

# 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.

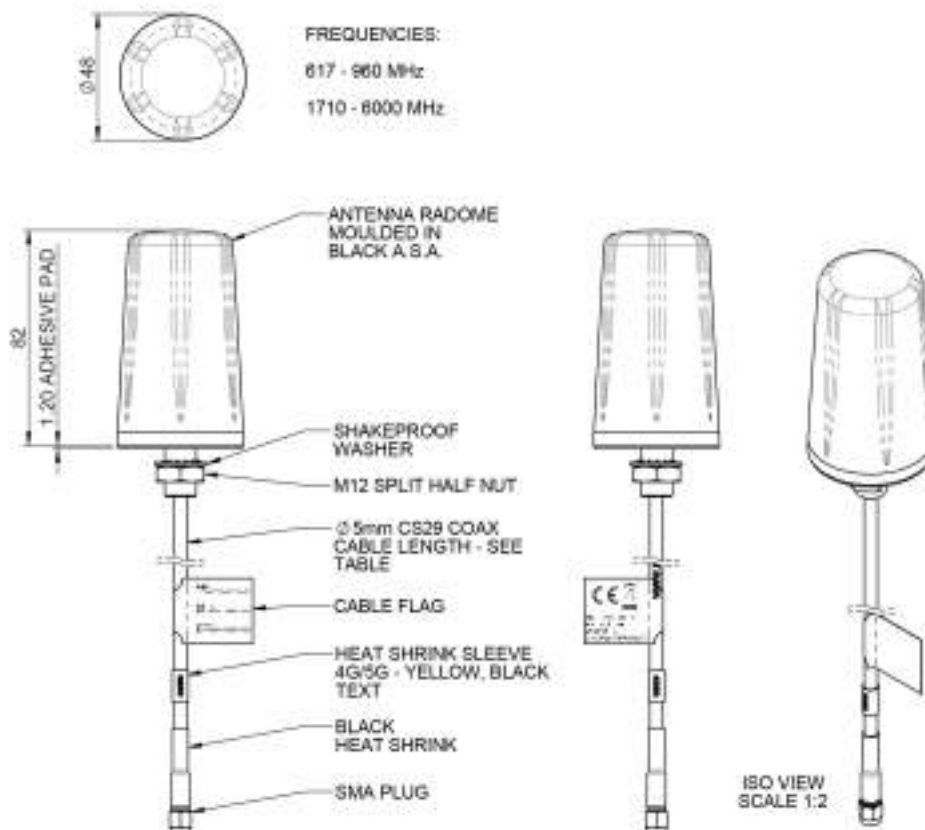
The LPB-6-60 is supplied with integrated 5mm double shielded CS29 coaxial cable and is available with a wide variety of connectors fitted.

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



# Low Profile Antenna

## 617-960/1710-6000MHz

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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

4.9-6GHz 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 82 (3.23")

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

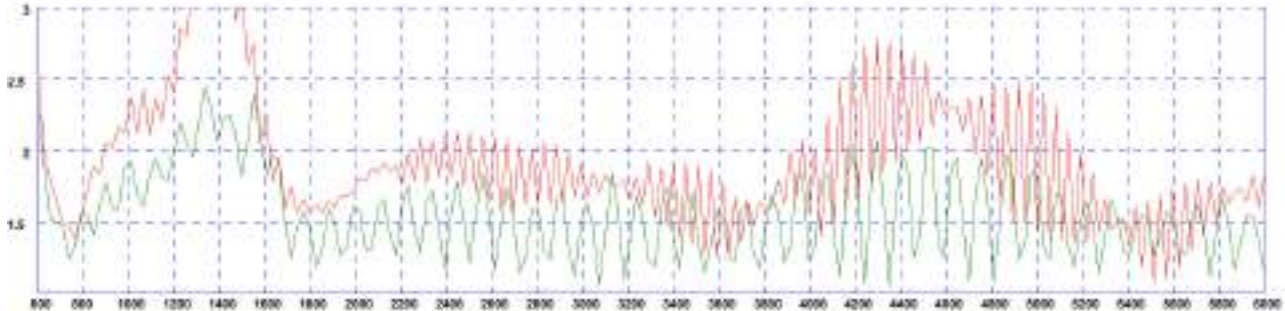
\* Peak gain and efficiency simulated in CST microwave studio with antenna mounted on a 600x600mm (2'x2') ground plane excluding cable loss.

