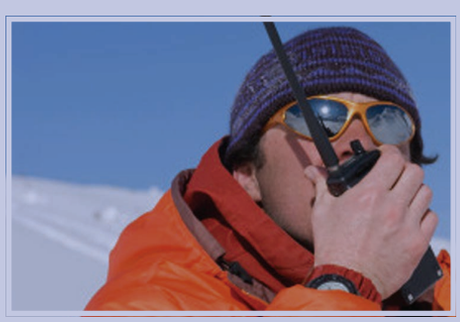


Product Data Sheet

LPMM-7-27

Low profile MiMo LTE & cellular antenna

C/Note	Doc Issue	Date	Approval
01019	1	07.06.2013	J.J.

PANORAMA ANTENNAS

LTE MIMO Antenna

Low Profile MIMO Antenna

LPMM-7-27

Rugged low profile design

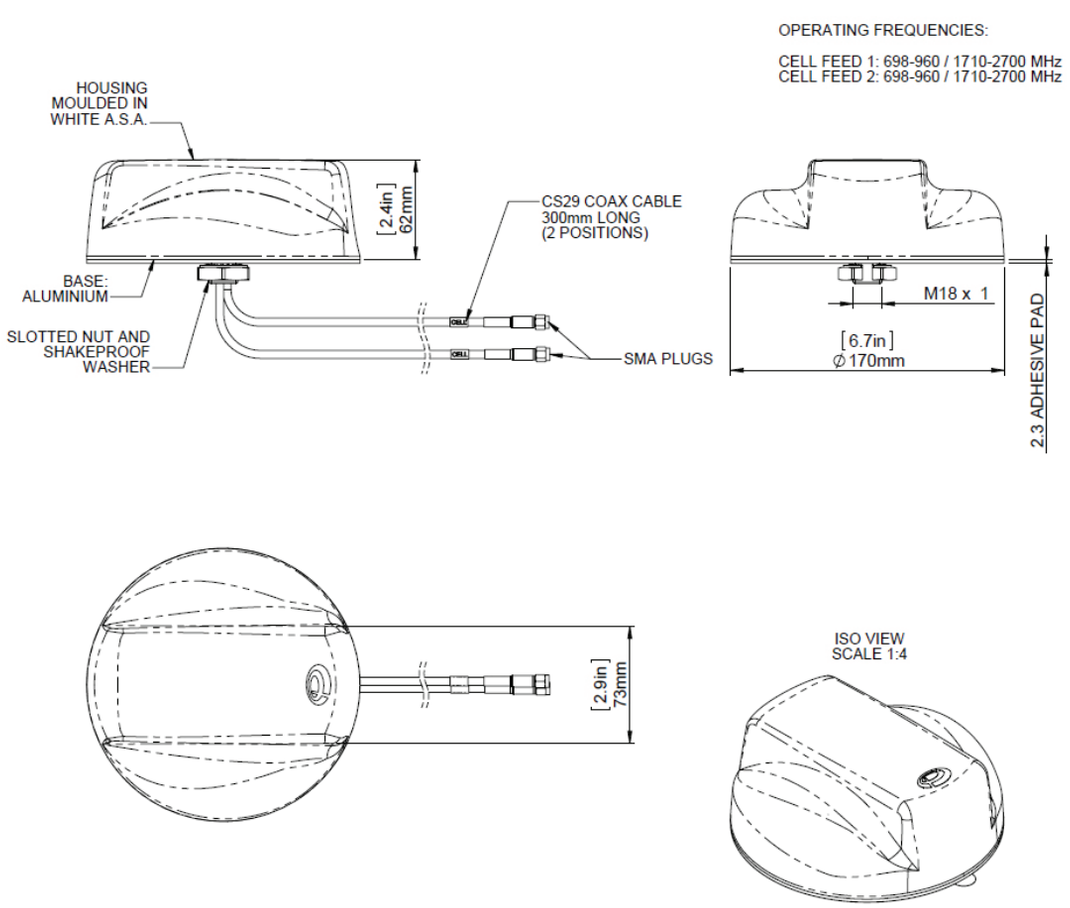
2x Wideband LTE/cellular elements

The Panorama LPMM low profile MIMO antenna range has been designed to support the new generation of vehicular LTE routers.

The antenna enclosure contains two isolated high performance antenna elements covering 698-2700MHz MIMO/diversity at cellular/LTE frequencies.

The antenna does not require a metallic ground plane, and maintains a high level of performance even when mounted on a non-metallic surface.

