M2M LPBE-7-27

Low Profile Antenna

22/05/2024 v1

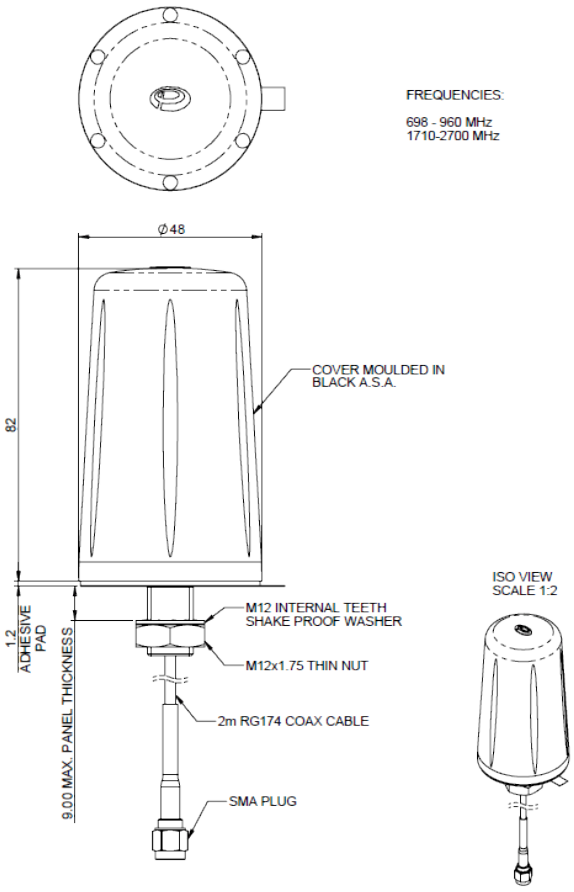
Rugged low profile design
Covers global cellular / LTE bands
Ideal for vending machines, utility meters & kiosks

The Panorama LPBE is a range of low cost high performance antennas for challenging applications. At only 82mm (3.22”) high and protected by a robust high impact radome the antenna is almost impervious to daily wear, tear and impact.

The LPBE offers excellent performance across a wide bandwidth. Mounted on a 300mm diameter groundplane or optional accessory bracket the LPBE covers global cellular and LTE frequencies from 698-960 MHz and 1710-2700MHz making it an extremely versatile product.

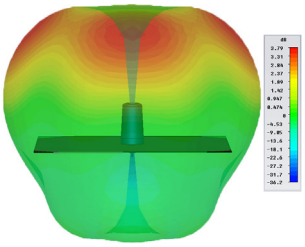
Supplied with a convenient adhesive pad and flexible RG174 cable the LPBE is easy to install and compatible with a large range of modems.

Technical Drawing

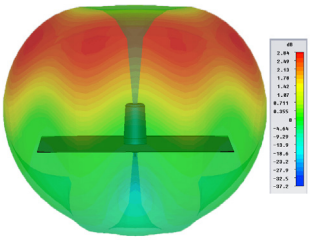


Simulated Radiation Patterns*

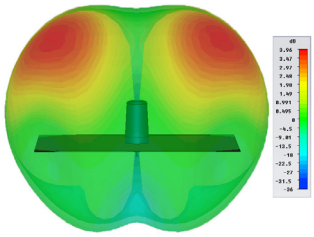
3D Gain Plot (700MHz)



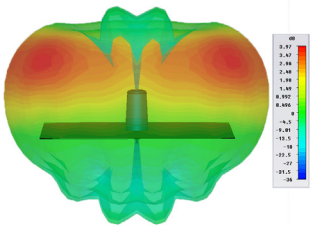
3D Gain Plot (800MHz)



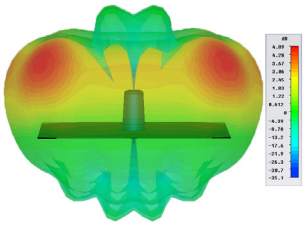
3D Gain Plot (900MHz)



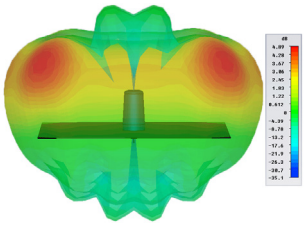
3D Gain Plot (1800MHz)



