

Wideband LPDA Antenna

30 – 2500 MHz

Product Code: LPDA-A0047

VERSION: 2.6



SPECIFICATIONS:

Electrical:	
Frequency range	30 – 2500 MHz
VSWR	< 2:1 over the frequency band
Nominal input impedance	50 Ω
Feed power handling	Receive only
Gain	7 dBi typical over the frequency band. Refer to gain plot
Elevation 3 dB beamwidth	60 °
Azimuth 3 dB beamwidth	120 °
Polarisation	Adjustable: vertical and horizontal
Connectors	N-type female
Mechanical:	
Dimensions (w x l)	4000 mm x 5000 mm
Material	Aluminium, stainless steel, fibreglass
Total mass	38 kg (incl. isolation pole)
Environmental: designed to meet the following specifications	
Wind survival	160 km/h when guyed
Water and dust resistance	IP66
Temperature range	- 30 °C to +65 °C (antenna has a nose piece covering high frequency elements for icing)
Corrosion	Appropriate anti-corrosion measures are taken in the design of antenna for harsh environmental conditions

PRODUCT FEATURES:

- Wideband frequency 30 MHz to 2500 MHz
- Low VSWR
- High gain of typically 7 dBi
- Rugged construction and compact packaging
- Easy to assemble and disassemble (< 10 minutes for two people)
- Also configured for fixed applications

PRODUCT APPLICATIONS:

- Wideband monitoring

PRODUCT DESCRIPTION:

The LPDA-A0047 is a directional log-periodic dipole array primarily designed for EW monitoring applications to cover the 30 MHz to 2500 MHz frequency band with a typical gain of 7 dBi. The polarisation is adjustable between vertical and horizontal without lowering the mast.

This antenna is supplied with a boom that breaks into three sections and all the elements can be removed and stored in a roll-up canvas bag for compact storage. The antenna can be assembled and erected within 10 minutes by two people.

This antenna can be customised if required, for different frequency ranges handling.

Wideband LPDA Antenna

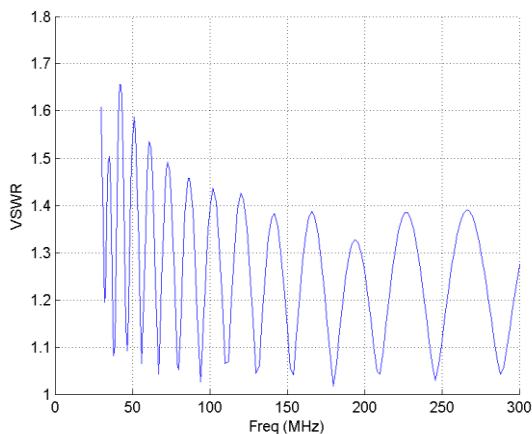
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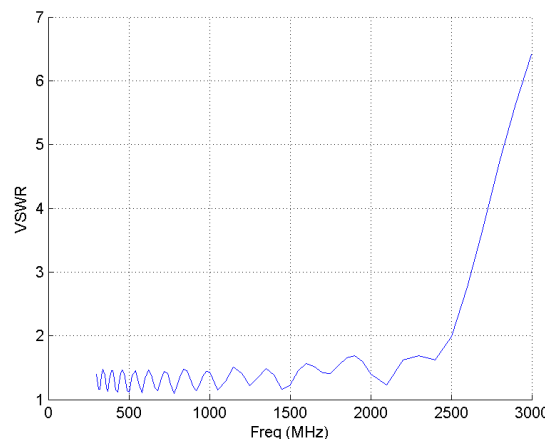
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VSWR AND GAIN GRAPHS:

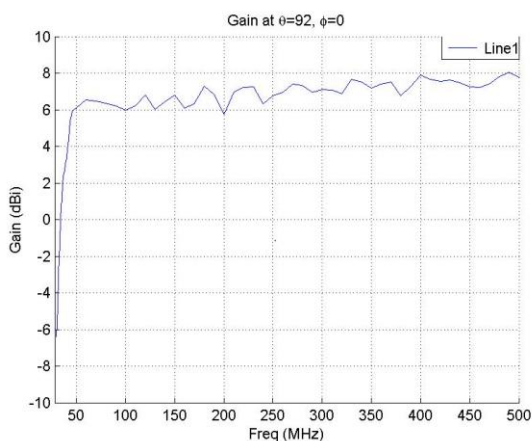
LOW FREQUENCY BAND VSWR:



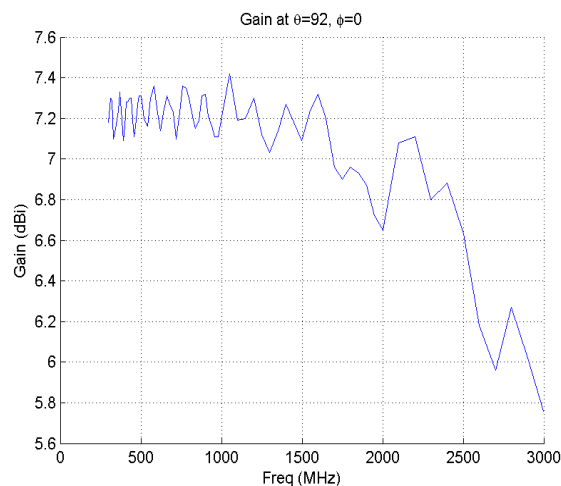
HIGH FREQUENCY BAND VSWR:



