LPBSC-6-60-[X]SPIP



- 2G/3G/4G/5G antenna solution covering global bands
- Designed for bracket or cabinet/enclosure installation
- Integrated double shielded coaxial cable
- IP68 rated (5m /7days)

LPBSC-6-60-[X]SPIP is an omni-directional broadband antenna range covering 617-960/1427-6000MHz which has been specially adapted for use in hostile, frequently flooded environments for applications like sewer monitoring and water metering.

The antenna is designed to be wall, mast or panel mounted either using a bracket (not supplied) or on a device / enclosure. The exposed metal parts of the antenna body are 316 stainless steel making the antenna very resistant to corrosion.

The omni-directional radiation pattern allows easy placement of the antenna in any position, without requiring directional alignment.

TheLPBSC-6-60-[X]SPIP antenna is supplied with an integral ultralow loss FR CS29 coaxial cable, of various lengths, fitted a special SMA plug which forms a seal preventing water wicking up the cable into the antenna housing during submersion.

This antenna is protected to IP68 (5m / 7 days) when mounted on a bracket provided that the SMA plug is properly connected.

ANTENNA RADOME MOULDED IN POLYPROPYLENE (PP) + 35% GLASS FILLED + UV STAB. -BLACK SF3-0222-SS-31 F2-0418-SS-316 EPROOF WASH SF3-0365-SS-310 AINLESS STEEL 316 STAINLESS STEEL (ALTERNATIVES NOT 948 M12 × 1.75 - 6g 316 STAINLESS STEEL (ALTERNATIVES NOT PERMITTED) 3M 5952 2 SILICONE GASKETS 1.00 ADHESIVE PAD M12 SEALING CAF 316 STAINLESS STEEL (ALTERNATIVES NOT PERMITTED) - SP5-0702-SS-316 ISO VIEW SCALE 1:4 Ø5mm CS29 FR COAX CABLE 2m LONG CEZ No. ABLE FLAG ŝ 9 HEAT SHRINK SLEEVE 4G/5G - YELLOW, BLACK TEXT (40) MAX ADHESIVE LINED BLACK HEAT SHRINK - IP68 SMA PLUG (SC1-SMA-GTRX-PC10) (ALTERNATIVES NOT PERMITTED)

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 W: www.panorama-antennas.com

Technical Drawing

Waiver: The data given above is indicative of the conditions and does not imply a guarantee of performance. These specifications are subject to change without notice. Copyright © Panorama Antennas Ltd. All rights reserved.

LPBSC-6-60-[X]SPIP Shown

Product Data

Part No.						
		LPBSC-6-60-2SPIP				
Electrical Data						
Frequency Range (MHz)		617-960 / 1427-6000				
Operational Band		2G / 3G / 4G / 5G				
Typical VSWR*		<3:1				
Peak Gain* (dBi)	617-960MHz	2.8				
	1427-2700MHz	3.6				
()	3300-6000MHz	5.5				
Polarisation		Vertical				
Pattern		Omni-directional				
Impedance		50Ω				
Max Input Powe	er (W)	30				
Mechanical Data						
Dimensions	Height mounted	82mm (3.2")				
Dimensions	Diameter	48mm (1.89")				
Operating Temp (°C)		-40° / +85°C (-40° / 185°F)				
Material		PP 35% GF, 316 Stainless Steel				
Colour		Black				
Ingress Protection	on	IP68 (5m / 7 days)				
Mounting Data						
Fixing		Panel mount				
Mounting Hole E	Diameter	19 mm (3/4")				
Cable Data						
Туре		FR CS29				
Diameter		5mm (0.2")				
Length		2m (6.6')				
Termination		IP68 SMA Plug				

* Typical VSWR and peak gain measured in free space on bracket with 0.5 m (1.6') of CS29 cable

LPBSC-6-60-[X]SPIP

Electrical Data Cell-Free Space on bracket

Measurement Conditions	4G/5G Antenna				
	Frequency Range (MHz)	LTE Bands	Peak Gain (dBi)	Efficiency (%)	
LPBSC-6-60 measured in free space on bracket with 0.5m (1.6') of CS29 cable	617-698	71, 105	2.0	75	
	699-798	12,13, 14 17,28	2.4	77	
	807- 862	5,19,20,26,27	2.4	71	
	880-960	8	2.8	64	
	1427-1518	11, 21, 74,75,76	3.6	72	
	1710-1920	2,3,4,9,25,35,39,66	2.6	71	
	1920-2170	1,23	2.6	71	
	2300-2400	30,40	3.0	70	
	2496-2690	7,38,41	3.4	72	
	3300-4200	22,42,43,48,77,78	5.5	78	
	4400-5000	79	4.9	62	

Typical VSWR* 5 4.5 4 3.5 3 2.5 2 1.5 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000 4200 4400 4600 4800 5000 5200 5400 5600 5800 6000 600 800

*VSWR measured in free space on bracket with 0.5m (1.6') of CS29 cable

LPBSC-6-60-[X]SPIP

Electrical Data Cell-Free Space on bracket



*Efficiency measured in free space on bracket with 0.5m (1.6') of CS29 cable



*Peak Gain measured in free space on bracket with 0.5m (1.6') of CS29 cable

LPBSC-6-60-[X]SPIP

3D Pattern Data in Free Space on bracket Cell





Typical H Plane- Cell - Patterns- 700-800MHz



Typical H Plane- Cell - Patterns- 800-900MHz



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 W: www.panorama-antennas.com

LPBSC-6-60-[X]SPIP 18/09/2024 V1 Page 5

Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice. Copyright © Panorama Antennas Ltd. All rights reserved.