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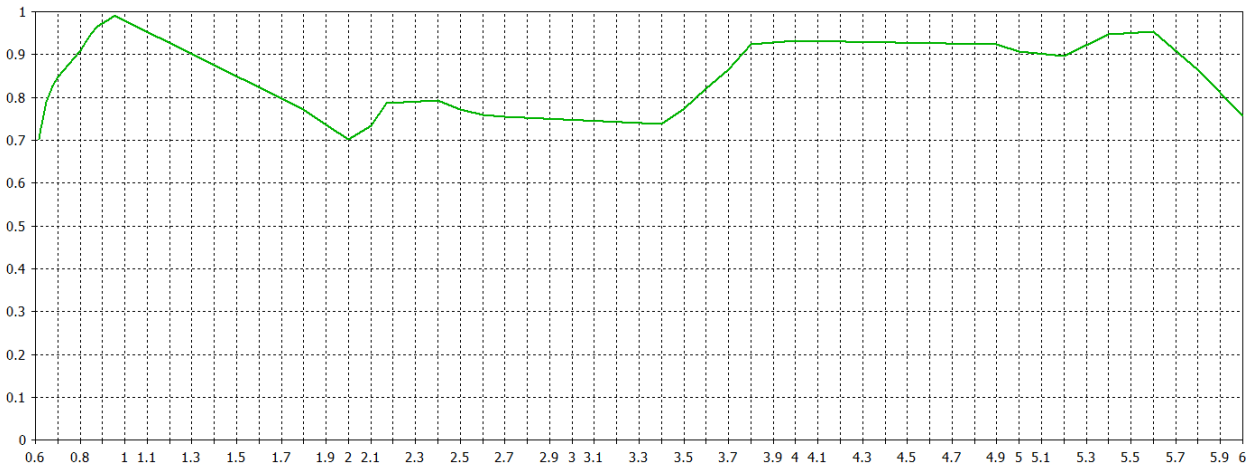
## Electrical Data

Typical VSWR\*



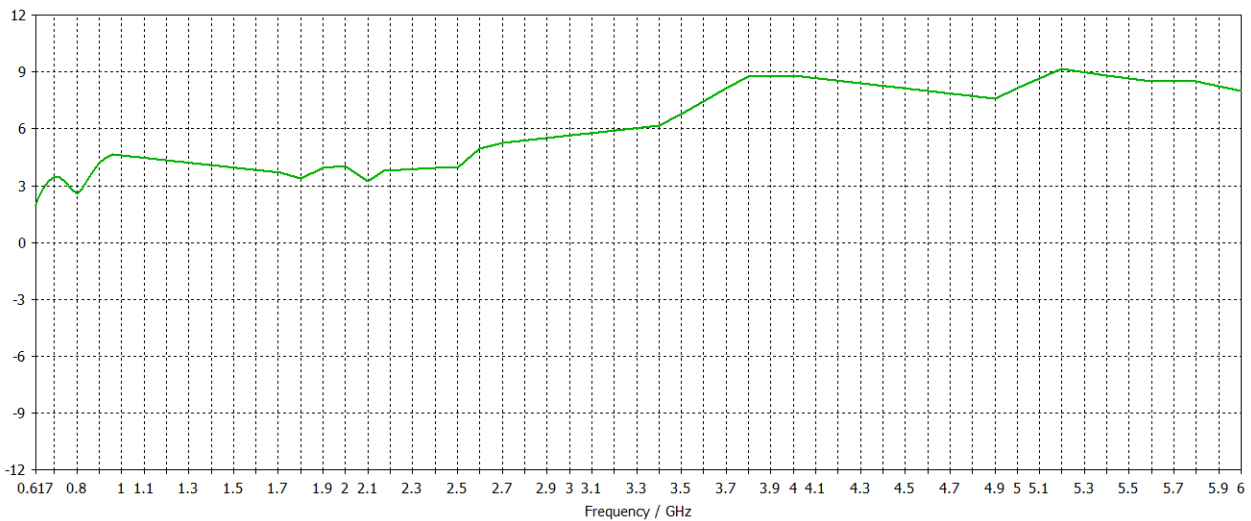
\*Red Plot =VSWR measured on 600x600mm (2'x2') ground plane with 2m (6'6") of CS29 Cable. Green Plot = VSWR measured on 600x600mm (2'x2') ground plane with 5m (17') of CS29 Cable.

Total Efficiency\*



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

Swept Peak Gain\*



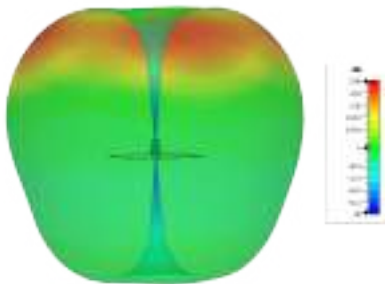
\*Swept peak gain simulated in CST Microwave studio on 600x600mm ground plane excluding cable loss.

