

Powertec 4G-5G LPDA Antenna, 698 to 4000 MHz

Model Number

LLP-6940-12.N2

Order Code

WEB-021

Polarisation

SISO

Design Type

Log Periodic Dipole Array

RF Category

Cellular



The Blackhawk LPDA Antenna is one of the most popular external antenna solutions for poor 3G / 4G voice and data service. This single antenna can be used on any mobile network, in any area without worrying about compatibility. It is the ideal roof-mounted antenna for Cel-Fi repeaters.

The LPDA antenna covers all cellular bands between the 700 and 4000 MHz range with a high peak gain which projects maximum energy in the direction of the cell tower, while maintaining a wide enough beam to capture signal reflections off nearby buildings, hills, and signal scattered by trees. Multiband LTE-NR covering major bands between 698 to 2690 MHz.

A Log Periodic Dipole Antenna, or LPDA for short, is a clever antenna design that provides exceptional wideband performance by phasing a series of elements together, much like an ordinary Yagi but with each successive element of a smaller (or larger) length. The result of this clever engineering is an antenna that holds high gain, with good tuning, across the entire cellular frequency range.

- Ruggedised construction for Australian conditions
- Fully welded, powder coat aluminium design
- Stainless steel mounting clamp included
- 30 cm tail with pre-terminated N Female connector

Antenna Technical Data

PHYSICAL CHARACTERISTICS

Construction Material	Aluminium	RF Connections	1
Radome Colour	Black Powdercoat	Environmental Rating	No Data
Dimensions	1240 x 200 x 60 mm	Operating Temperature	-40 °C to 65 °C
Weight	2.2 kg	Mounting	Pole mount Ø 30-50 mm

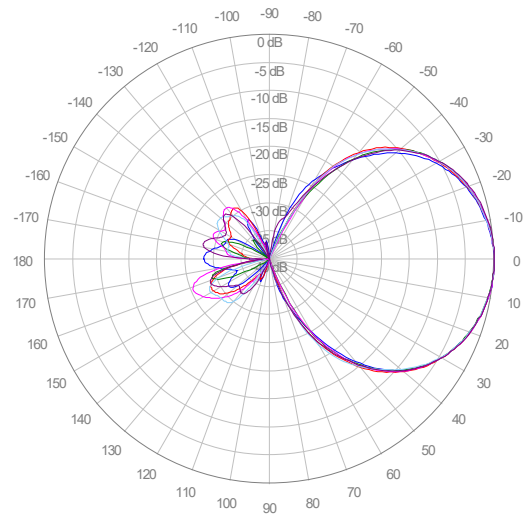
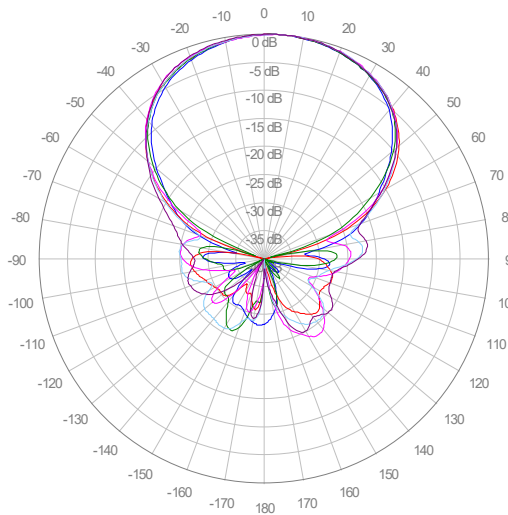
ELECTRICAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS

