

# Powertec Wideband Cellular Stud Antenna, 700 to 2700 MHz, 2 metre SMA Male

## Model Number

VST-6927-3.SA13

## GTIN-13

9337692004315

## Polarisation

SISO

## Design Type

Stud Mount, Microstrip Planar

## RF Category

Cellular



The VST-6927-3 is an economic, high performance stud mount wideband 4G antenna for external use on a range of M2M devices including electronic advertising, vending machines, and metering applications. Stable omnidirectional gain and high efficiency across the entire operating frequency range ensures consistent reception and transmission.

The antenna achieves remarkably high radiated efficiency when considering its highly economic positioning, making it uniquely suited to mass roll-out in metering, monitoring, and industrial control systems.

This antenna is M12 stud mounted on any type of structure and is locked from the inside of the structure by a nut. The nut and washer components have been developed to optimise mechanical strength when mounting through M14 and M16 diameter holes.

Rubber gaskets at the base provide an IP67 watertight seal to the mounting structure. VST-6927-3 provides a 2 to 5 dBi gain across global 4G LTE bands and 5G Low-Band when mounted on both non-metallic surfaces and metallic ground planes.

- Wideband 690 to 2700 MHz covering main 4G bands worldwide
- Stud mount for permanent installation
- Can be installed in ground-independent and ground-plane dependent situations
- IP67 ingress protection
- 2 metres of cable with an industry standard SMA Male connector.

# Antenna Technical Data

## PHYSICAL CHARACTERISTICS

Construction Material	ABS Plastic, Brass	RF Connections	1
Radome Colour	Black	Environmental Rating	IP67
Dimensions	75.4 x 45.2 mm (H x ø)	Operating Temperature	-40 °C to 85 °C
Weight	0.13 kg	Mounting	Stud Ø M12 to M16

## ELECTRICAL SPECIFICATIONS

## MECHANICAL SPECIFICATIONS

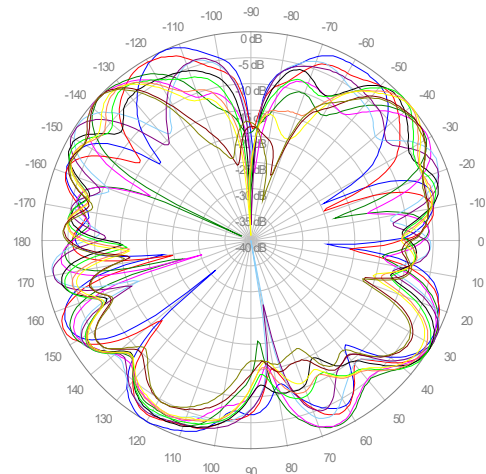
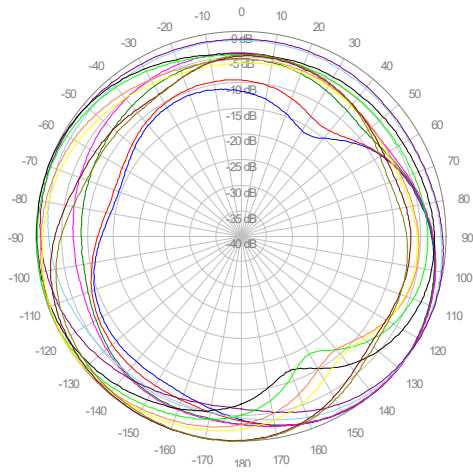
Input Impedance	50 Ω	Input Connector	SMA
Polarisation	Vertical (V)	Input Connector Gender	Male
Max. Input Power	5 W	Cable Series	RG-58
PIM, 3rd Order	-	Cable Length	2000 mm

FREQUENCY RANGE	PEAK GAIN	VSWR	AZ.	EL.	EFFICIENCY	INTER-PORT	XPI
698 to 803 MHz	3.8 dBi	< 2.8:1	360°	140°	61%	-	-
803 to 890 MHz	3.8 dBi	< 1.4:1	360°	140°	76%	-	-
890 to 960 MHz	4.0 dBi	< 2.0:1	360°	140°	68%	-	-
1695 to 1880 MHz	4.4 dBi	< 2.6:1	360°	80°	56%	-	-
1880 to 2200 MHz	4.7 dBi	< 1.9:1	360°	80°	59%	-	-
2300 to 700 MHz	2.5 dBi	< 2.5:1	360°	80°	42%	-	-