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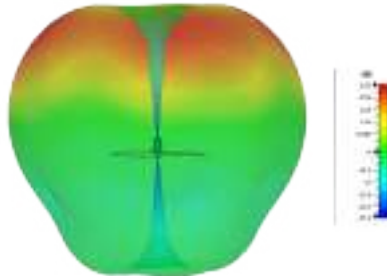
LPB-6-60

## 3D Patterns

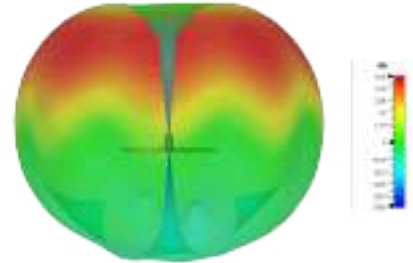
3D Plot (617 MHz)



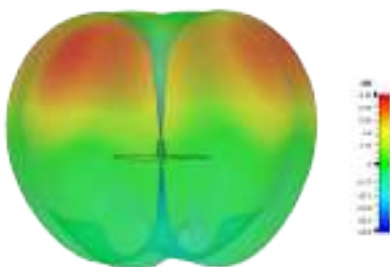
3D Plot (700MHz)



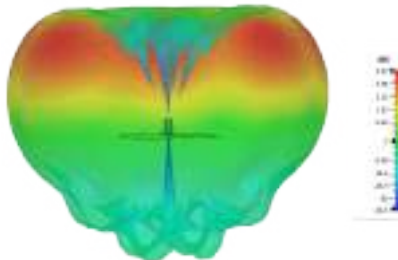
3D Plot (800MHz)



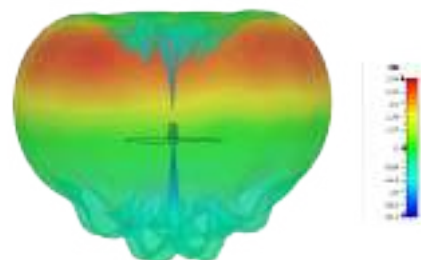
3D Plot (900MHz)



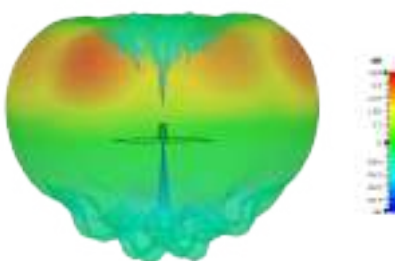
3D Plot (1710MHz)



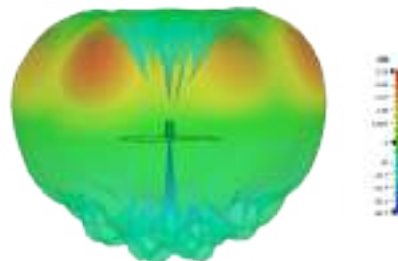
3D Plot (1800MHz)



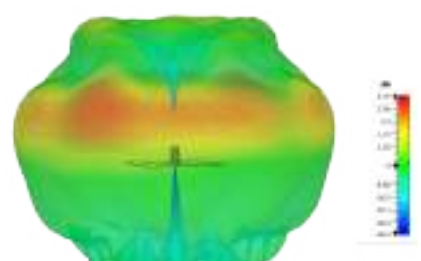
3D Plot (1900 MHz)



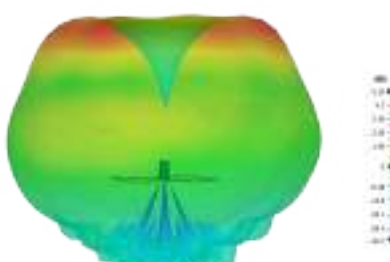
3D Plot (2000MHz)



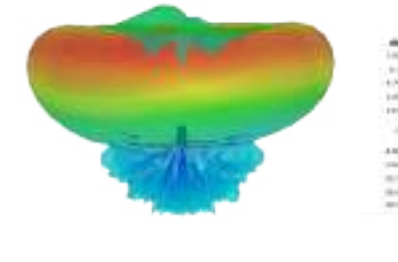
3D Plot (2100MHz)



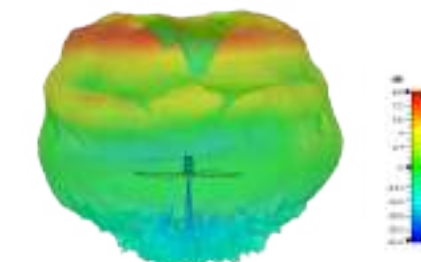
3D Plot (2600MHz)



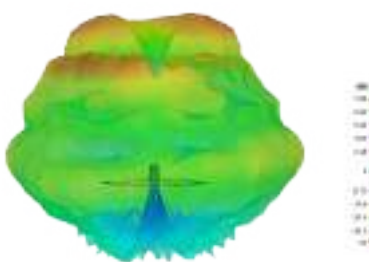
3D Plot (3600MHz)



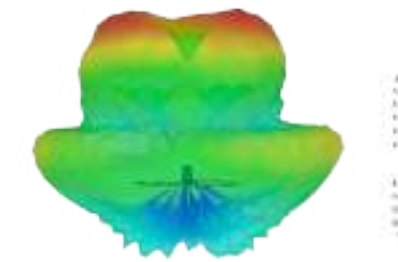
3D Plot (4900MHz)



3D Plot (5400 MHz)



3D Plot (6000MHz)



All measurements simulated in CST Microwave Studio without cable