

# Low Profile Antenna

## 617-960/1710-6000MHz

LPB-6-60

PANORAMA ANTENNAS



### LPB-6-60

- Cost Effective 2G/3G/4G/5G coverage
- Integrated low loss cable
- Robust but subtle design

The LPB-6-60 antenna is a cost effective omni-directional panel mount antenna for 4G/3G/2G and 5G devices from 617-960/1710-6000MHz and is suitable for external or internal installation.

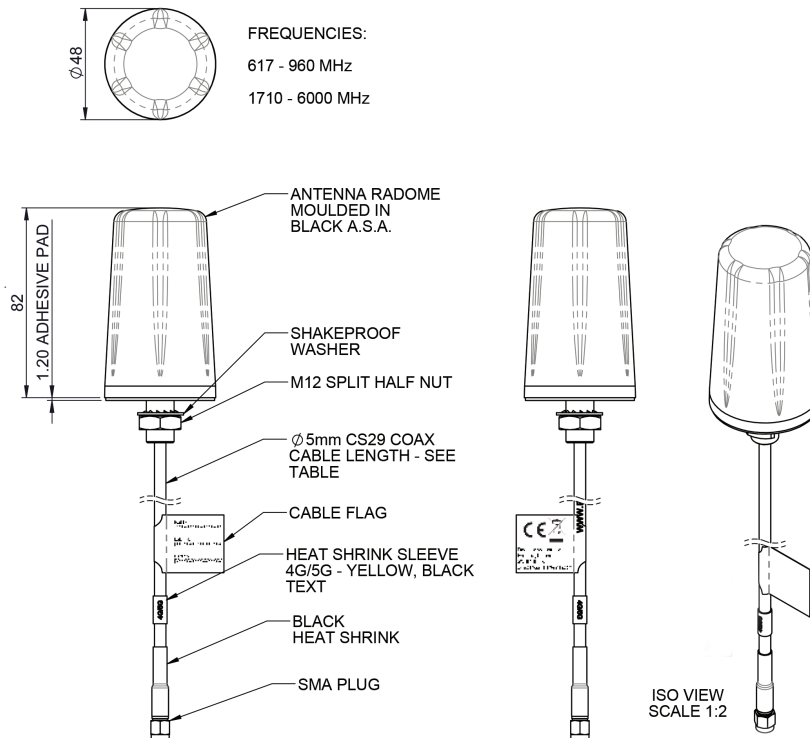
The LPB-6-60 is supplied with integrated 5mm double shielded CS29 coaxial cable and is available with a wide variety of connectors fitted.

This antenna is an ideal solution for use in industrial and domestic environments with cellular modems/routers and Machine to Machine (M2M) wireless connectivity applications.

The LPB-6-60 requires a conductive ground plane of >300mm (1') diameter for optimal performance or it can be bracket mounted (p/n B4BE-6-60).

### Technical Drawing

LPB-6-60-5SP Shown



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#### Product Data

#### Part No.

LPB-6-60-5SP

LPB-6-60-2SP

#### Electrical Data

Frequency Range (MHz)	617-960 / 1710-6000	
Operational Band	2G/3G/4G/5G	
	617-960MHz	3dBi
Peak Realised	1710-2700 MHz	4dBi
Gain: Isotropic*	3400-3800MHz	8dBi
	4.9-6000Mhz	9dBi
VSWR	<2.5:1	
Nominal Radiated Efficiency*	> 70%	
Polarisation	Vertical	
Pattern	Omni-directional	
Impedance	50Ω	
Max Input Power (W)	30	

#### Mechanical Data

Dimensions (mm)	Height mounted	164 (6.46")
	Diameter	48(1.89")
Operating Temp (°C)	-40° / +85°C ( -40° / 185°F )	
Material	ASA, aluminium, zinc plated steel	
Colour	Black & natural	
Ingress Protection	IP66	

#### Mounting Data

Fixing	Panel mount	
Mounting Hole Diameter (mm)	12 (1/2")	
Weight (g)	340	250

#### Cable Data

Type	CS29 (double shielded RG58)	
Diameter (mm)	5 (0.19")	
Length (m)	5 (17')	2 (6')
Termination	SMA plug	

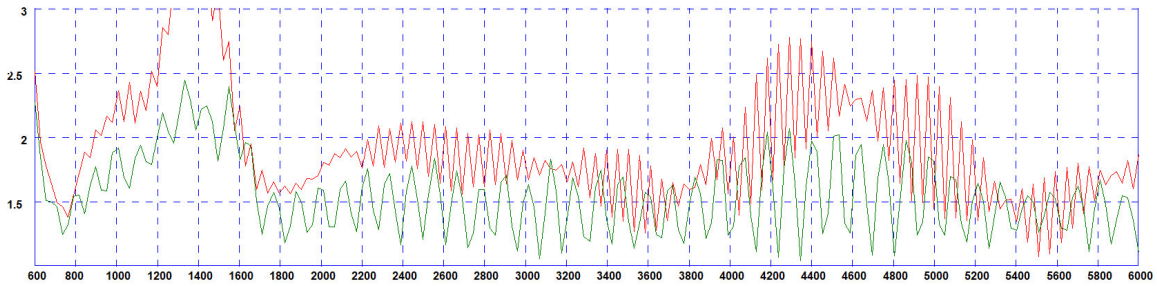
\* Peak gain and efficiency simulated in CST microwave studio with antenna mounted on a 600x600mm (2'x2') ground plane excluding cable loss.