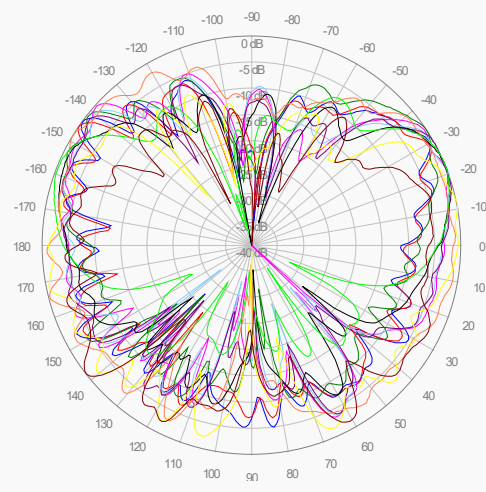
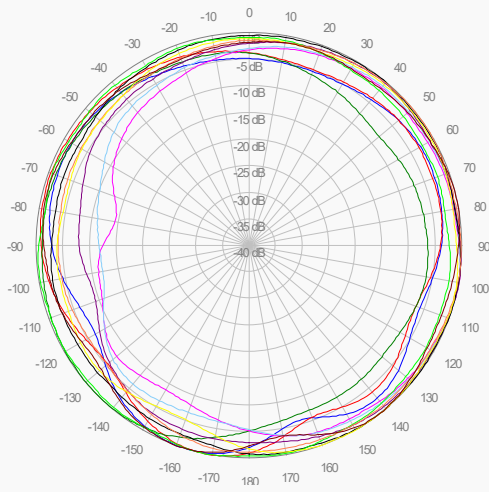
## AZIMUTH POLAR PLOT