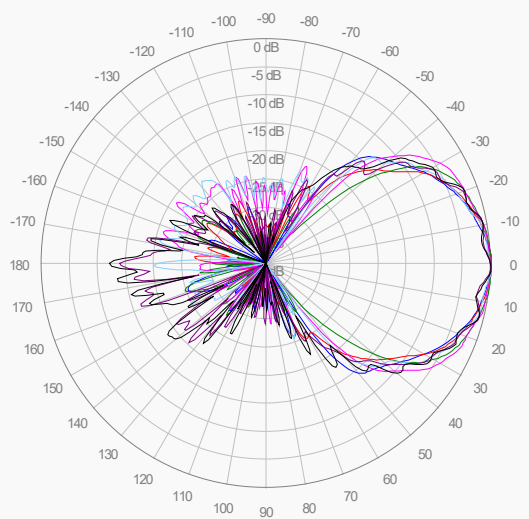
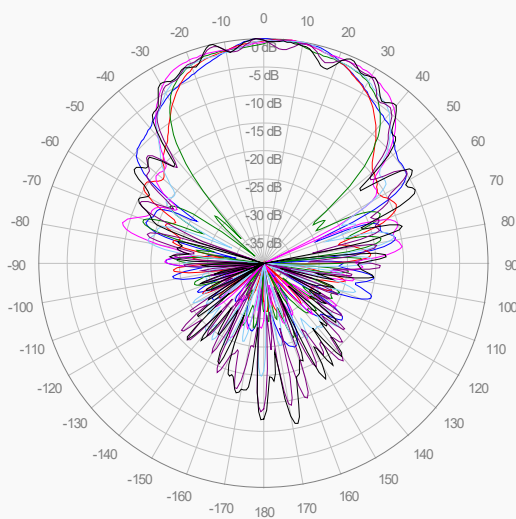
Input Impedance	50 Ω	Input Connector	N
Polarisation	Vertical (V)	Input Connector Gender	Female
Max. Input Power	50 W	Cable Series	RG-142
PIM, 3rd Order	-	Cable Length	300 mm

FREQUENCY RANGE	PEAK GAIN	VSWR	AZ.	EL.	F/B RATIO	INTER-PORT	XPI
698 to 803 MHz	11.1 dBi	< 1.8:1	60°	46°	> 28 dB		
803 to 960 MHz	11.3 dBi	< 1.8:1	60°	47°	> 26 dB		
1695 to 2200 MHz	11.5 dBi	< 1.8:1	45°	34°	> 24 dB		
2200 to 2700 MHz	10.7 dBi	< 1.8:1	50°	40°	> 13 dB		
3300 to 4000 MHz	9.5 dBi	< 1.6:1	34°	30°	> 9 dB		

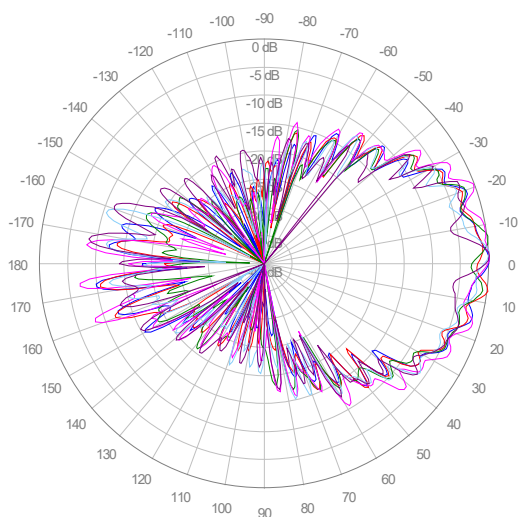
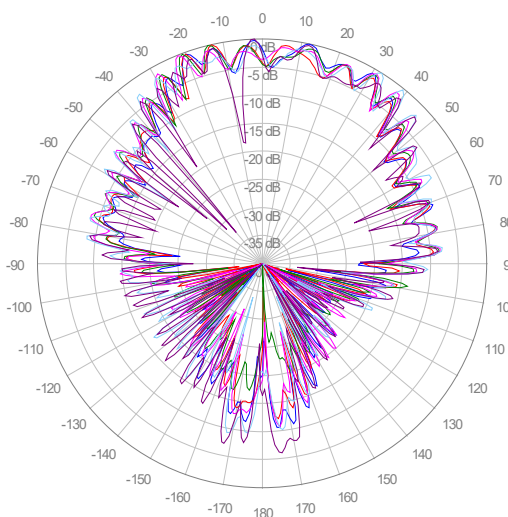
698 to 960 MHz



