

# High-Power LPDA Antenna

800 – 3000 MHz

Product Code: LPDA-A0052

VERSION: 2.9



## PRODUCT FEATURES:

- Wideband frequency 800 to 3000 MHz
- VSWR < 2:1
- High gain: 12 dBi average
- Feed power handling:
  - 500 W CW (0.8 to 2 GHz)
  - 200 W CW (2 to 3 GHz)
- Rugged construction

## PRODUCT APPLICATIONS:

- Wideband jamming
- Covers the GSM-800, 900, 1800, 1900 and 3G frequency bands

## SPECIFICATIONS:

<b>Electrical:</b>	
Frequency range	800 – 3000 MHz
VSWR	< 2:1
Nominal input impedance	50 Ω
Feed power handling	500 W CW (0.8 – 2 GHz) 200 W CW (2 – 3 GHz)
Gain (free space)	12 dBi typical
Polarisation	Vertical
Connectors	7-16 female
E-plane beamwidth:	
1 GHz	36°
2 GHz	28°
3 GHz	22°
H-plane beamwidth:	
1 GHz	64°
2 GHz	68°
3 GHz	72°
Front-to-back ratio	> 20 dB
<b>Mechanical:</b>	
Dimensions (l x w x h)	< 720 mm x 80 mm x 470 mm
Material	Brass, stainless steel, fibreglass
Total mass	4.5 kg including mounting bracket
<b>Environmental: designed to meet the following specifications</b>	
Wind survival	160 km/h (theoretical)
Temperature range	- 30 °C to + 70 °C
Water and dust resistance	IP65
Corrosion	Appropriate anti-corrosion measures are taken in the design of antenna for harsh environmental conditions

## PRODUCT DESCRIPTION:

This directional log-periodic dipole array (LPDA) is primarily designed for high-power transmitting applications. It covers a frequency band of 800 to 3000 MHz with an average gain of 12 dBi. The antenna is supplied with hardware to mount onto a 60 mm mast.

The antenna consists of two high gain log-periodic antennas in a common radome. The antennas are connected in phase using a power divider. This allows high gain within a relatively small radome.

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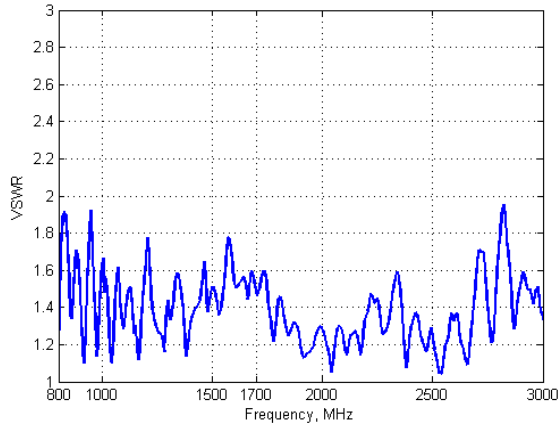
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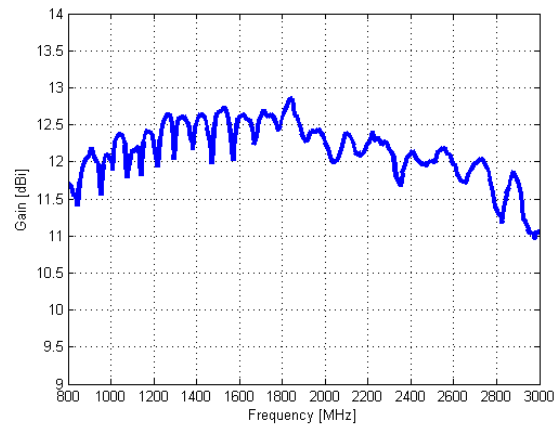
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## VSWR AND GAIN GRAPHS:

Typical VSWR:

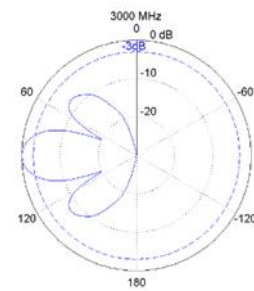
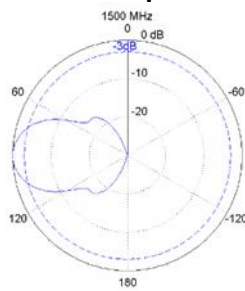
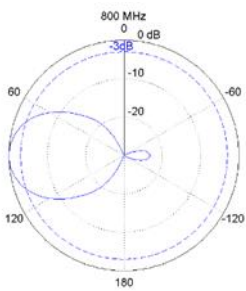


GAIN:



## PATTERNS:

Radiation patterns (E-plane):



Radiation patterns (H-plane):