## ELEVATION POLAR PLOT

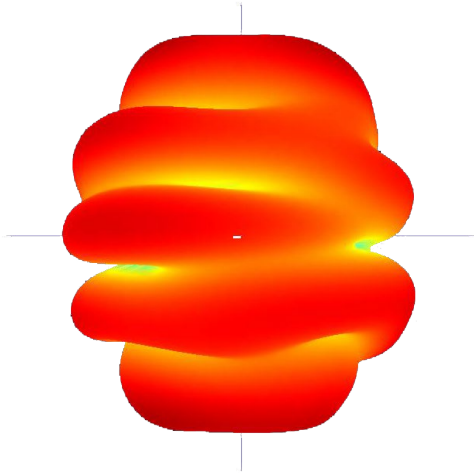
698 to 960  
MHz



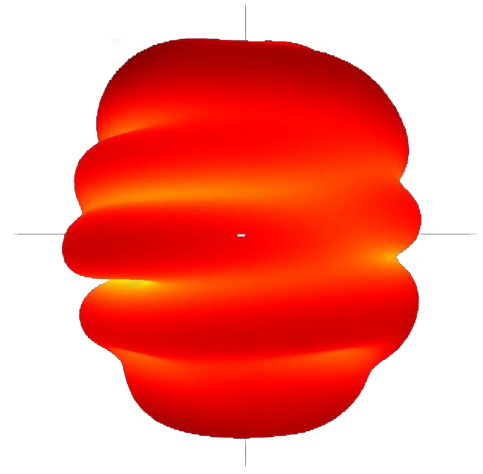
1695 to  
2700 MHz



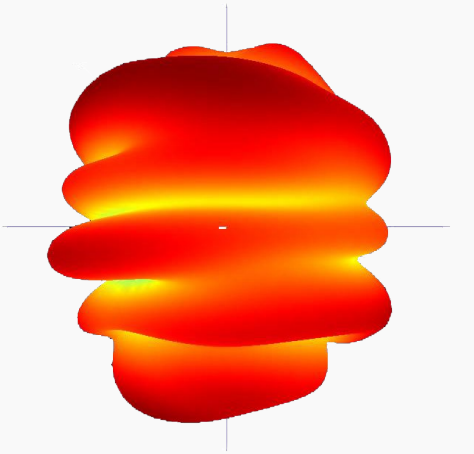
723 MHz



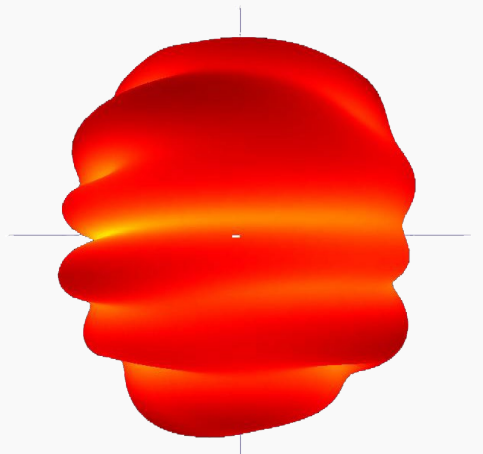
778 MHz



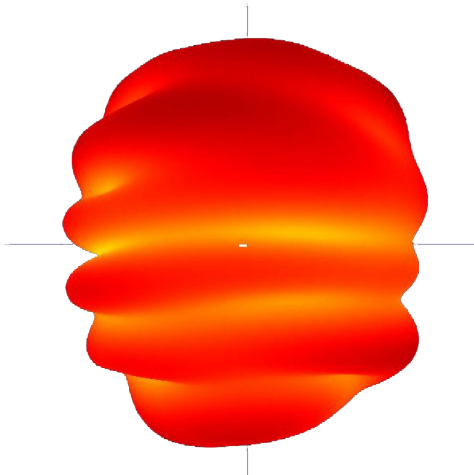
840 MHz



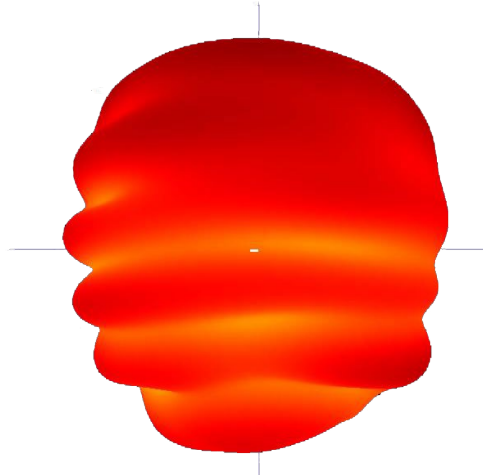
885 MHz



911 MHz

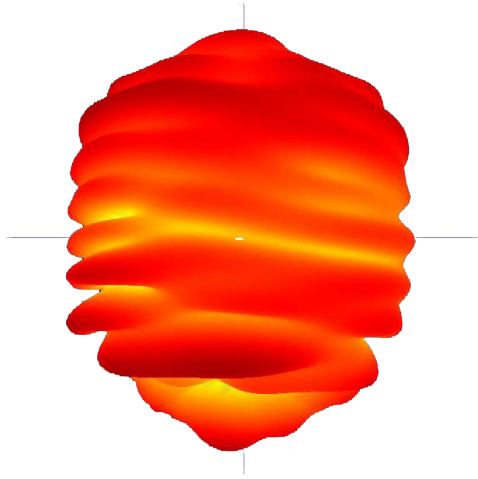


956 MHz