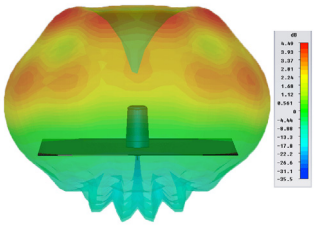
3D Gain Plot (1900MHz)



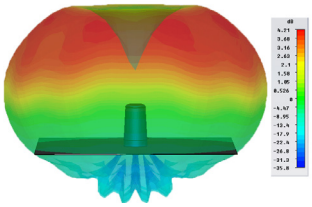
3D Gain Plot (2100MHz)



3D Gain Plot (2400MHz)

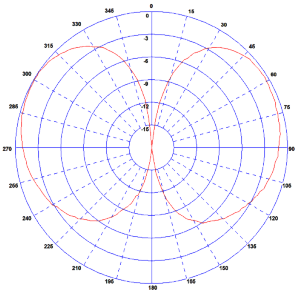


3D Gain Plot (2600MHz)

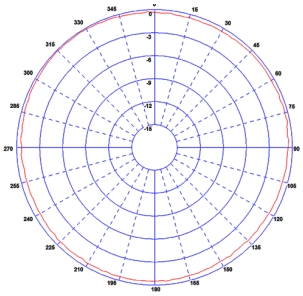


Measured Radiation Patterns*

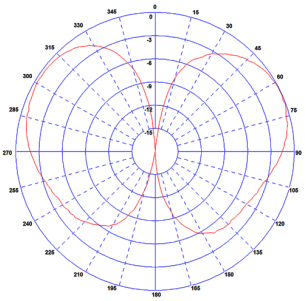
Typical E Plane (750MHz)



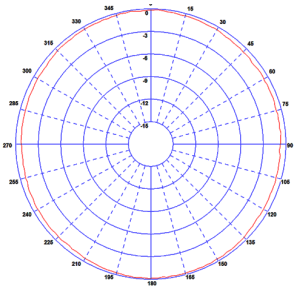
Typical H Plane (750MHz)



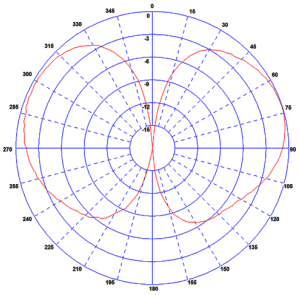
Typical E Plane (850MHz)



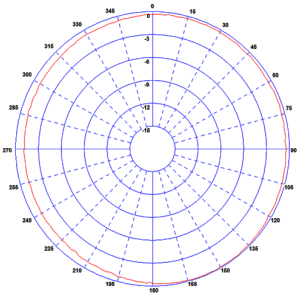
Typical H Plane (850MHz)



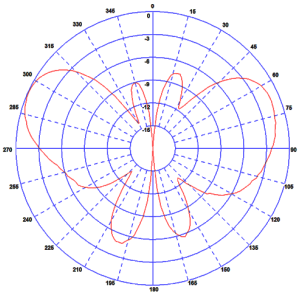
Typical E Plane (900MHz)



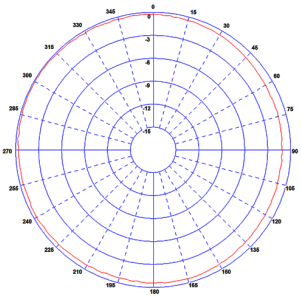
Typical H Plane (900MHz)



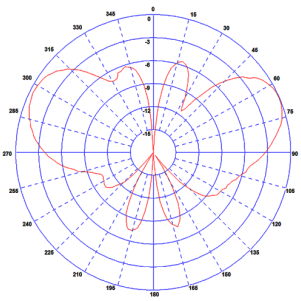
Typical E Plane (1800MHz)



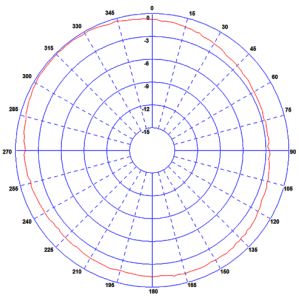
Typical H Plane (1800MHz)