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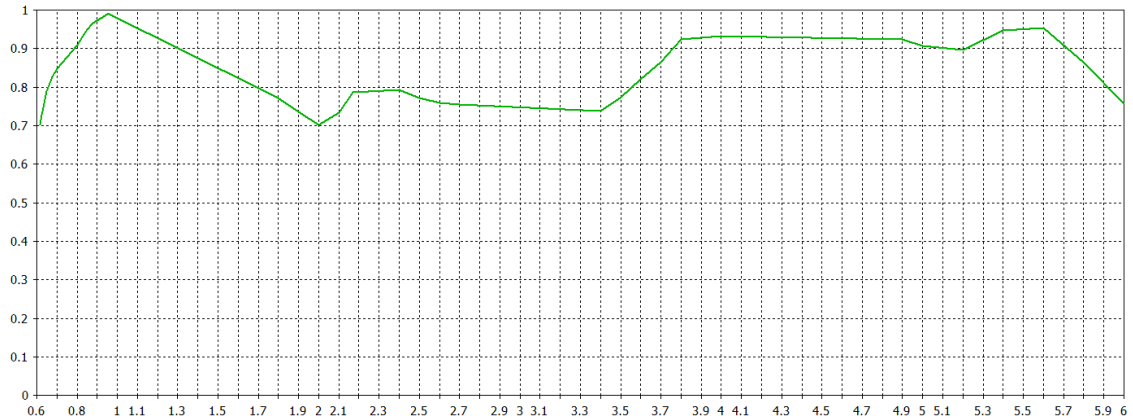
Electrical Data

Typical VSWR\*



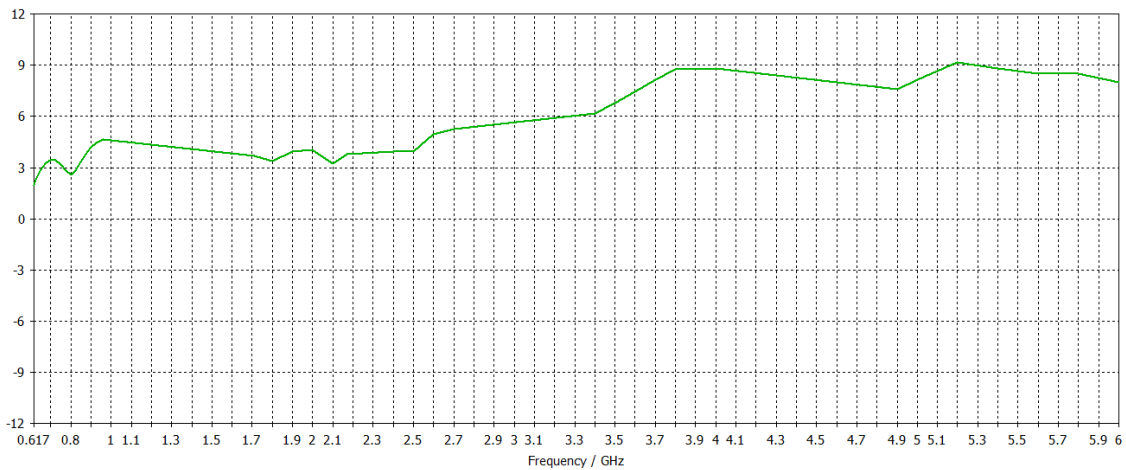
\*Red Plot =VSWR measured on 600x600mm (2'x2') ground plane with 2m (6'6") of CS29 Cable. Green Plot = VSWR measured on 600x600mm (2'x2') ground plane with 5m (17') of CS29 Cable.

Total Efficiency\*



\*Total efficiency simulated in CST Microwave studio on 600x600mm (2'x2') ground plane without cable loss

Swept Peak Gain\*



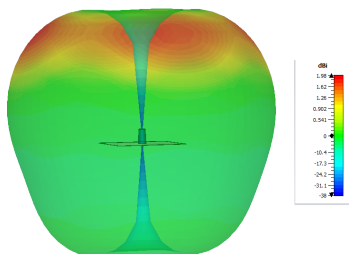
\*Swept peak gain simulated in CST Microwave studio on 600x600mm ground plane excluding cable loss.