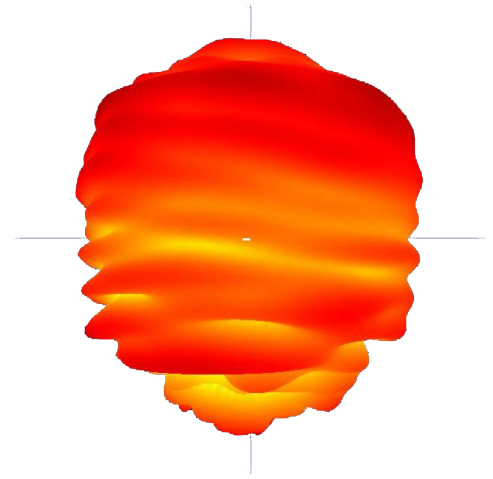


3D RADIATION PATTERNS

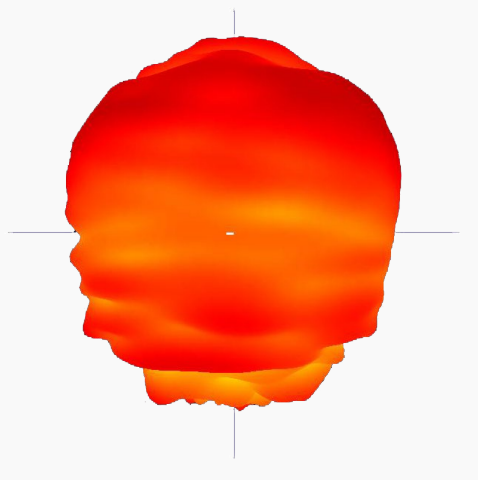
1735  
MHz



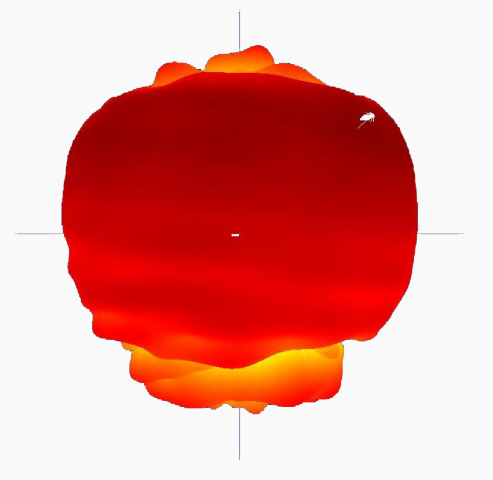
1852  
MHz



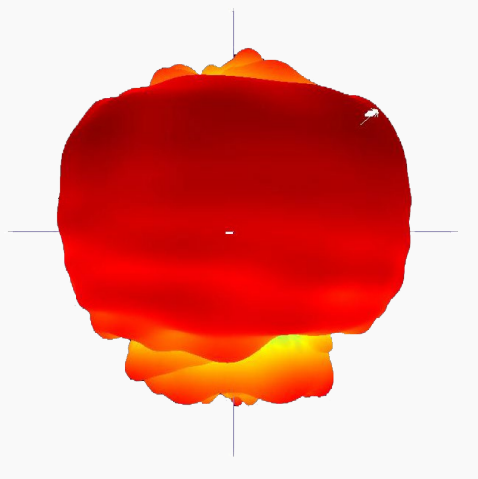
1977  
MHz



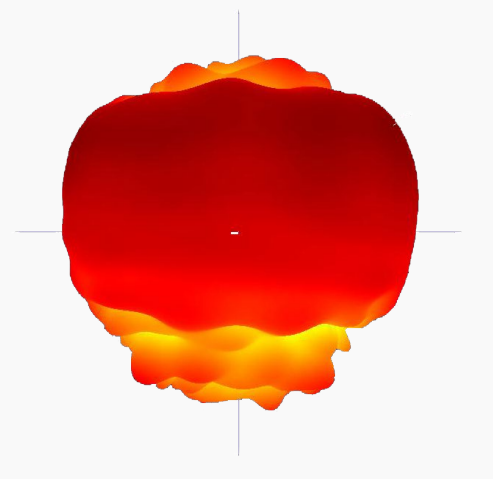
2167  
MHz



2200  
MHz

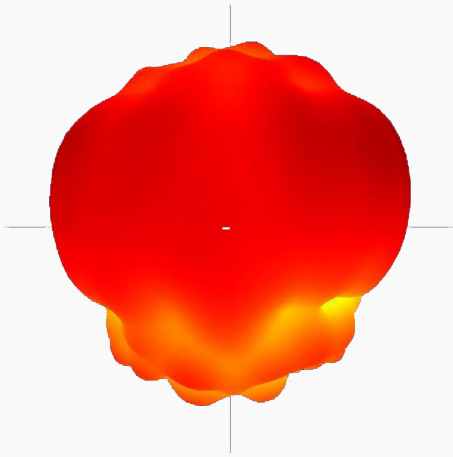


2300  
MHz

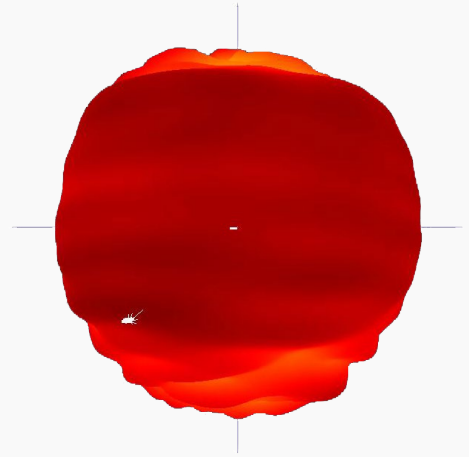


3D RADIATION PATTERNS

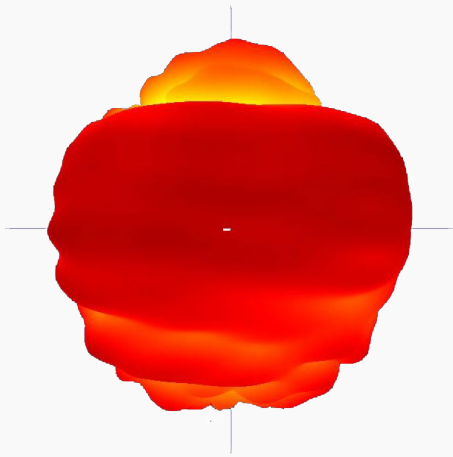
