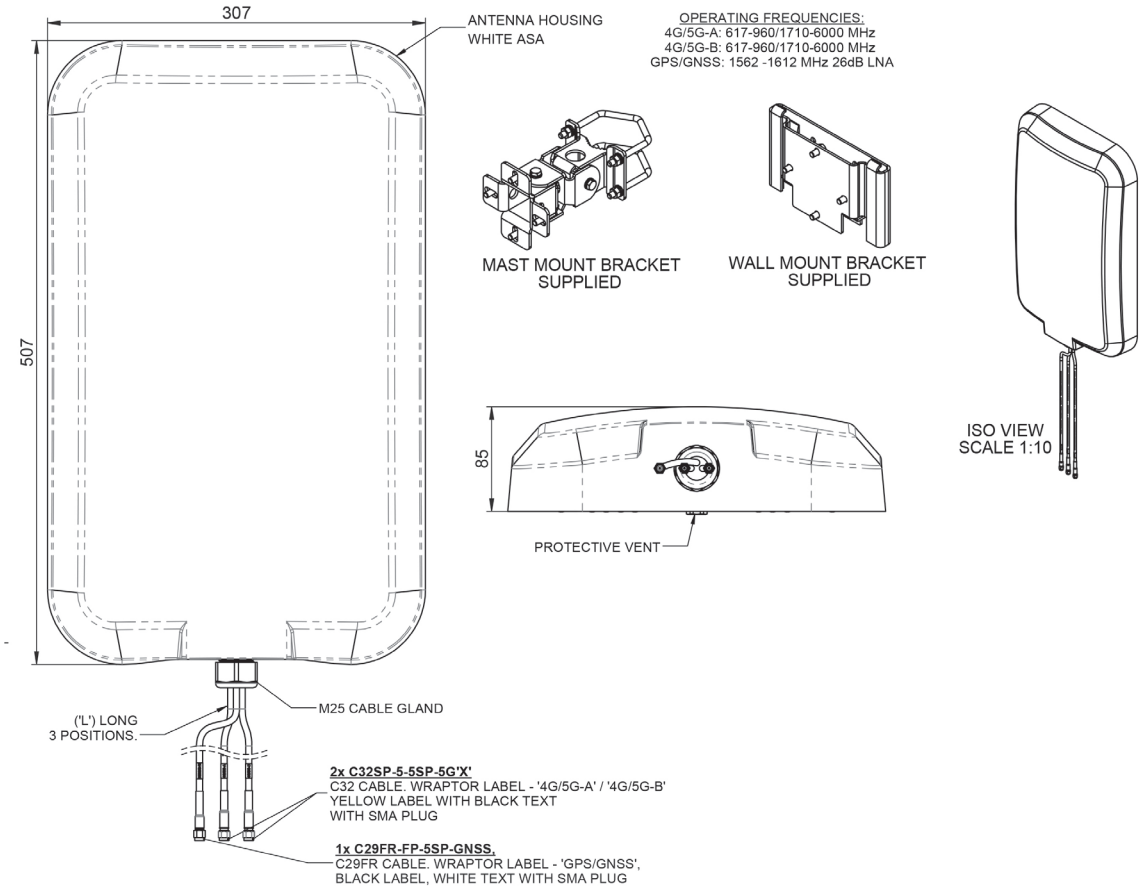
The standard WMM2GG-6-60-5SP version has 5m length ultra-low loss CS32 type coaxial cables which eliminates exposed connector joints and simplifies the installation process.

The WMM2GG-6-60-05NJ version has 50cm length cables, fitted with N type jack, which is ideal for installations that require a longer cable run, where Panorama's CS240 or CS400 type coaxial cable can be used to minimise the cable insertion loss.

The WMM2GG-6-60 is a value added product for network operators and service providers by improving the link resilience to the router, achieving increased data rates for the subscriber, resulting in customer satisfaction and retention.

