



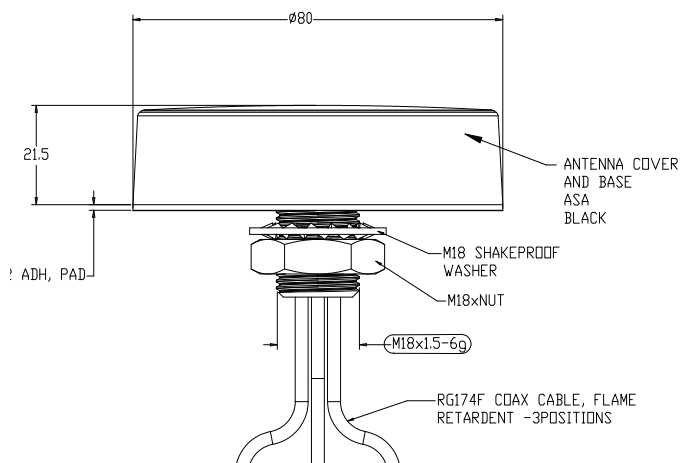
# MULTI FUNCTION PUCK ANTENNA

## LOW PROFILE ANTENNA

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

At < 22mm height the antenna is extremely discreet and ideal for low clearance deployment locations. The antenna is suitable for non conductive panels.

### Technical Drawing



Partnumber	Cell	WLAN	GNSS	Length	Connector
2363696-1	Y	Y	Y	3m	SMA
2363696-2	Y	Y	Y	3m	Fakra
2363696-3	Y	Y	Y	1m	Fakra
2363696-4	Y	Y	Y	1m	SMA
1-2363696-1	Y	Y	N	3m	SMA
1-2363696-2	Y	Y	N	3m	Fakra
1-2363696-3	Y	Y	N	1m	Fakra
1-2363696-4	Y	Y	N	1m	SMA
2-2363696-1	Y	N	N	3m	SMA
2-2363696-2	Y	N	N	3m	Fakra
2-2363696-3	Y	N	N	1m	Fakra
2-2363696-4	Y	N	N	1m	SMA

# MULTI FUNCTION PUCK ANTENNA

LOW PROFILE ANTENNA FOR DAS NETWORKS

Electrical Data		2363696-1	2363696-2	2363696-3	2363696-4
Frequency Range (MHz)	Element 1	698-960 / 1710-3800			
	Element 2	2400-2485 / 4900-6000			
Operational band		2G/3G/4G/5G, WLAN/Wi-Fi, GPS			
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			
Typical 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 / IK07			
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)	3 (10')		1 (3' 3")	
	Termination	SMA plug	FAKRA D Jack	FAKRA D Jack	SMA plug
Cable 2: Wi-Fi	Cable Type	RG174 (meets UN ECE 118)			
	Diameter (mm)	2.8 (0.11")			
	Length (m)	3 (10')		1 (3' 3")	
	Termination	SMA Rev Pol	FAKRA I Jack	FAKRA I Jack	SMA Rev Pol
Cable 3: GPS/GNSS	Cable Type	RG174 (meets UN ECE 118)			
	Diameter (mm)	2.8 (0.11")			
	Length (m)	3 (10')		1 (3' 3")	
	Termination	SMA plug	Fakra C jack	Fakra C Jack	SMA plug

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

# MULTI FUNCTION PUCK ANTENNA

## LOW PROFILE ANTENNA FOR DAS NETWORKS

Electrical Data		1-2363696-1	1-2363696-2	1-2363696-3	1-2363696-4
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		< 2.5:1			
Polarisation		Vertical			
Pattern		Omni-Directional			
Impedance		50Ω			
Max Input Power (W)		20			
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/IK07			
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)	3 (10')		1 (3' 3")	
	Termination	SMA plug	FAKRA D Jack	FAKRA D Jack	SMA plug
Cable 2: Wi-Fi	Cable Type	RG174 (meets UN ECE 118)			
	Diameter (mm)	2.8 (0.11")			
	Length (m)	3 (10')		1 (3' 3")	
	Termination	SMA Rev Pol	FAKRA I Jack	FAKRA I Jack	SMA Rev Pol

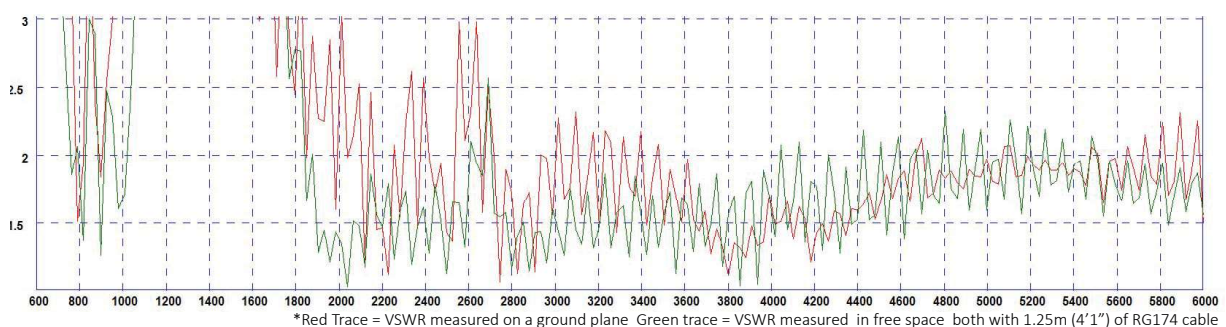
Peak gain modelled in CST Microwave Studio and does not include cable attenuation