2400  
MHz



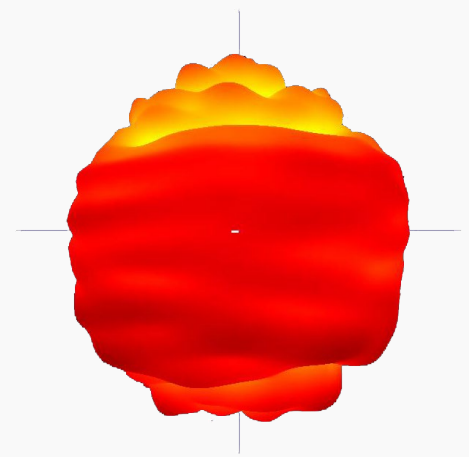
2500  
MHz



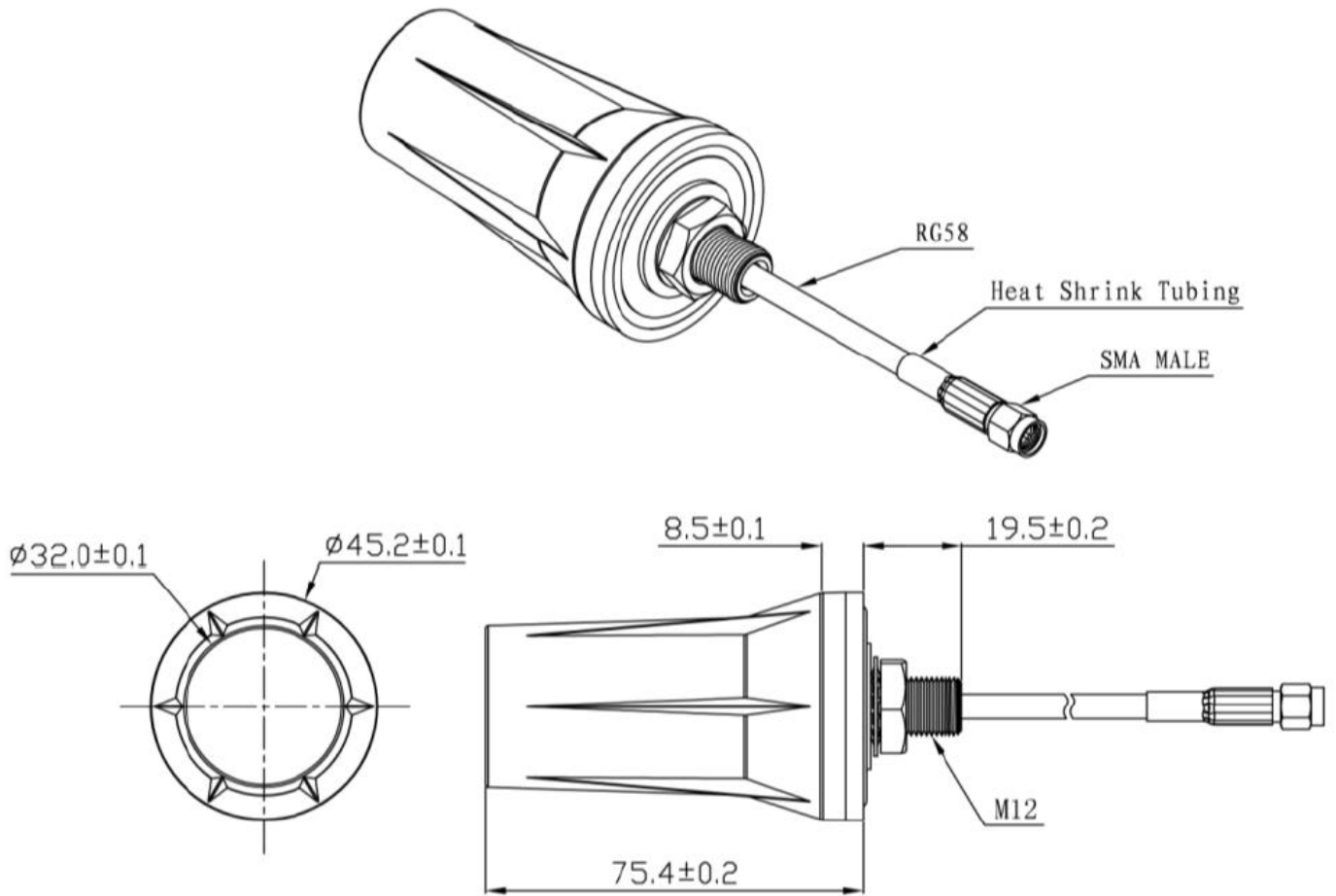
2600  
MHz



2700  
MHz



# CAD Drawing



Note: customised M12 nut and flanged washer to improve mechanical strength when mounting through holes up to 16 mm diameter. Brass M12 stud is Nickel plated for corrosion resistance (differs to main image).



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