MULTI FUNCTION PUCK ANTENNA

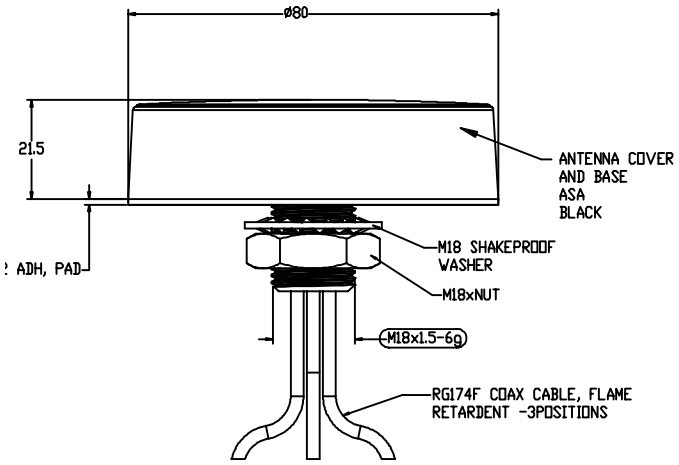
LOW PROFILE ANTENNA

This antenna range is designed to decrease the applied cost of M2M and IoT applications by offering a low profile antenna with an extremely compact envelope. Ideal for situations where a robust solution is required. The antenna covers cellular bands 698-960/1710-3800MHz and optional 2.4/5.9GHz WLAN and optional GPS/GNSS with a 26dB LNA.

At < 22mm (0.86”) height the antenna is extremely discreet and ideal for low clearance deployment locations.

Cellular and WLAN are dipole antennas, GNSS is active ceramic patch antenna

Technical Drawing

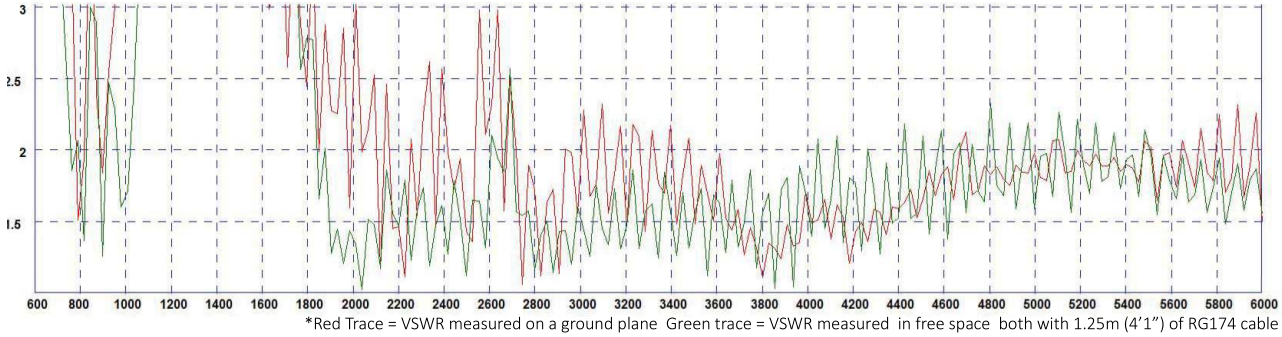


Partnumber	Cell	WLAN	GNSS	Length	Connector
2363696-5	Y	Y	Y	2m	SMA plug

Electrical Data		2363696-5
Frequency Range (MHz)	Element 1	698-960 / 1710-3800
	Element 2	2400-2485 / 4900-6000
Operational band		2G/3G/4G/5G, WLAN/Wi-Fi
Peak Gain	Element 1: 698-960MHz	0dBi
	Element 1: 1710-3800MHz	2dBi
	Element 2: 2.4GHz	2dBi
	Element 2: 5.0GHz	4dBi
Typical VSWR		< 2.5:1
Polarisation		Vertical
Pattern		Omni-Directional
Impedance		50Ω
Max Input Power (W)		20
GPS/GNSS Data		
Frequency Range (MHz)		1562-1612 MHz
LNA Gain (dB)		26dB
Typicall Current (mA)		15
Typical Voltage		3-5 VDC
Mechanical Data		
Dimensions (mm)	Height (mm)	22.5 (0.88")
	Diameter (mm)	80 (3.14")
Operating Temp (°C)		-40 to +85°C (-40 to 185°F)
Material		ASA
Colour		Black
Ingress Protection		IP66
Mounting Data		
Fixing		Panel mount - 19mm (3/4")
Cable Data		
Cable 1: Cellular	Cable Type	RG174 (meets UN ECE 118)
	Diameter (mm)	2.8 (0.11")
	Length (m)	2 (6' 6")
	Termination	SMA plug
Cable 2: Wi-Fi	Cable Type	RG174 (meets UN ECE 118)
	Diameter (mm)	2.8 (0.11")
	Length (m)	2 (6' 6")
	Termination	SMA Plug
Cable 3: GPS/GNSS	Cable Type	RG174 (meets UN ECE 118)
	Diameter (mm)	2.8 (0.11")
	Length (m)	2 (6' 6")
	Termination	SMA plug

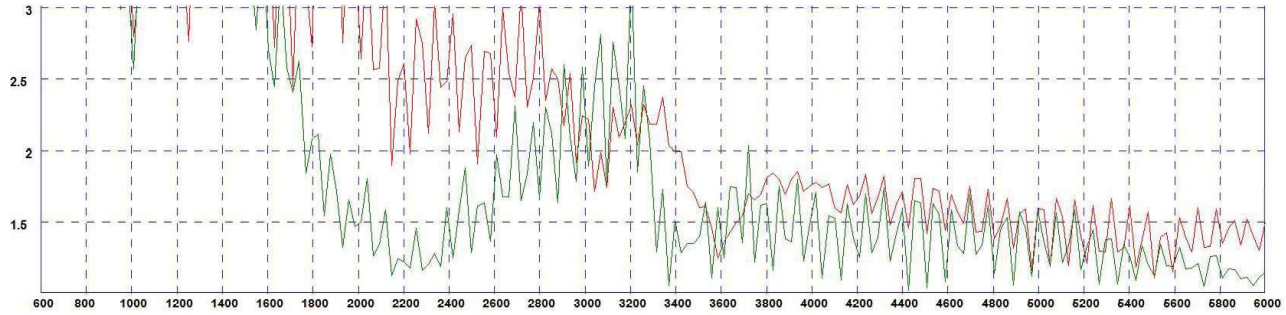
Peak gain modelled in CST Microwave Studio and does not include cable attenuation

Typical VSWR - Element 1*



*Red Trace = VSWR measured on a ground plane Green trace = VSWR measured in free space both with 1.25m (4'1") of RG174 cable

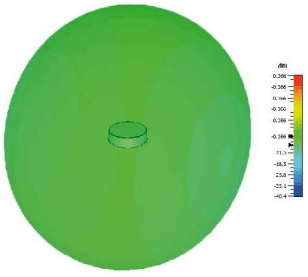
Typical VSWR - Element 2*



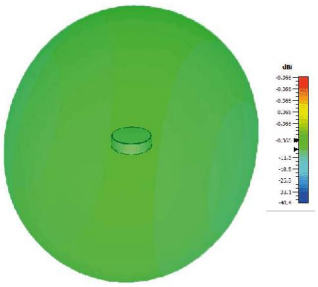
Red Trace = VSWR measured on a ground plane Green trace = VSWR measured in free space both with 1.25m (4'1") of RG174 cable

3D Patterns Cell

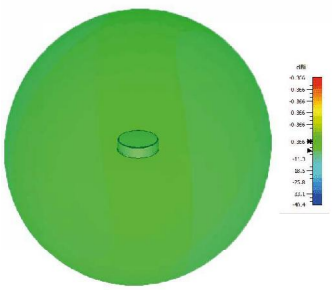
Typical 3D Pattern 700MHz



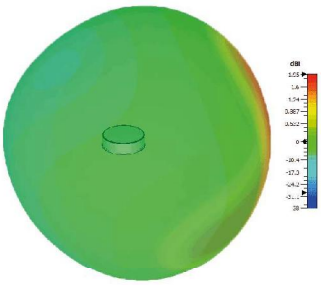
Typical 3D Pattern 800MHz



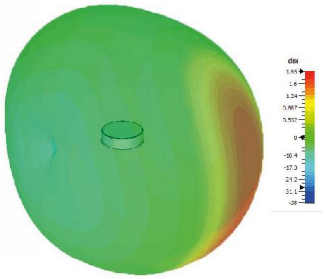
Typical 3D Pattern 900MHz



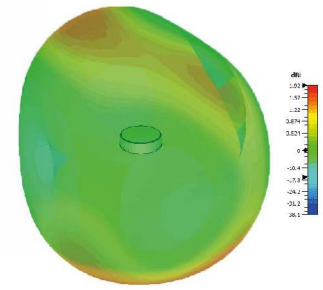
Typical 3D Pattern 1800MHz



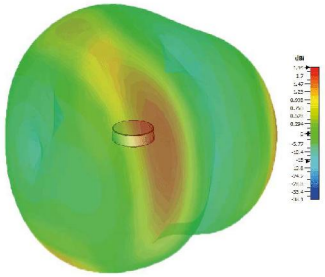
Typical 3D Pattern 2000MHz



Typical 3D Pattern 2600MHz

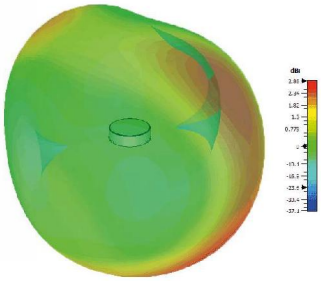