# MULTI FUNCTION PUCK ANTENNA

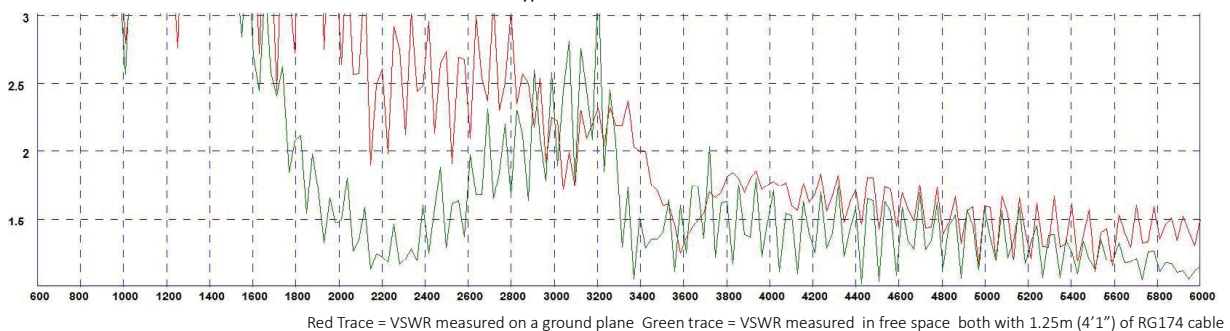
## LOW PROFILE ANTENNA FOR DAS NETWORKS

Electrical Data		2-2363696-1	2-2363696-2	2-2363696-3	2-2363696-4
Frequency Range (MHz)		698-960 / 1710-3800			
Operational Band		2G/3G/4G/5G			
Peak Gain	Element 1: 698-960MHz	0dBi			
	Element 1: 1710-3800MHz	2dBi			
Typical		< 2.5:1			
Polarisation		Vertical			
Pattern		Omni-Directional			
Impedance		50Ω			
Max Input Power (W)		20			
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/IK07			
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)	3 (10')		1 (3' 3")	
	Termination	SMA plug	FAKRA D Jack	FAKRA D Jack	SMA plug

Typical VSWR - Element 1\*

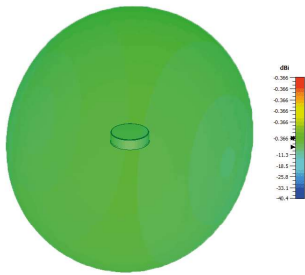


Typical VSWR - Element 2\*

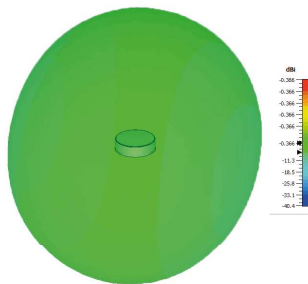


**3D Patterns Cell**

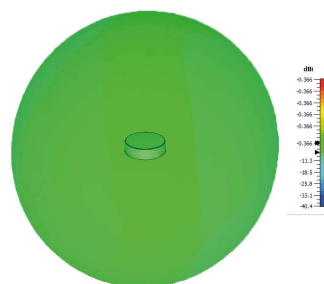
Typical 3D Pattern 700MHz



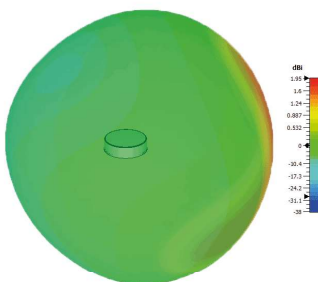
Typical 3D Pattern 800MHz



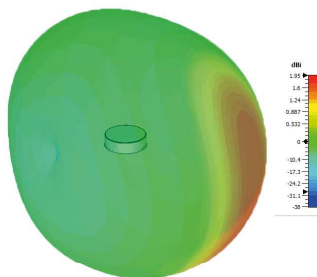
Typical 3D Pattern 900MHz



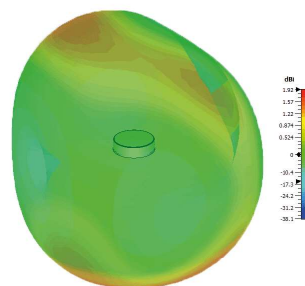
Typical 3D Pattern 1800MHz



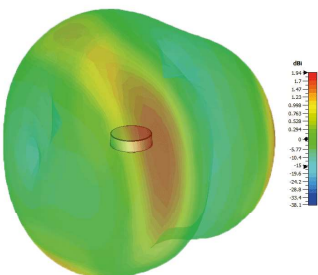
Typical 3D Pattern 2000MHz



Typical 3D Pattern 2600MHz

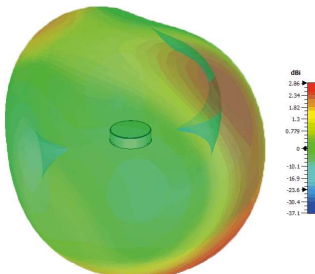


Typical 3D Pattern 3600MHz



**3D Patterns Wi-Fi**

Typical 3D Pattern 2450MHz



Typical 3D Pattern 5400MHz