Technical Drawing

WMM2GG-6-60-5SP Shown



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WMM2GG-6-60

PANORAMA ANTENNAS

Product Data

Part No.			
		WMM2GG-6-60-5SP	WMM2GG-6-60-05NJ
Electrical Data			
Frequency range (MHz)		2x 617-960/1710-6000	
Operational bands		4G/5G	
Radiation pattern		Directional	
Nominal polarisation		+/- 45deg / Vertical	
Peak gain (excl cable loss)+	617-960MHz	6dBi	
	1710-6000MHz	9dBi	
Efficiency - excluding cable loss (all bands)		> 60%	
Correlation co-efficient (all bands)		< 0.2	
Max input power (W)		20 Watts	
GPS/GNSS Data			
Frequency range (MHz)		1562-1612	
Typical LNA gain (dB)		26 +/- 3	
Out of band rejection		>40dB (@ > +/- 100MHz f)	
Noise figure (dB)		<2.7	
Notch Filter rejection @787MHz (dB)		24dB	
Typical Current (mA)		15	
Nominal Operating Voltage		3-5 V DC	
Mechanical Data			
Dimensions (mm)	Height	507 (19.96")	
	Width	307 (12.01")	
	Depth	85 (3.34")	
Operating temp (°C)		-40° / +80°C (-40° / 176°F)	
Material		ASA	
Colour		White	
IP Rating		IP66	
Radome material certifications		UL94-HB, UL746C-f2	
Weight (g)		5400	
Survival wind speed (m/s)		55	
Typical wind load @ 45 m/s (N)		200	
Mounting Data			
Fixing		wall mount / mast mount	
Mounting bracket material		Coated steel / Aluminium / Stainless Steel	
Pole diameter (mm)		20-50 / (0.78 - 1.96")	
Cable & Connector Data			
Cable Type		Cell Cables: CS32 FRZH | GNSS Cable: CS29 FRZH (Both meet EN6722 / EN45545-2)	
Diameter (mm)		5 (0.2")	
Length (m)		5 (16.4')	0.5 (19")
Connector		SMA(m) x 3	N Socket (f) x 3

ǂ Peak gain derived from CST Microwave Studio and excludes cable loss.

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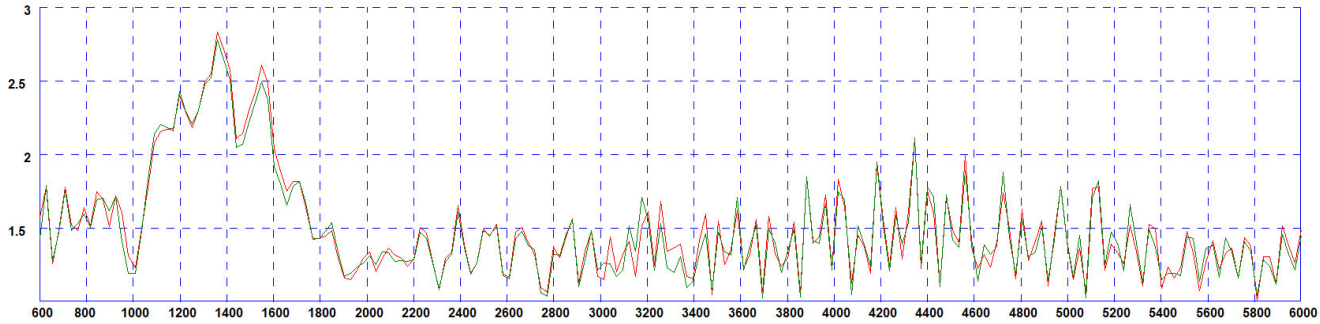
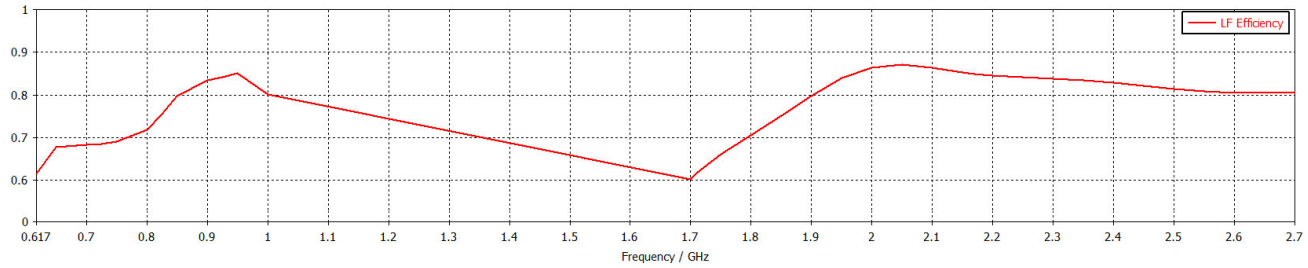
Electrical Data