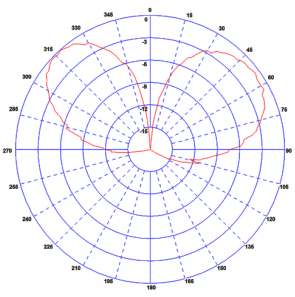
Typical E Plane (2100MHz)



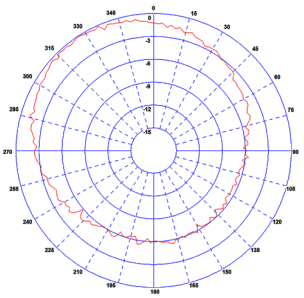
Typical H Plane (2100MHz)



Typical E Plane (2600MHz)

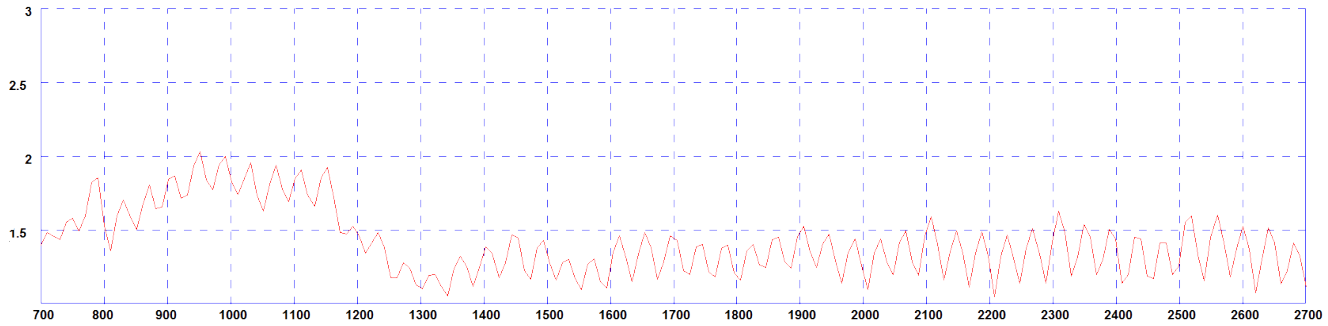


Typical H Plane (2600MHz)



*All simulations conducted in CST Microwave Studio on a 400 x 400mm (16” x 16”) groundplane. All measured patterns taken on a 300mm (12”) ground plane with 0.5m (1.5’) of RG174 cable.

Typical VSWR*



*VSWR measured on a 300mm (12”) diameter ground plane with with 2m (6’6”) of RG174 cable.

Part No.		
		LPBE-7-27-3SP
Electrical Data		
Frequency Range (MHz)		698-960 / 1710-2700
Operational Band		700/800/900/1800/1900/2100/ 2400/2600
Peak Gain (excluding cable loss)	698-960 MHz	3dBi
	1710-2170 MHz	5dBi
	2170-2700 MHz	4dBi
Typical VSWR*		<2:1
Polarisation		Vertical
Pattern		Omni-directional
Impedance		50Ω
Max Input Power (W)		25
Mechanical Data		
Dimensions (mm)	Height	82 (3.22”)
	Diameter	48 (1.89”)
Operating Temp (°C)		-40°/+80°C (-40°/176°F)
Material		UV stable ABS
Colour		Black
Mounting Data		
Fixing		Panel mount
Hole Diameter (mm)		12 (1/2”)
Max Panel Thckness (mm)		9 (0.35”)
Cable & Connector Data		
Cable Type		RG174
Cable Diameter (mm)		2.8 (0.1”)
Cable Length (m)		3 (9.8’)
Termination		SMA Plug

**VSWR measured on a 300mm (12”) diameter ground plane with with 2m (6’6”) of RG174 cable.

PANORAMA ANTENNAS

Panorama Antennas Ltd
Frogmore, London, SW18 1HF, United Kingdom

T: +44 (0)20 8877 4444
F: +44 (0)20 8877 4477
E: sales@panorama-antennas.com
www.panorama-antennas.com

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