LPBSC-6-60-[X]SPIP

3D Pattern Data in Free Space on bracket Cell





Typical H Plane- Cell- Patterns- 1750-1850 MHz



Typical H Plane- Cell- Patterns- 2100-2200 MHz



Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice. Copyright © Panorama Antennas Ltd. All rights reserved.

Panorama Antennas Ltd Frogmore, London, SW18 1HF, United Kingdom T: +44 (0)20 8877 4444 | F: +44 (0)20 8877 4477 E: selse@panorama-antennas.com W: www.panorama-antennas.com

LPBSC-6-60-[X]SPIP 18/09/2024 V1

LPBSC-6-60-[X]SPIP

3D Pattern Data in Free Space on bracket Cell



Typical 3D Pattern- Cell - 2650 MHz



Typical 3D Pattern- Cell - 3600 MHz



Typical H Plane- Cell - Patterns- 2300-2400 MHz 2300 2350 2400

Typical H Plane- Cell - Patterns- 2600-2700 MHz



Typical H Plane- Cell - Patterns- 3400-4000 MHz



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 W: www.panorama-antennas.com

LPBSC-6-60-[X]SPIP 18/09/2024 V1 Page 7

Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice. Copyright © Panorama Antennas Ltd. All rights reserved.

3D Pattern Data in Free

4G/5G Low Profile Antenna PANORAMA (2) ANTENNAS

LPBSC-6-60-[X]SPIP

Typical 3D Pattern- Cell - 4700 MHz Z -11 -у y -25 -Z



LPBSC-6-60-[X]SPIP

Electrical Data Cell -Ground Plane

Measurement Conditions	4G/5G Antenna			
	Frequency Range (MHz)	LTE Bands	Peak Gain (dBi)	Efficiency (%)
LPBSC-6-60 measured on 600x600mm (2'x2') ground plane with 0.5m (1.6') of CS29 cable	617-698	71, 105	3.8	71
	699-798	12,13, 14 17,28	3.1	59
	807- 862	5,19,20,26,27	3.5	69
	880-960	8	3.9	75
	1427-1518	11, 21, 74,75,76	4.1	54
	1710-1920	2,3,4,9,25,35,39,66	4.7	67
LARR 2778	1920-2170	1,23	4.6	69
	2300-2400	30,40	4.1	73
	2496-2690	7,38,41	4.7	80
	3300-4200	22,42,43,48,77,78	6.7	74
	4400-5000	79	5.6	57



600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000 4200 4400 4600 4800 5000 5200 5400 5600 5800 6000 *VSWR measured on 600x600mm (2'x2') ground plane with 0.5m (1.6') of CS29 cable

LPBSC-6-60-[X]SPIP





*Peak Gain measured on 600x600mm (2'x2') ground plane with 0.5m (1.6') of CS29 cable

LPBSC-6-60-[X]SPIP

3D Pattern Data on Ground Plane Cell







Typical H Plane- Cell - Patterns- 700-800MHz



Typical H Plane- Cell - Patterns- 800-900MHz



Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice. Copyright © Panorama Antennas Ltd. All rights reserved.

LPBSC-6-60-[X]SPIP 18/09/2024 V1 Page 11

LPBSC-6-60-[X]SPIP

3D Pattern Data on Ground Plane Cell



Typical 3D Pattern- Cell - 1800 MHz



Typical 3D Pattern- Cell - 2150 MHz





Typical H Plane- Cell- Patterns- 1750-1850 MHz



Typical H Plane- Cell- Patterns- 2100-2200 MHz



Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice. Copyright © Panorama Antennas Ltd. All rights reserved.

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 W: www.panorama-antennas.com

LPBSC-6-60-[X]SPIP 18/09/2024 V1

LPBSC-6-60-[X]SPIP

3D Pattern Data on Ground Plane Cell



Typical 3D Pattern- Cell - 2650 MHz



Typical 3D Pattern- Cell - 3600 MHz





Typical H Plane- Cell - Patterns- 2600-2700 MHz



Typical H Plane- Cell - Patterns- 3400-4000 MHz



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 W: www.panorama-antennas.com

LPBSC-6-60-[X]SPIP 18/09/2024 V1 Page 13

Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice. Copyright © Panorama Antennas Ltd. All rights reserved.

3D Pattern Data on

4G/5G Low Profile Antenna PANORAMA (2) ANTENNAS

LPBSC-6-60-[X]SPIP