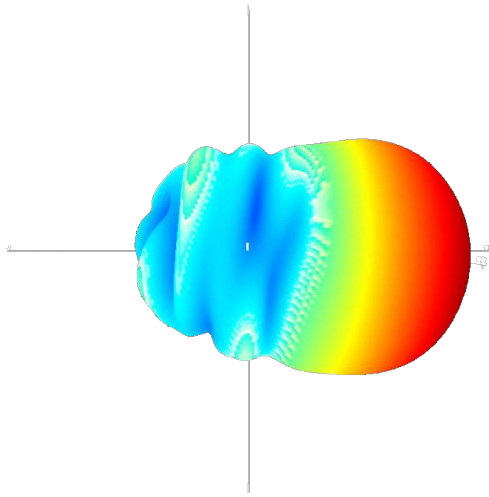
1695 to 2700 MHz



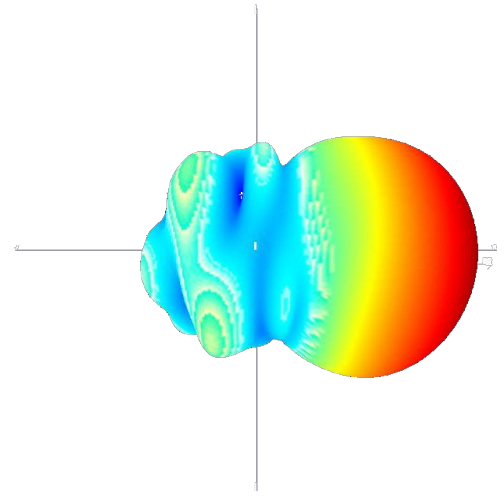
3300 to 4000 MHz



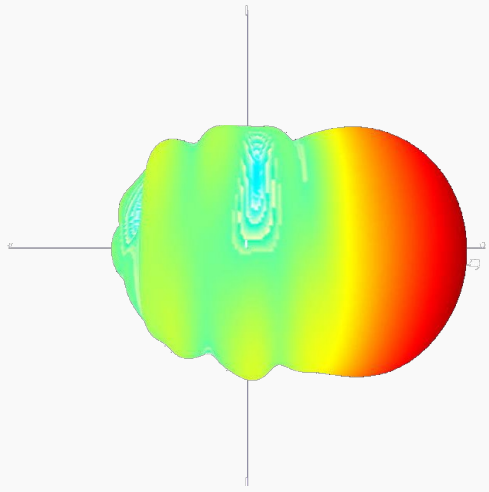
723 MHz



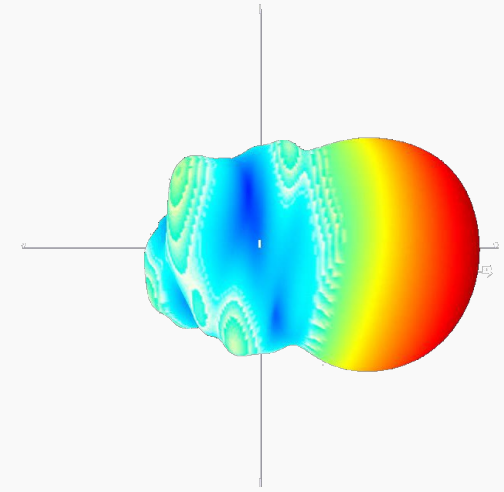
778 MHz



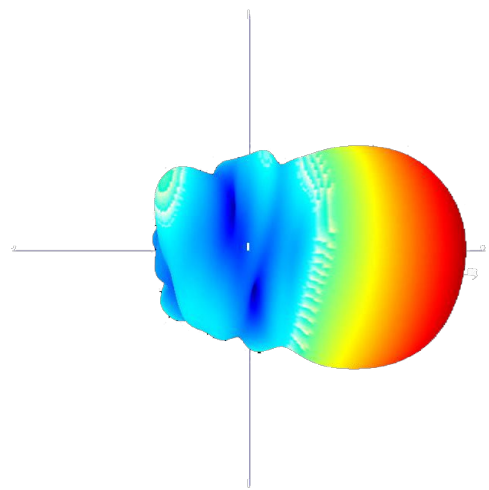
840 MHz



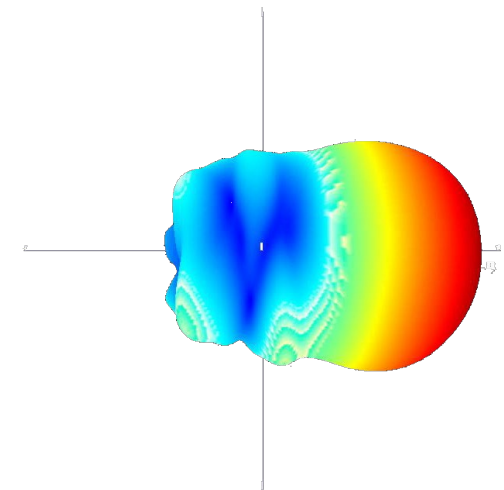
885 MHz



911 MHz

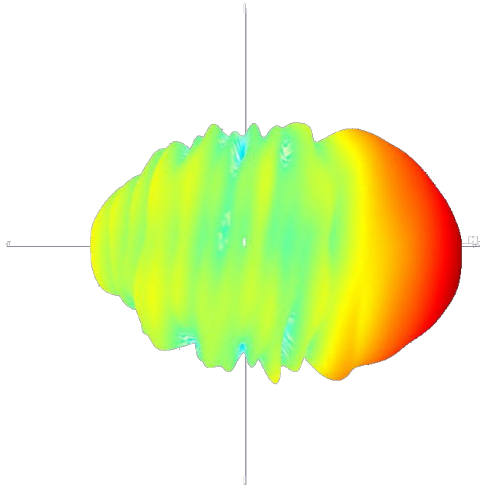


956 MHz