Typical VSWR*



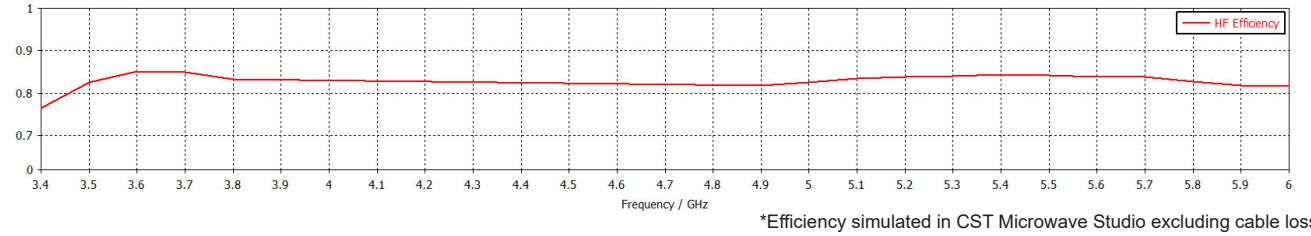
*VSWR for elements assemblies 1 and 2 measured with 5m (16') of CS32 cable.

Typical Efficiency 617-2700MHz*



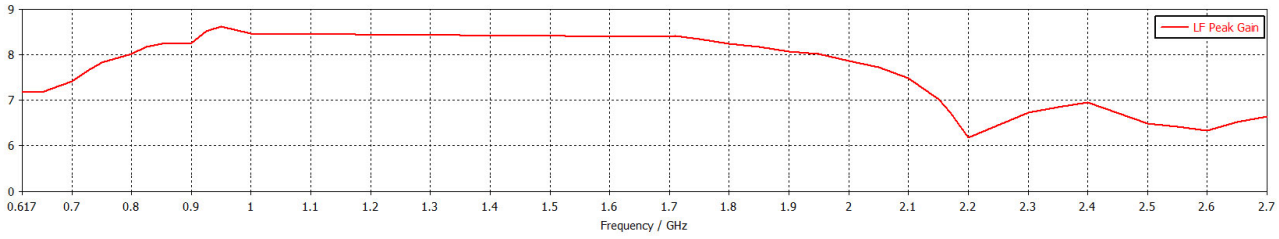
*Efficiency simulated in CST Microwave Studio excluding cable loss.

Typical Efficiency 3400-6000MHz*



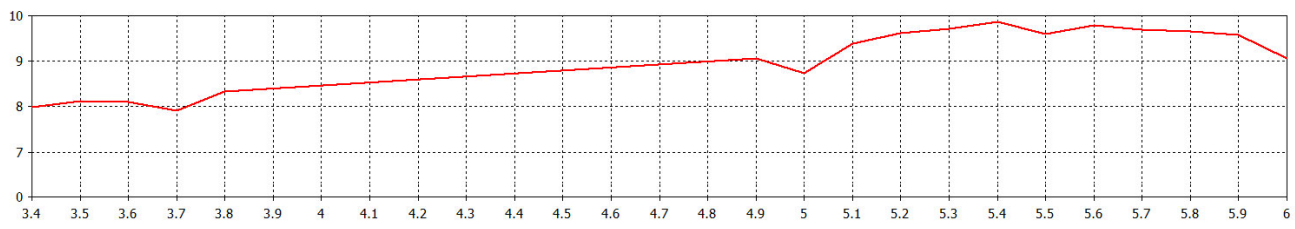
*Efficiency simulated in CST Microwave Studio excluding cable loss.

Typical Swept Gain 617-2700MHz*



*Swept gain simulated in CST Microwave Studio excluding cable loss.

Typical Swept Gain 3400-6000MHz*



*Swept gain simulated in CST Microwave Studio excluding cable loss.

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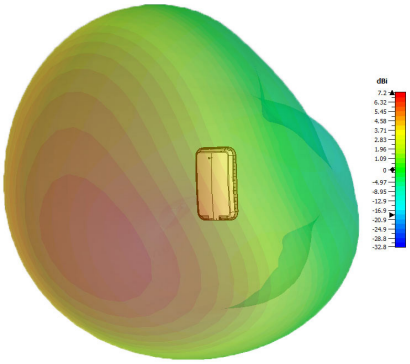
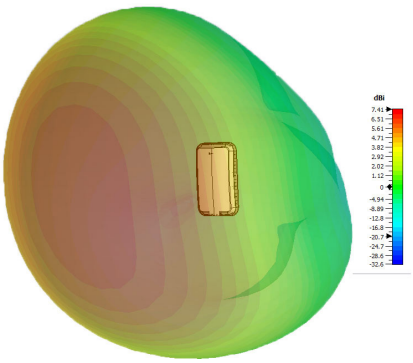
3D Patterns