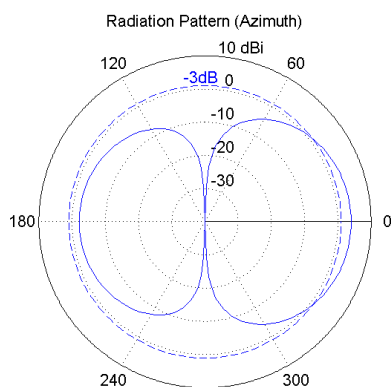
LOW FREQUENCY BAND GAIN:



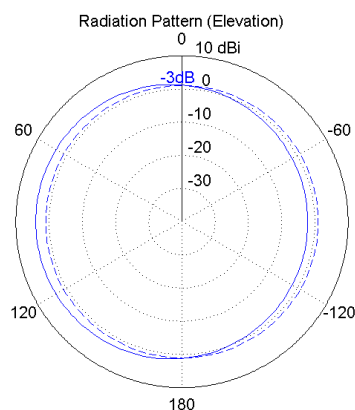
HIGH FREQUENCY BAND GAIN:



E-plane plot at 30 MHz:



H-plane plot at 30 MHz:



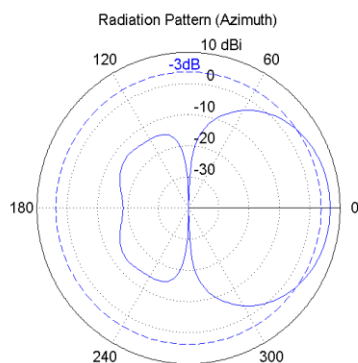
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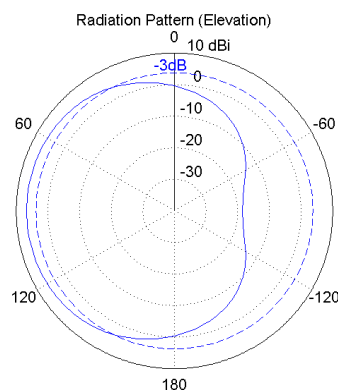
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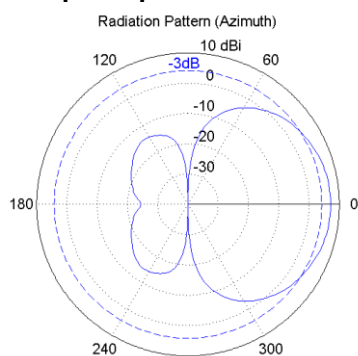
E-plane plot at 100 MHz:



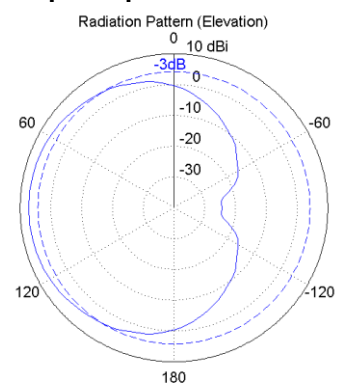
H-plane plot at 100 MHz:



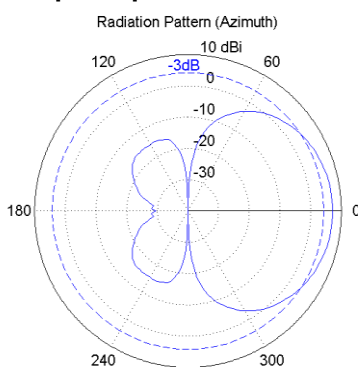
E-plane plot at 300 MHz:



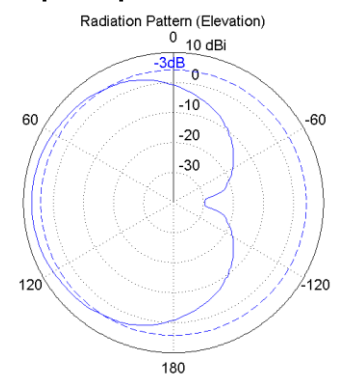
H-plane plot at 300 MHz:



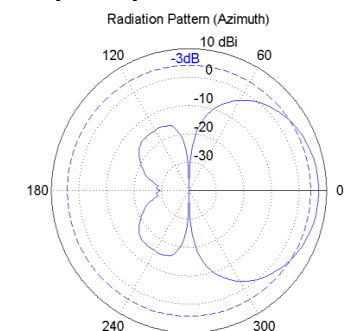
E-plane plot at 1000 MHz:



H-plane plot at 1000 MHz:



E-plane plot at 2500 MHz:



H-plane plot at 2500 MHz:

