

LTE MiMo ANTENNA

LOW PROFILE MiMo ANTENNA WITH GPS

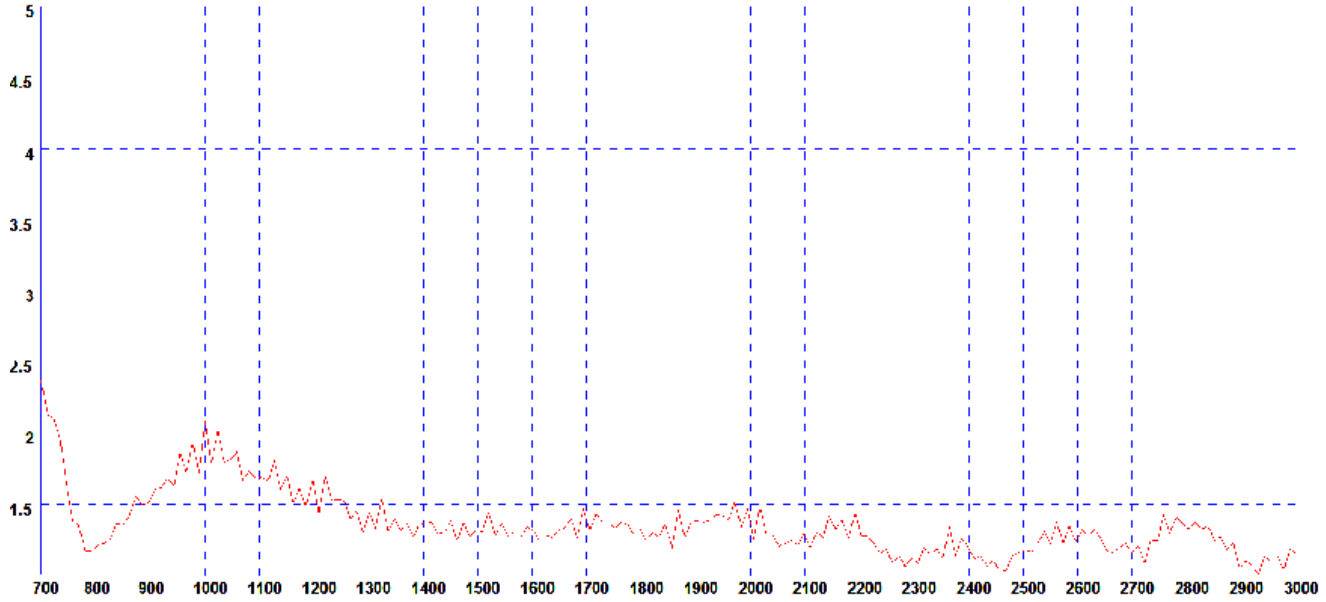
The light transit low profile MiMo antenna range has been designed to support the new generation of vehicular LTE routers. The antenna enclosure contains three isolated high performance antenna elements; two ultra-wideband elements covering 698-2700MHz support MiMo/diversity at cellular/LTE frequencies and a high performance GPS antenna with an integrated 26dB gain LNA and high quality filtering to combat noise.

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

Ordering Information

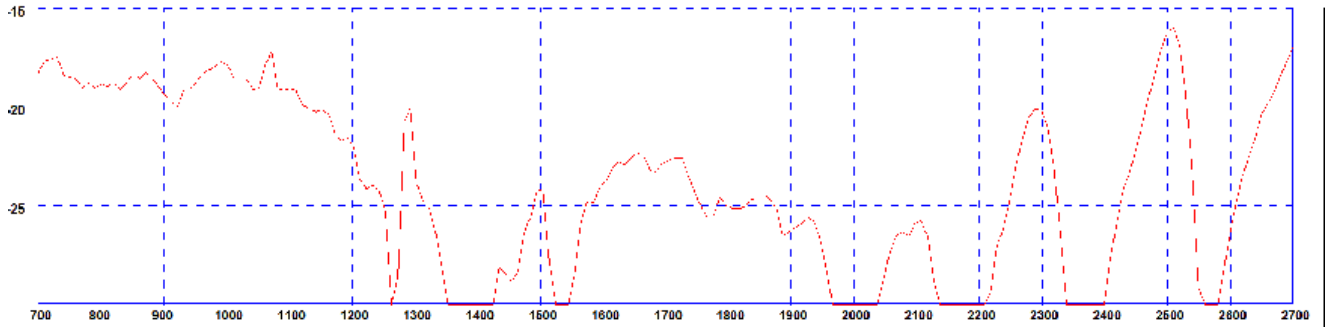
TE Part number	Housing colour: White	Housing Colour: Black	Elements 1 & 2	Elements 3, 4 & 5		1x GPS (1575MHz 26dB gain)
			2x Cellular Elements (698-960/ 1710-2700MHz)	2x WLAN Elements (2.4/4.906GHz)	3x WLAN Elements (2.4/4.9-6GHz)	
1-2823595-1	✓		✓			✓
1-2823595-2		✓	✓			✓
1-2823596-1	✓		✓			
1-2823596-2		✓	✓			
1-2823597-1	✓		✓	✓		
1-2823597-2		✓	✓	✓		
1-2823598-1	✓		✓	✓		✓
1-2823598-2		✓	✓	✓		✓
1-2823599-1	✓		✓		✓	✓
1-2823599-2		✓	✓		✓	✓

Typical VSWR cellular / LTE elements*



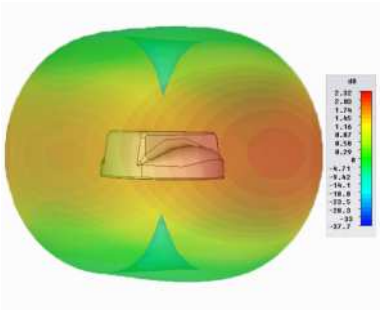
* VSWR measured in free space with 4.5m (15') of CS29 cable.

