

Low Profile IOT Antenna

PANORAMA ANTENNAS

LPWTC-7-27



- Low profile, vandal & tamper proof design
- Simple adhesive pad or screw fix installation
- Covers global cellular & LTE bands
- Suitable for mounting on metallic or non metallic surfaces*
- Ultra slim cable can allow no drill installation through some box seals

The Panorama LPW range of antennas are designed to decrease the lifetime cost of M2M and IOT installations by offering a robust, effective antenna that is easy to install and lasts the lifetime of the installation.

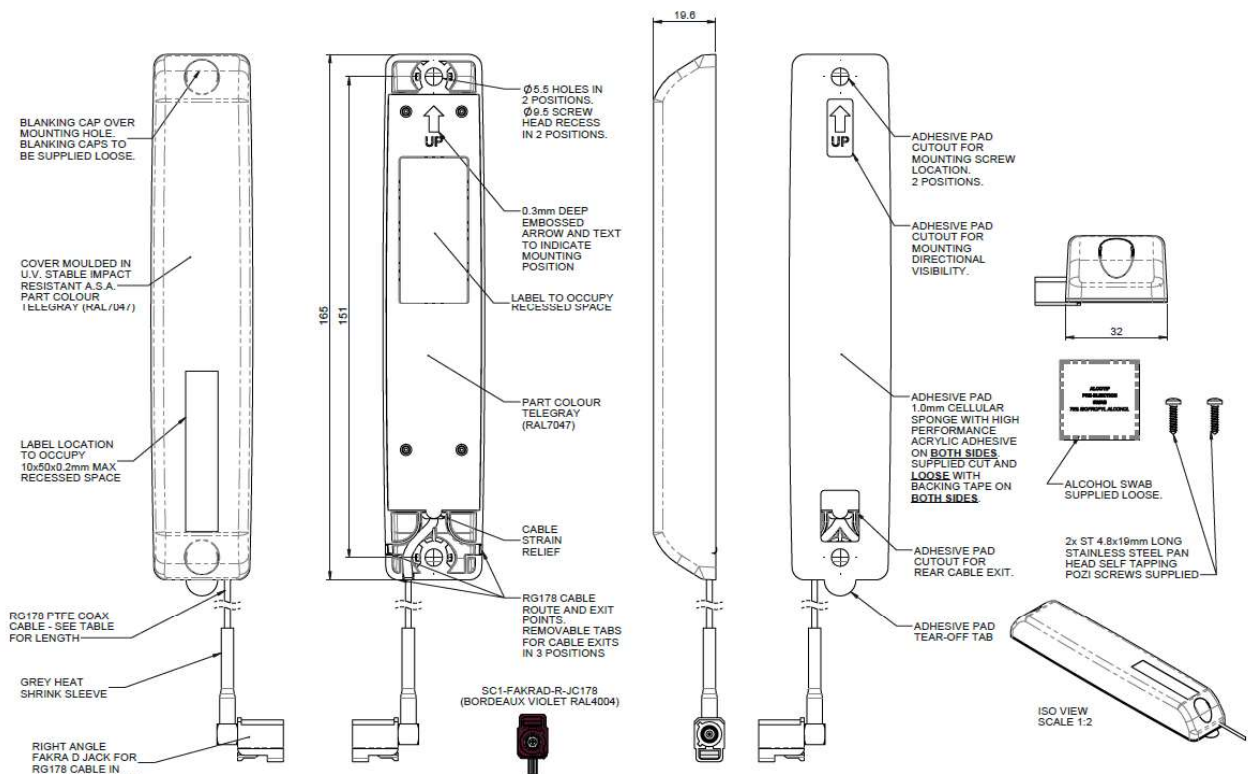
The antenna offers ground-plane independent omni-directional performance across global cellular and LTE bands making it a versatile solution for any number of applications. The efficient element design ensures a high first time connection rate and an ongoing, robust communications link even in problematic coverage areas.

