Sierra Wireless AirLink® Antenna: 3-in-1 Panel

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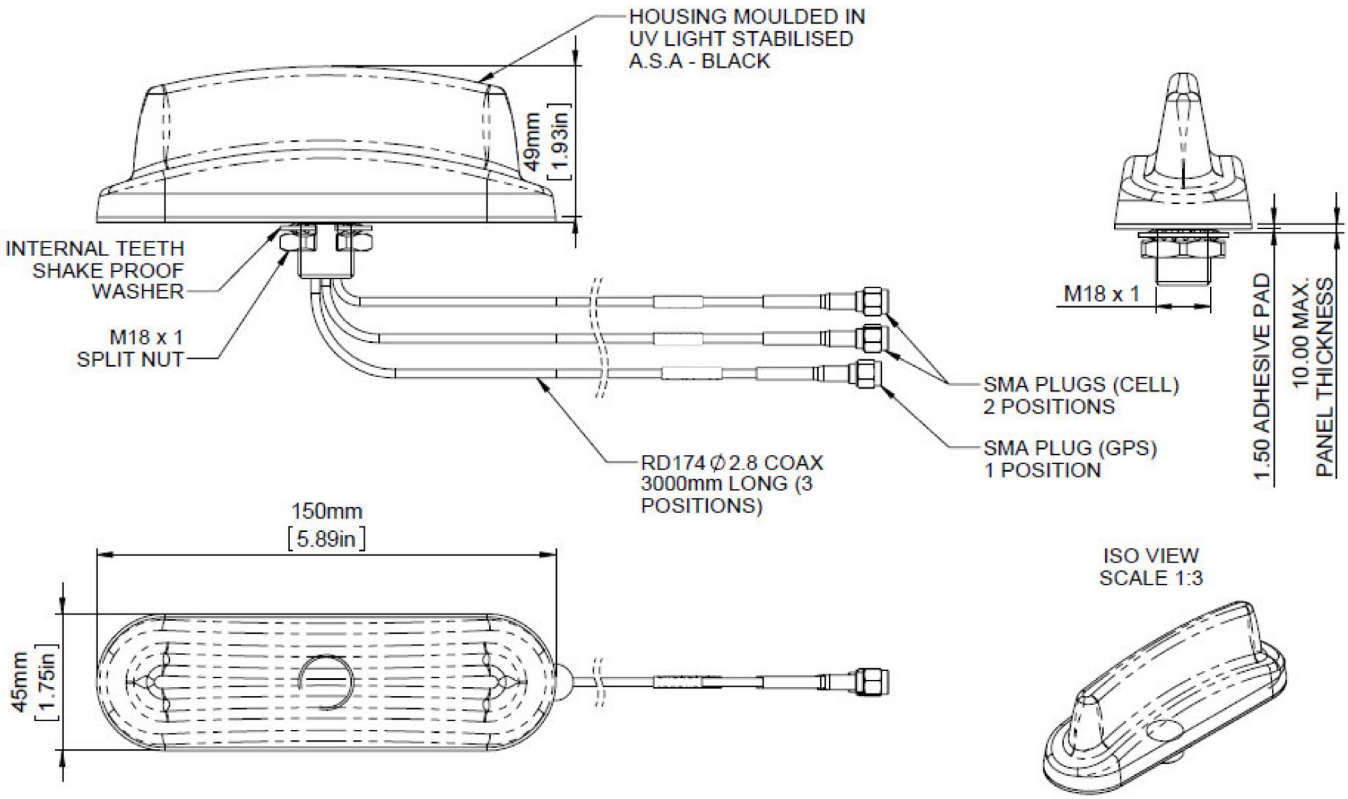
The 3-In-1 Panel has been tested and certified to provide MiMo LTE antenna function for AirLink routers and gateways. The compact, robust low profile housing is ground plane independent, weatherproof and contains two antenna elements with effective isolation and correlation covering all current global cellular and LTE bands in freq. range 698-960/1710-3800MHz as well as an active GNSS antenna for applications which require position or timing function.

		Specification	
PART NO.			
		6001125	
ELECTRICAL DATA			
Frequency Range	Elements 1 & 2	698-960 / 1710-3800MHz	
	Element 3	1562-1612MHz	
Peak gain: Isotropic*	Cellular	698-960MHz	1.5dBi
		1710-2700MHz	4.5dBi
		2500-3800MHz	5dBi
Pattern		Omni-directional	
Nominal Impedance		50Ω	
Max Input Power		20W	
GNSS DATA			
Frequency Range		1562-1612MHz	
LNA Gain		26dB	
Polarisation		Right Hand Circular	
Operating Voltage		3-5VDC	
Current		Typical <20mA	
MECHANICAL DATA			
Dimensions	Height	49mm (1.92")	
	Length	150mm (5.90")	
	Width	45mm (1.77")	
Operating Temp		-30° / +70°C (-22° / 158°F)	
Material		ASA	
Colour		Black	
Weigh		263g	

