# POWERTEC | DATASHEET | UNCONTROLLED WHEN PRINTED PUBLIC | August 4, 2025 10:55

Page



Powertec Wireless Technology ABN: 42 082 948 463 PO Box 1034, Ashmore City Queensland, Australia, 4214 sales@powertec.com.au 1300 769 378

# Powertec 4G-5G LPDA Antenna, 698 to 4000 MHz, 4.3-10 Female

SKU IBC-PT-00021 MPN LLP-6940-12.432 Barcode 9337692001529

### **Description**

Powertec's LPDA Antenna is the most popular external antenna solution for poor 4G-5G 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 4000 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 the Yagi design but with each successive element of a smaller (or larger) length. The result of this clever engineering is an antenna that holds ...

#### Read More





**Powertec** 

Powertec is a wireless technology manufacturer and systems integrator based in Australia. Operating since 1995, Powertec has grown to become the leading wireless technology distributor in its region, and a leading Infratech systems developer. Supporting over 1500 partners the company provides procurement, design, project management, and support services across Australia, New Zealand, Pacific ...

# **RF Specification**

Start Frequency

698 MHz

Stop Frequency

4000 MHz

Max. Input Power

50 W

Polarisation

Vertical (V)

Input Impedance

50 Ω

**RF Connectors** 

## Ports RF Interface Body Shape Cable Series Length

1 4.3-10 Female Straight RG-142 300 mm

Frequency Test Data

# Start Freq. Stop Freq. Peak Gain VSWR Azimuth Elevation F/B Ratio

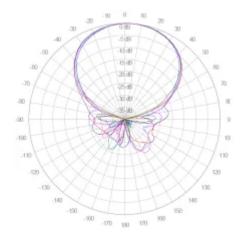
698 MHz	803 MHz	11.1 dBi	< 1.8:1 60°	46°	> 28 dB
803 MHz	960 MHz	11.3 dBi	< 1.8:1 60°	47°	> 26 dB
1695 MHz	2200 MHz	11.5 dBi	< 1.8:1 45°	34°	> 24 dB

# Start Freq. Stop Freq. Peak Gain VSWR Azimuth Elevation F/B Ratio

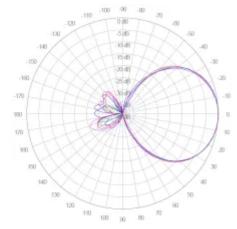
2200 MHz 2700 MHz 10.7 dBi < 1.8:1 50° 40° > 13 dB 3300 MHz 4000 MHz 9.5 dBi < 1.6:1 34° 30° > 9 dB

Polar Patterns Start Frequency 698 MHz Stop Frequency 960 MHz

#### **Azimuth Polar Plot**

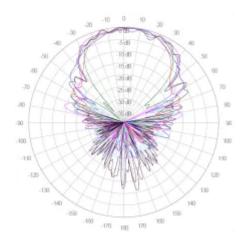


#### **Elevation Polar Plot**

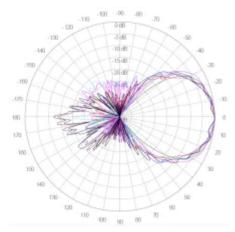


Start Frequency 1695 MHz Stop Frequency 2700 MHz

**Azimuth Polar Plot** 

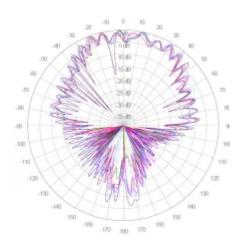


#### **Elevation Polar Plot**

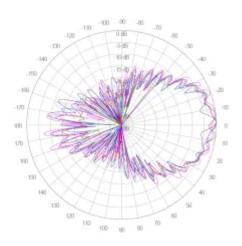


Start Frequency 3300 MHz Stop Frequency 4000 MHz

#### **Azimuth Polar Plot**



**Elevation Polar Plot** 



# **Physical Specification**

Subtype

Log Periodic Dipole Array

**Input Ports** 

1

**MIMO** 

1x1 SISO

Min. Operating Temperature

-40 °C

Max. Operating Temperature

65°C

**Dimensions** 

1240 x 60 x 200

Materials

Aluminium

Mounting

Pole Clamp 25 to 52 mm ø

Weight

2.2 kg

Disclaimer: Although care has been taken to ensure the accuracy, completeness and reliability of the information provided, Powertec assumes no responsibility therefore. The user of the information agrees that the information is subject to change without notice. Powertec assumes no responsibility for the consequences of use of such information, nor for any infringement of third party intellectual property rights which may result from its use. IN NO EVENT SHALL POWERTEC BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, OR INCIDENTAL DAMAGE RESULTING FROM, ARISING OUT OF OR IN CONNECTION WITH THE USE OF THE INFORMATION.