The antenna can be installed using the supplied industry grade adhesive pad or via the integrated screw mounting bosses. If the antenna is panel mounted the cable can be routed through a hole in the adhesive pad to run invisibly into the panel behind. In addition the LPWTC features an ultra slim 1.78mm diameter cable which can permit the cable to run through some enclosure sealing gaskets allowing installation without drilling any holes.

*Performance may change based on mounting surface.

Technical Drawing

LPWTC-7-27-1-5FDJ Shown



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Product Data

Part No.

LPWTC-7-27-1-5FDJ

LPWTC-7-27-1-5SP

Electrical Data

Frequency Range (MHz)	698-960, 1710-2700
Operational Band	LTE 700 / LTE 800 / AMPS 850 / GSM 900 / GSM 1800 / PCS 1900 / AWS / 3G UMTS 2100 / LTE 2600
Typical VSWR	< 2:1
Typical Peak Gain: Isotropic†	2dBi
Compared to ¼ wave	0dB
Pattern	Omni-directional
Impedance	50Ω
Max Input Power (W)	20W

Mechanical Data

Dimensions (mm)	Height	19.6 (0.77")
	Length	165 (6.5")
	Width	32 (1.26")
Operating Temp (°C)	-30° / +70°C (-22°F / 158 °F)	
Material	ASA	
Colour	Telegray RAL 7047	
Ingress protection	Equivalent to IP66 when properly installed	

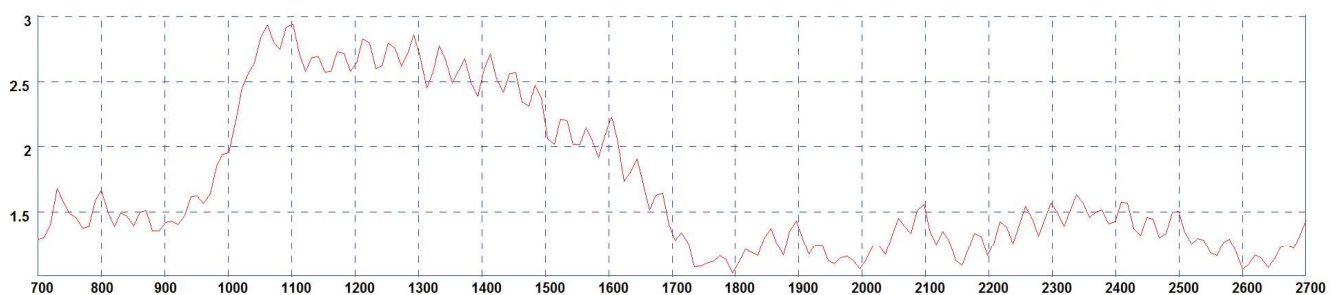
Mounting Data

Fixing	Industrial grade acrylic adhesive pad / 2x 4.8mm (0.18") screws
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Cable Data

Type	RG178
Thickness (mm)	1.78 (0.07")
Length (m)	1.5 (4' 9")
Termination	Right Angle Fakra D Jack SMA Plug

Typical VSWR of Antenna in Free Space*



* VSWR measured in free space with 2m (6.6') of RG174 cable

†Peak gain shown simulated in CST microwave studio in free space without cable loss

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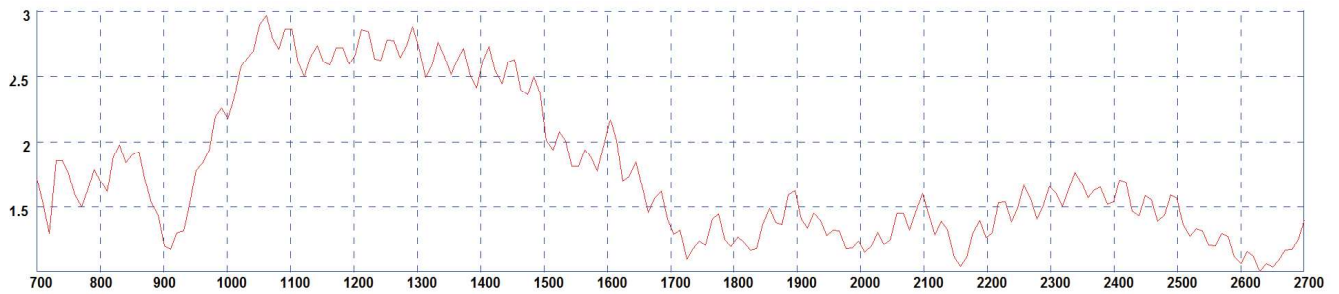
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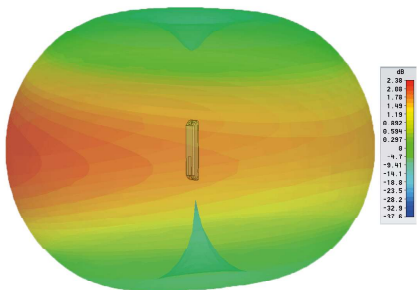
Typical VSWR on 350 x 350mm Ground Plane*