Technical Drawing



LTE MIMO Antenna

Low Profile MIMO Antenna

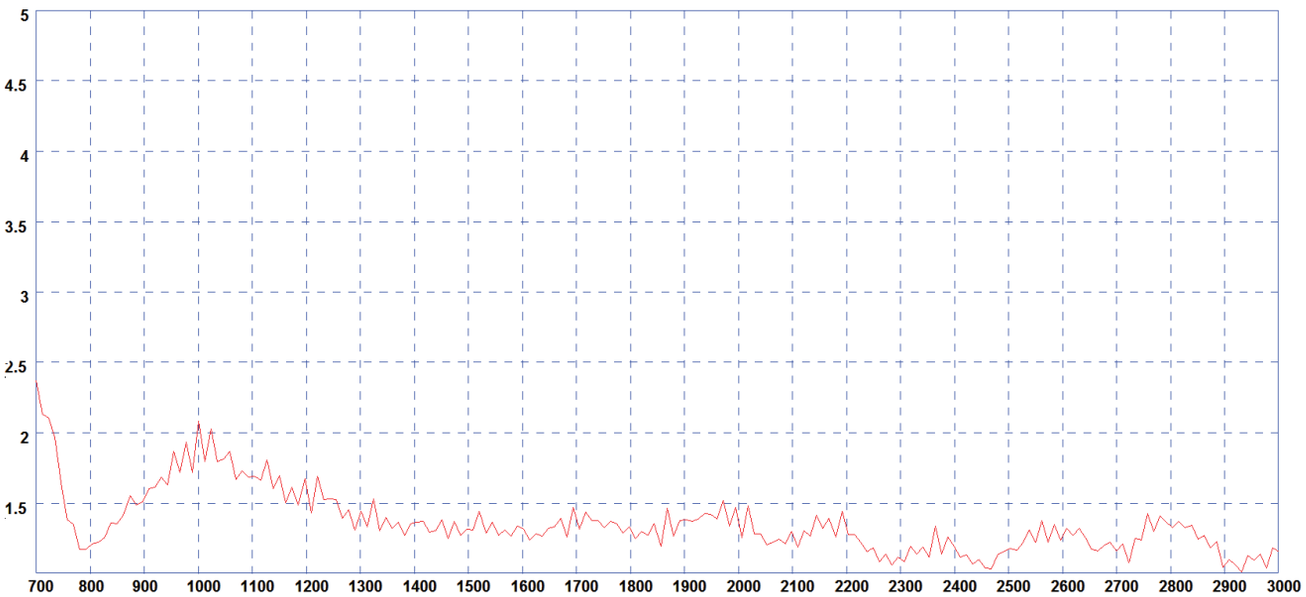
Part No.		
		LPMM-7-27
Electrical Data		
Frequency Range (MHz)	Elements 1 & 2	698-960 / 1700-2700
Operational Bands	Elements 1 & 2	LTE / Cellular
Peak Gain: Isotropic	Elements 1 & 2 -698-960	2.3dBi
	Elements 1 & 2 -1700-2700	5dBi
VSWR	Elements 1 & 2	< 2.5:1
Isolation (in free space)	Elements 1 & 2	> 15dB
Polarisation		Vertical
Impedance		50Ω
Max Input Power (W)		50
Mechanical Data		
Dimensions	Height	2.4” (62mm)
	Diameter	6.7” (170mm)
Operating Temp		-22°/ 176°F (-30° / +80°C)
Material		A.S.A & diecast aluminium
Colour		White
Mounting Data		
Mounting type		Panel mount
Max panel thickness		0.236”(6mm)
Mounting hole		3/4” (19mm)
Cable Data		
Cell / LTE Cables x2	Type	CS29 (double shielded RG58)
	Diameter	0.2”(5mm)
	Length	1’ (0.3m)
	Termination	SMA (male)

We recommend the customer uses Panorama C29 type coax for LTE and C32 type coax WLAN.

LTE MIMO Antenna

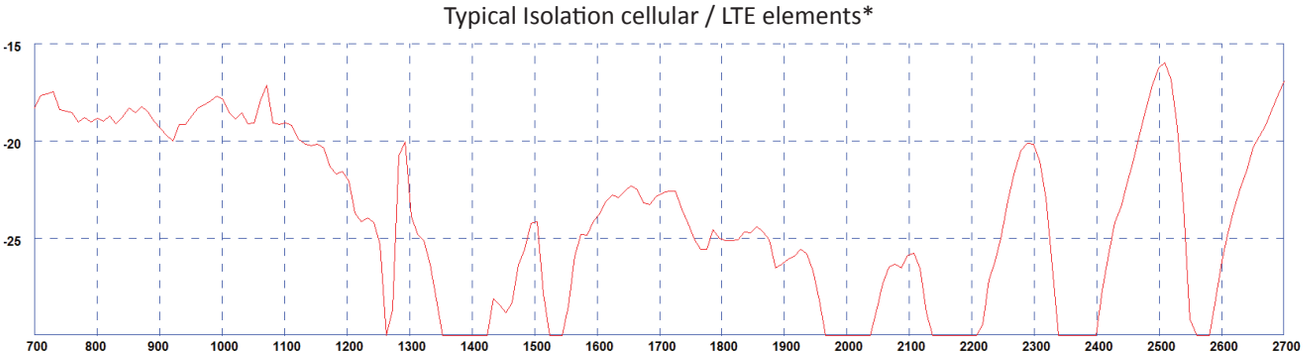
Low Profile MIMO Antenna

Typical VSWR cellular / LTE elements*



* VSWR measured in free space with 4.5m (15') of CS29 cable.