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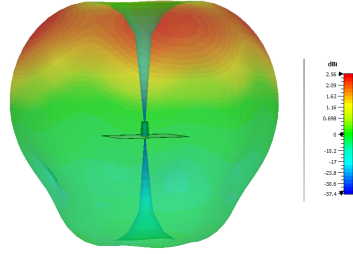
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3D Patterns

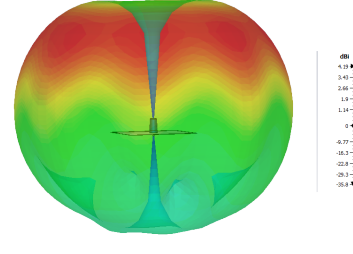
3D Plot (617 MHz)



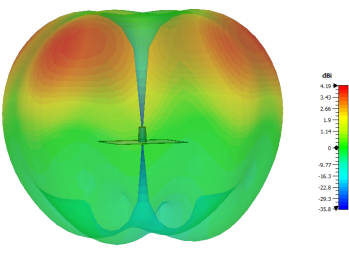
3D Plot (700MHz)



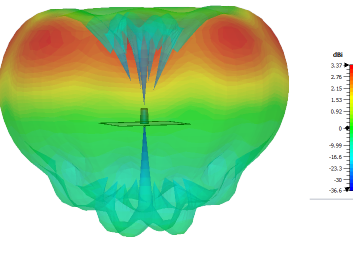
3D Plot (800MHz)



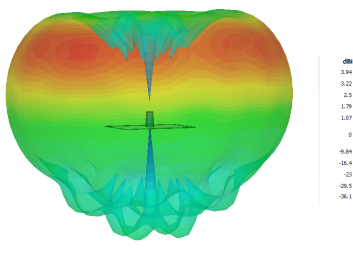
3D Plot (900MHz)



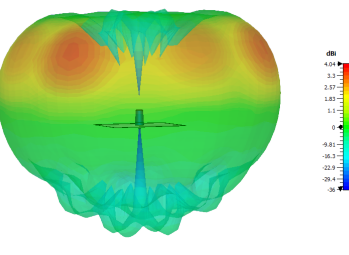
3D Plot (1710MHz)



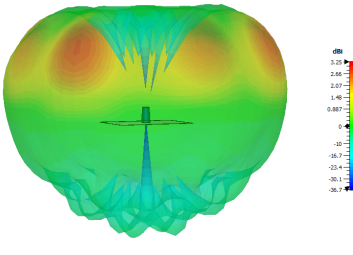
3D Plot (1800MHz)



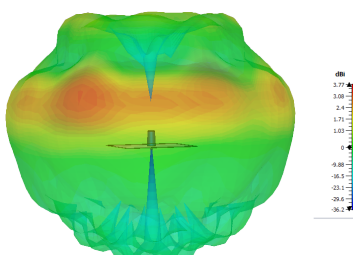
3D Plot (1900 MHz)



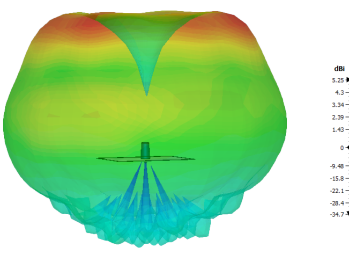
3D Plot (2000MHz)



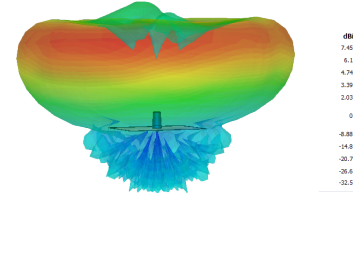
3D Plot (2100MHz)



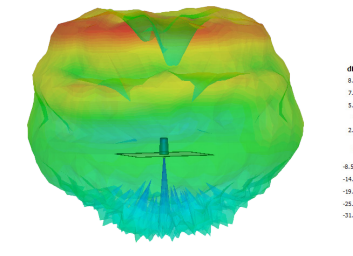
3D Plot (2600MHz)



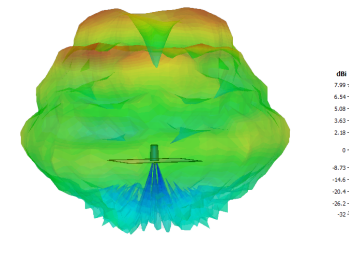
3D Plot (3600MHz)



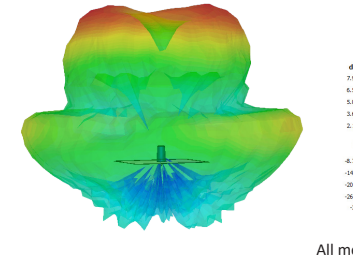
3D Plot (4900MHz)



3D Plot (5400 MHz)



3D Plot (6000MHz)



All measurements simulated in CST Microwave Studio without cable