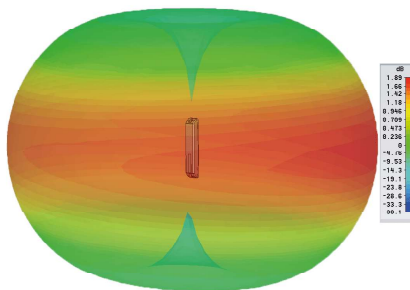
* VSWR measured mounted on a 350 x 350mm (14" x14") with 2m (6.6') of RG174 cable

3D Patterns of Antenna in Free Space

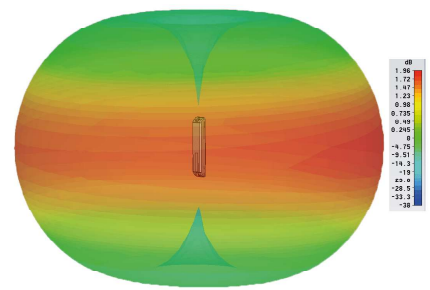
Typical 3D Pattern (700MHz)



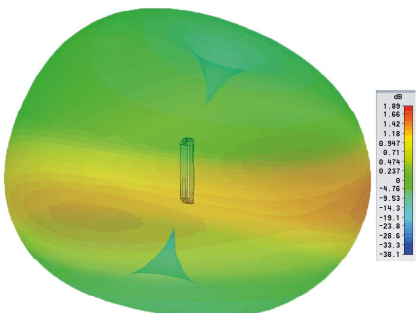
Typical 3D Pattern (800MHz)



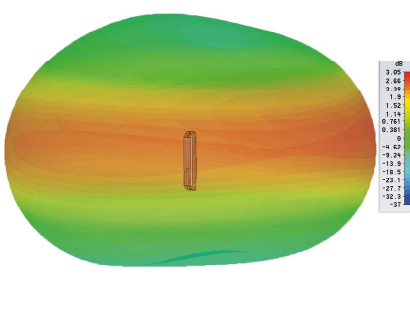
Typical 3D Pattern (900MHz)



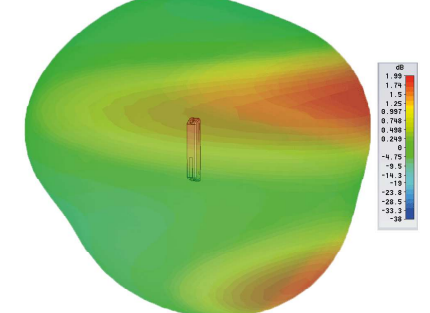
Typical 3D Pattern (1800MHz)



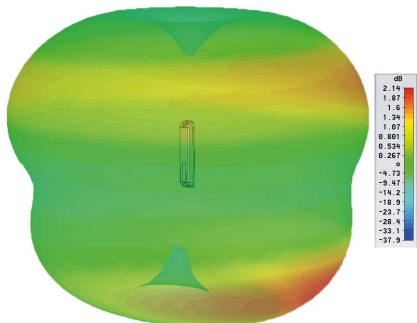
Typical 3D Pattern (1900MHz)



Typical 3D Pattern (2100MHz)



Typical 3D Pattern (2400MHz)



Typical 3D Pattern (2600MHz)