*Peak gain simulated off a groundplane and does not include cable attenuation

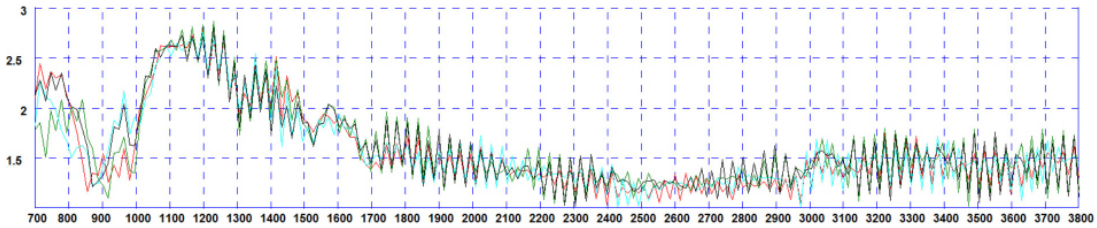
		Specification
MOUNTING DATA		
Mounting Type		18mm (3/4") mounting bush and acrylic adhesive pad
CABLE DATA		
Cell / LTE Cable	Cable Type	RG174
	Length	3m (9.8')
	Termination	SMA Plug
GPS Cable	Cable Type	RG174
	Length	3m (9.8')
	Termination	SMA Plug

TECHNICAL DRAWING



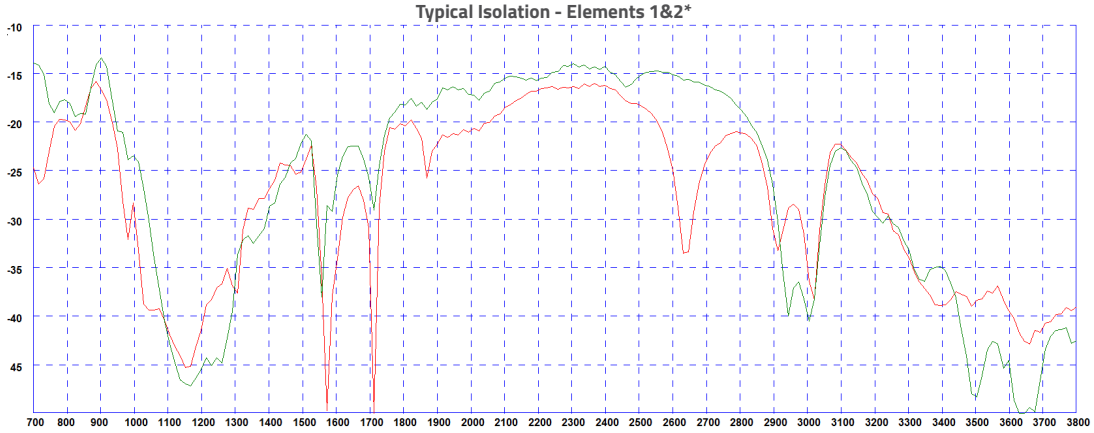
VSWR

Typical VSWR - Elements 1&2*



* VSWR measured with 3m (10') of RG174 cable Green and Red Plots = Elements 1&2 in free space Black and Blue plots = Elements 1&2 on a 400x400mm ground plane

Typical Isolation - Elements 1&2*

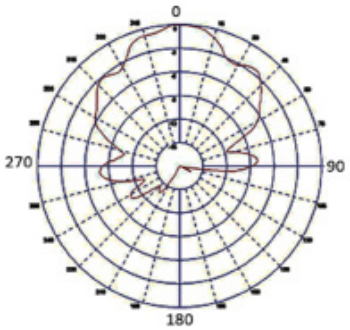


*Isolation measured with 3m (10') of RG174 cable Red Plot = mounted on a 400x 400mm (1' 4" x 1'4") ground plane Green Plot = free space

ELECTRICAL DATA

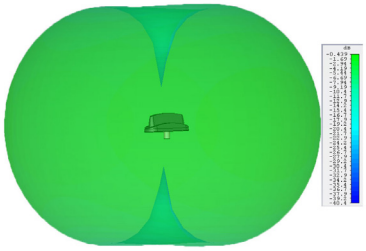
Typical Radiation Pattern -GPS/GNSS Element 3

Element 3: Typical E Plane Pattern (1602MHz)

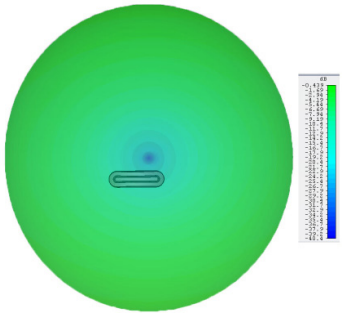


Typical 3D Radiation Patterns - Cell / LTE Elements 1&2

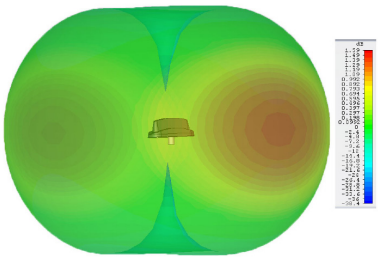
3D Gain Plot Side (700MHz)



3D Gain Plot Top (700MHz)