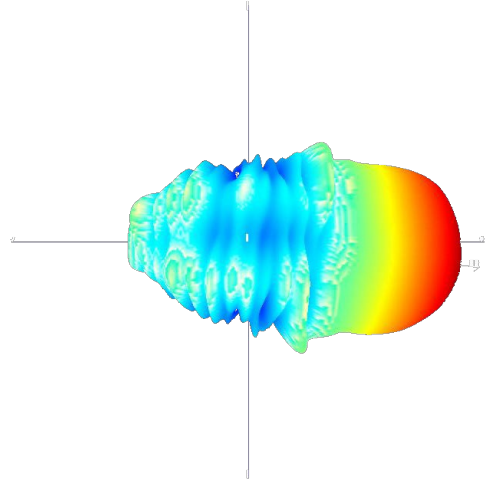


3D RADIATION PATTERNS

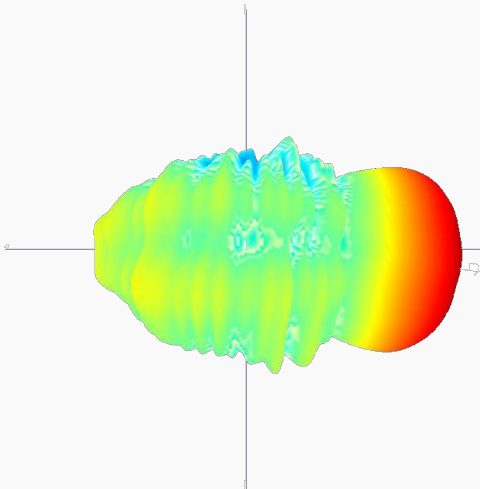
1710
MHz



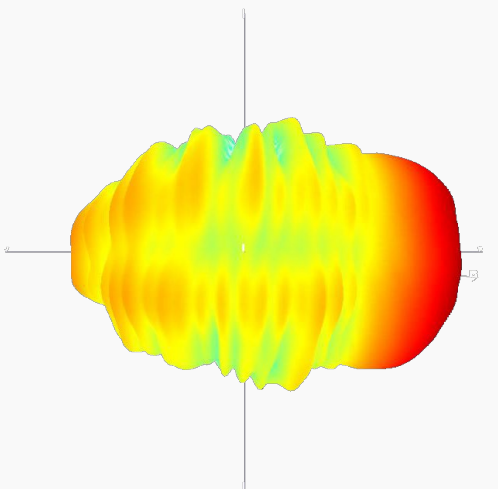
1880
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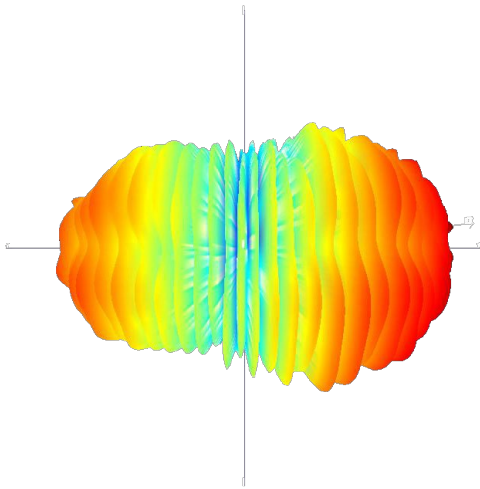
2170
MHz



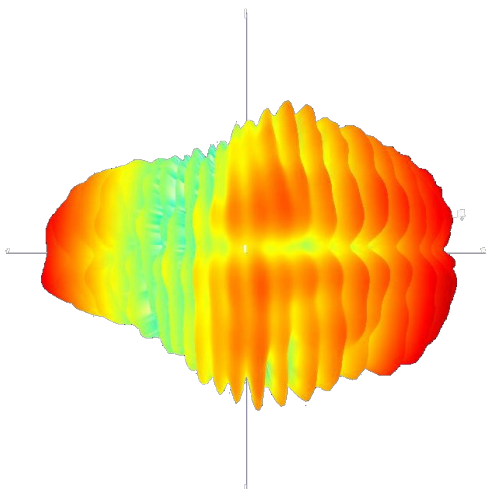
2300
MHz



2700
MHz



3600
MHz



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