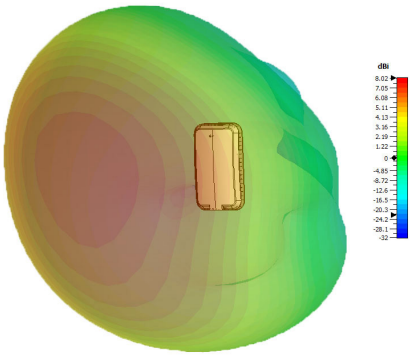
Typical 3D Pattern 617MHz*



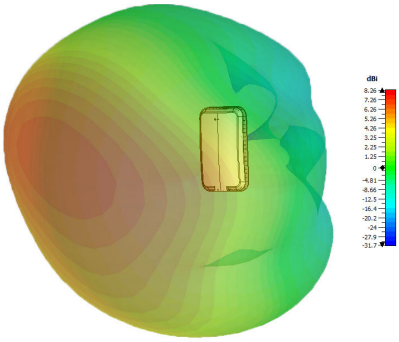
Typical 3D Pattern 700MHz*



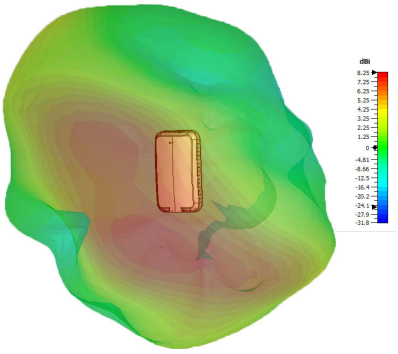
Typical 3D Pattern 800MHz*



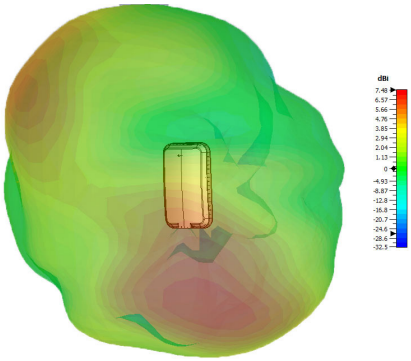
Typical 3D Pattern 900MHz*



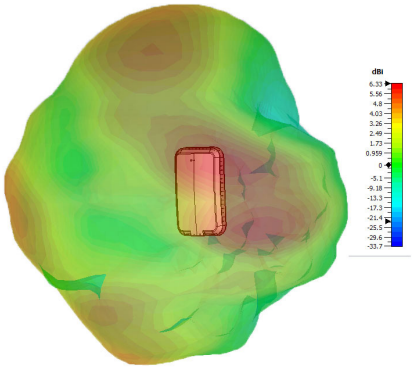
Typical 3D Pattern 1800MHz*



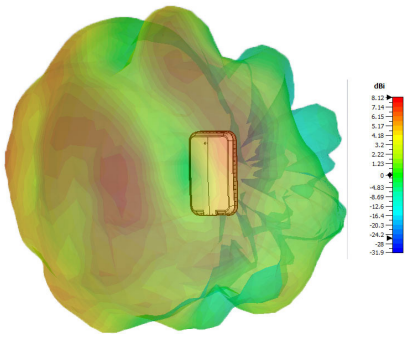
Typical 3D Pattern 2100MHz*



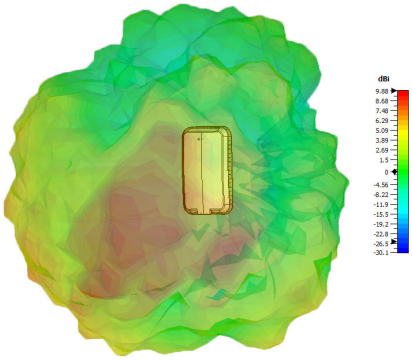
Typical 3D Pattern 2600MHz*



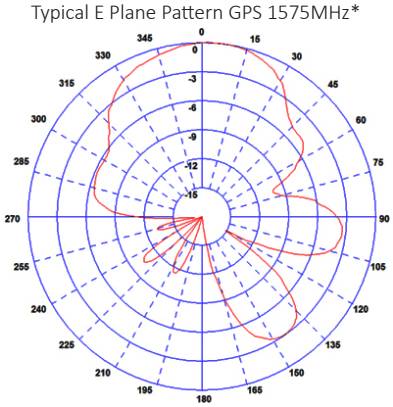
Typical 3D Pattern 3600MHz*



Typical 3D Pattern 5600MHz*



Typical E Plane Pattern GPS 1575MHz*



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