Typical Isolation cellular / LTE elements*

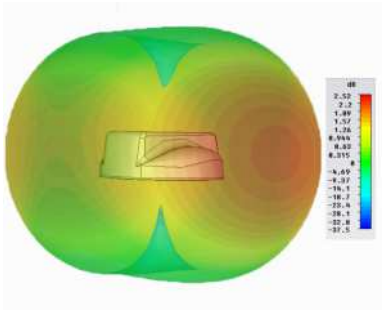


* Isolation measured in free space with 300mm (1') of cable.

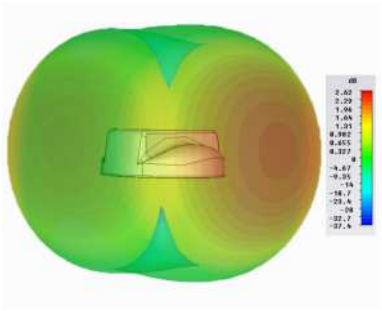
Typical 3D Pattern - Elements 1 & 2



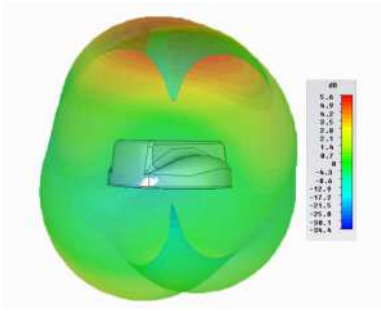
700MHz



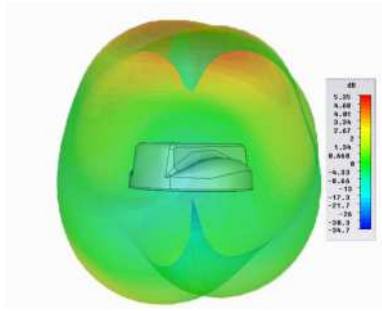
800MHz



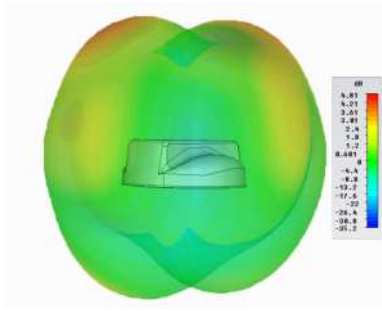
900MHz



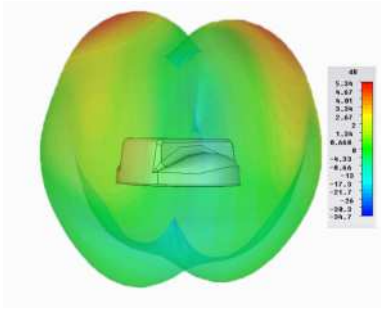
1800MHz



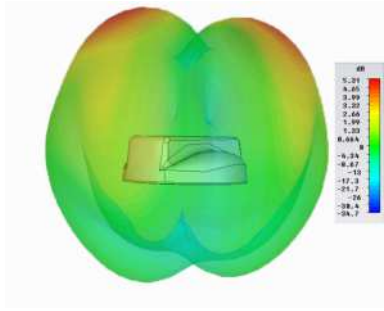
1900MHz



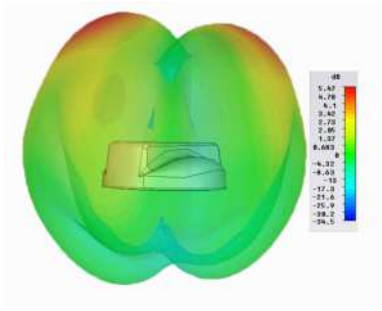
2100MHz



2400MHz



2500MHz



2600MHz

Note: All pattern and gain measurements taken in free space without additional ground plane.

Technical Information

Electrical Data		
Frequency Range (MHz)	Elements 1 & 2	698-960 / 1700-2700
	Elements 3 & 4	2.4/4.9-6GHz
Operational Bands	Elements 1 & 2	LTE / Cellular
	Elements 3 & 4	WiFi
Peak Gain Isotropic	Elements 1 & 2: 698-960	2.3dBi
	Elements 1 & 2: 1710-2700	5dBi
	Elements 3 & 4: 2.4/4.9-6.0GHz	2dBi
Polarisation		Vertical
VSWR	Elements 1 & 2	<2.5:1
Isolation (in free space)	Elements 1 & 2	>15dB
Impedance		50Ω
Max Input Power (W)		50
GPS Data		
Frequency Range (MHz)		1575
VSWR		<2.0:1 ± 4MHZ
LNA Gain		26dB
Polarisation		Right Hand Circular
Operating Voltage		3-7V DC (fed via coax)
Current (Typical)		14mA
Mechanical Data		
Dimensions	Height	62mm (2.4”)
	Diameter	176mm (6.7”)
Operating Temp		-30°C / +80°C (-22°F / 176°F)
Material		ASA & diecast aluminium
Ingress Protection		IP66
Colour		White
Mounting Data		
Mounting type		Panel mount
Max panel thickness		6mm (0.236”)
Mounting hole		19mm (3/4”)
Cable Data		
GPS Cable	Type	RG174
	Diameter	2.8mm (0.11”)
	Length	0.3m (11.8”)
	Termination	FME (female)
Cell / LTE Cables x2	Type	CS29 (double shielded RG58)
	Diameter	5mm (0.2”)
	Length	0.3m (1”)
	Termination	SMA (male)

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