Typical Isolation cellular / LTE elements*

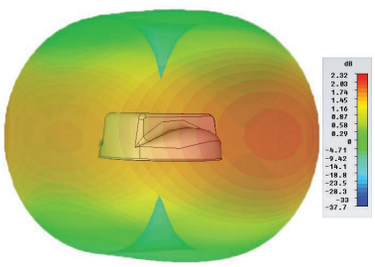


* Isolation measured in free space with 300mm (1') of cable.

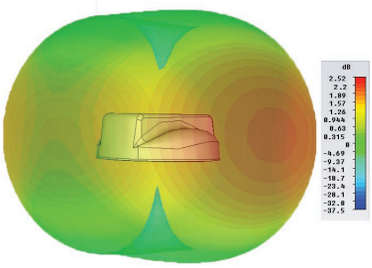
LTE MIMO Antenna

Low Profile MIMO Antenna

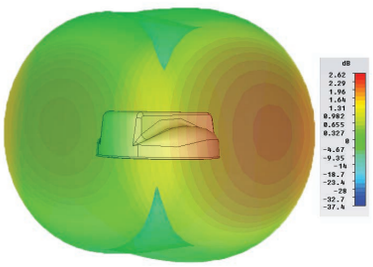
Typical 3D Pattern - Elements 1&2 700MHz



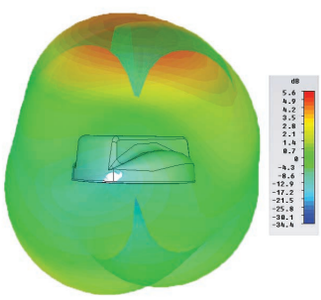
Typical 3D Pattern - Elements 1&2 800MHz



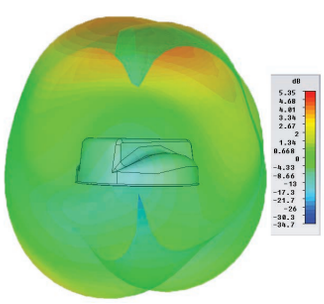
Typical 3D Pattern - Elements 1&2 900MHz



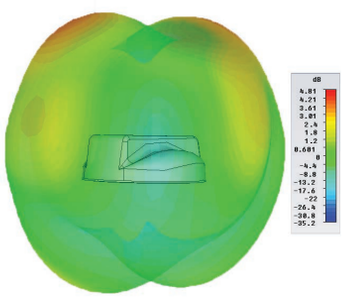
Typical 3D Pattern - Elements 1&2 1800MHz



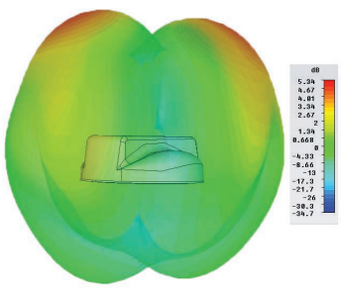
Typical 3D Pattern - Elements 1&2 1900MHz



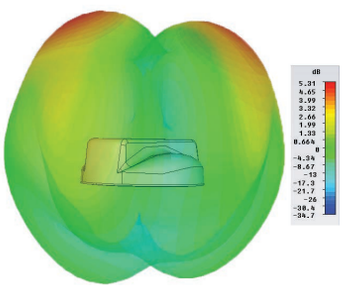
Typical 3D Pattern - Elements 1&2 2100MHz



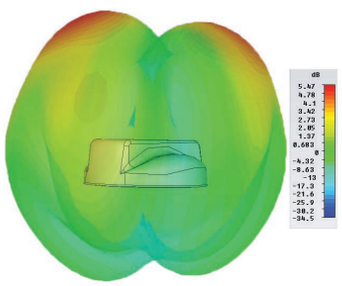
Typical 3D Pattern - Elements 1&2 2400MHz



Typical 3D Pattern - Elements 1&2 2500MHz



Typical 3D Pattern - Elements 1&2 2600MHz



N.B. All pattern and gain measurements taken in free space without additional ground plane.

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