Typical 3D Pattern 3600MHz

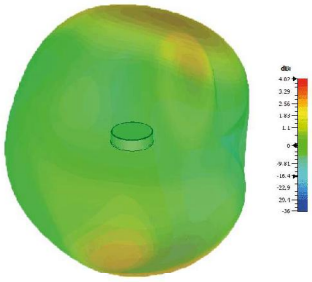


3D Patterns Wi-Fi

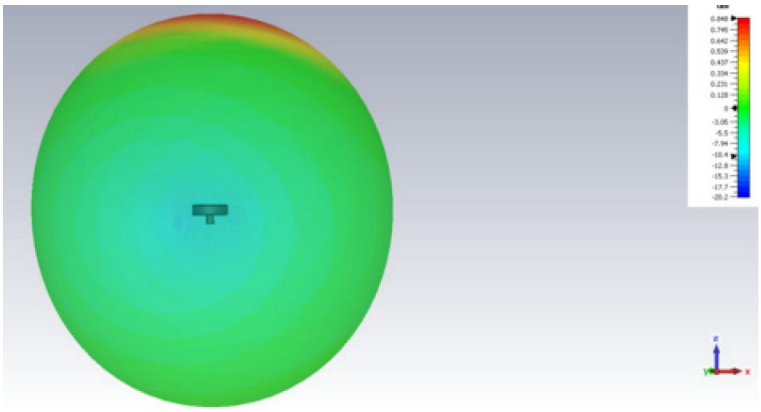
Typical 3D Pattern 2450MHz



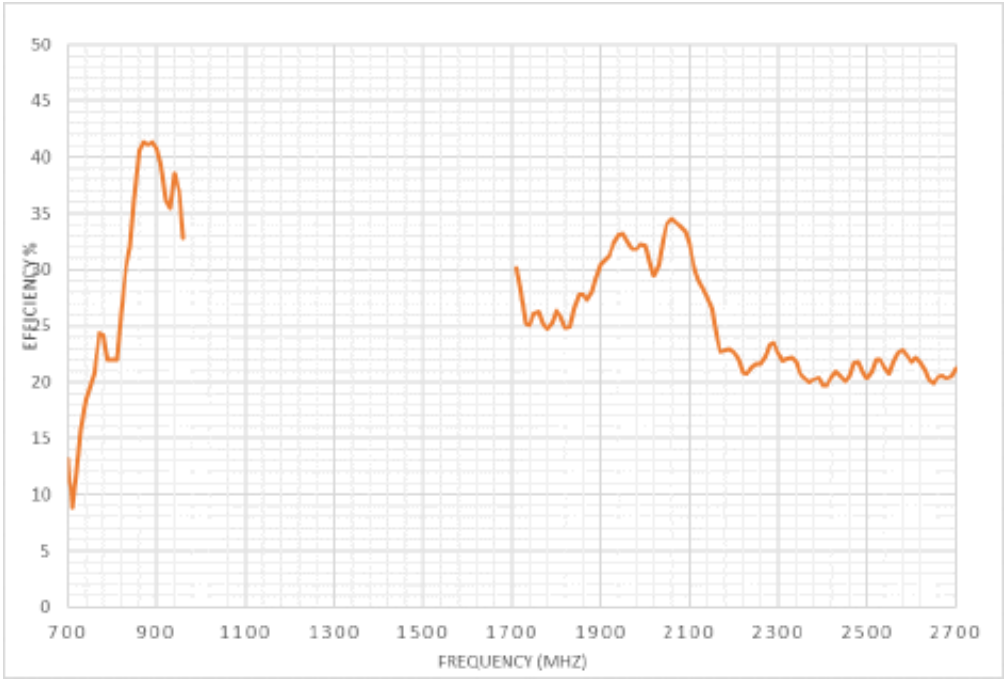
Typical 3D Pattern 5400MHz



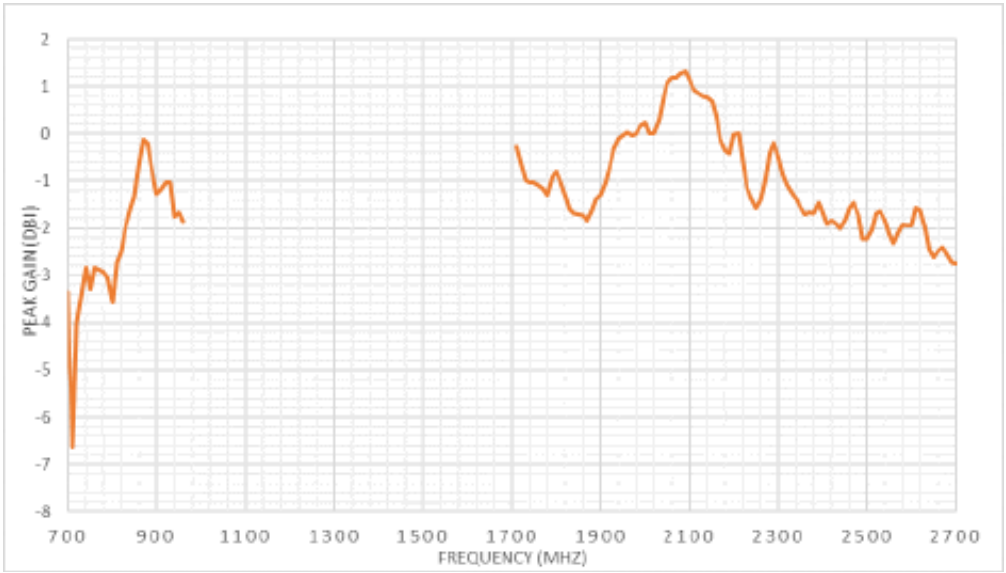
3D Patterns GNSS (1575MHz)



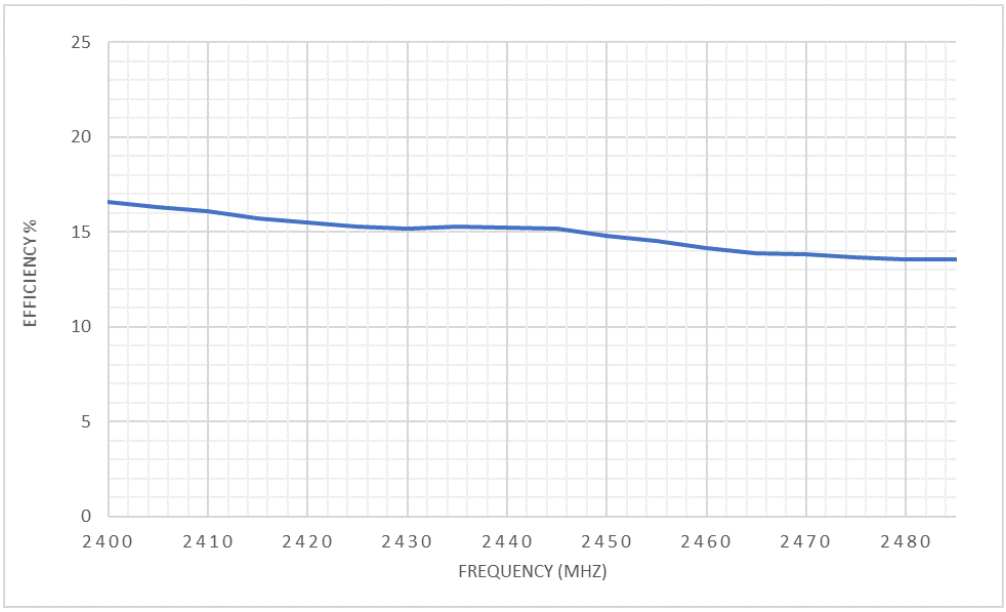
Efficiency Element 1



Peak Gain Element 1



Efficiency Element 2



Peak Gain Element 2