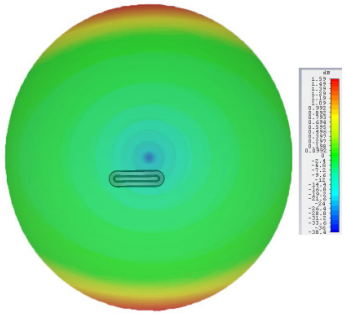


3D Gain Plot Side (800MHz)

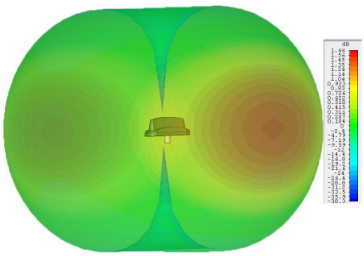


ELECTRICAL DATA

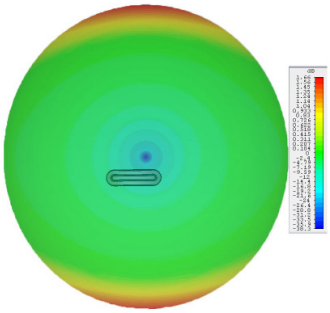
3D Gain Plot Top (800MHz)



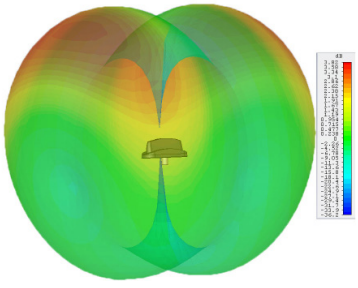
3D Gain Plot Side (900MHz)



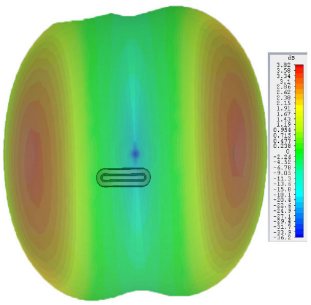
3D Gain Plot Top (900MHz)



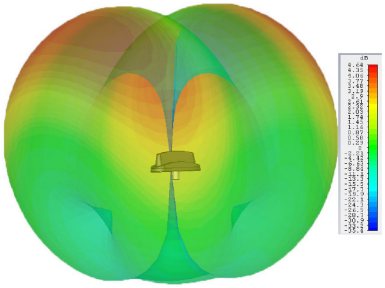
3D Gain Plot Side (1800MHz)



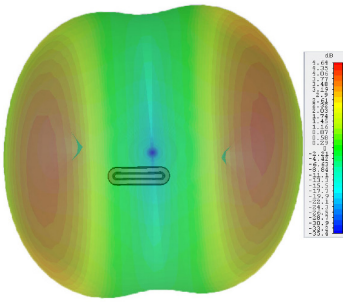
3D Gain Plot Top (1800MHz)



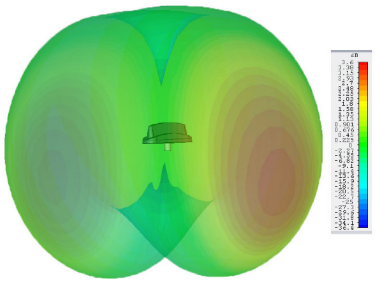
3D Gain Plot Side (2100MHz)



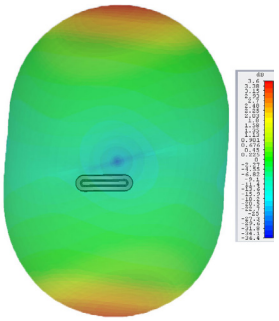
3D Gain Plot Top (2100MHz)



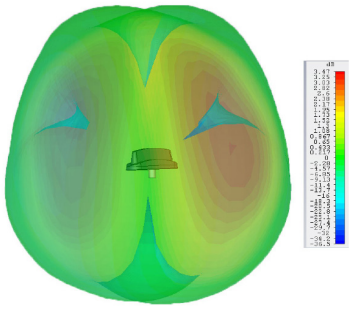
3D Gain Plot Side (2600MHz)



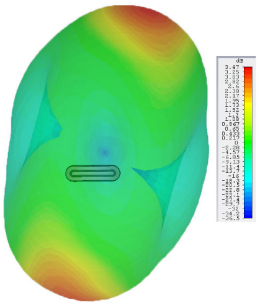
3D Gain Plot Top (2600MHz)



3D Gain Plot Side (3600MHz)



3D Gain Plot Top (3600MHz)



*3D radiation patterns simulated in CST Microwave Studio on a 600x600mm (2' X2') ground plane with both elements fed together.
ǂ Element 1&2 Patterns simulated in CST Microwave Studio in free space excluding cable loss. Element 3 pattern measured in free space.

About Sierra Wireless

Sierra Wireless is building the Internet of Things with intelligent wireless solutions that empower organizations to innovate in the connected world. We offer the industry's most comprehensive portfolio of 2G, 3G, and 4G embedded modules and gateways, seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide trust our innovative solutions to get their connected products and services to market faster.

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