Wideband LPDA Antenna

30 – 2500 MHz

Product Code: LPDA-A0047

VERSION: 2.5

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 º
Azimuth 3 dB beamwidth	120 º
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 ºC to +65 ºC (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.

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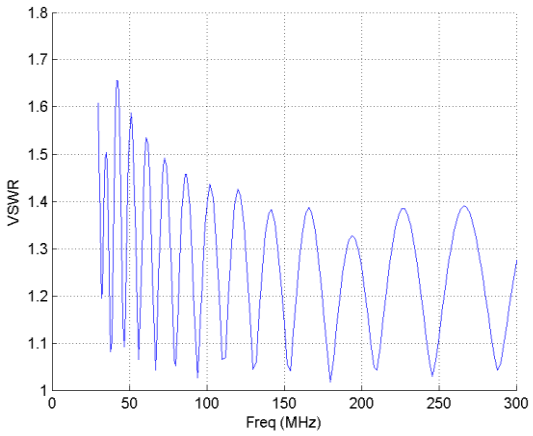
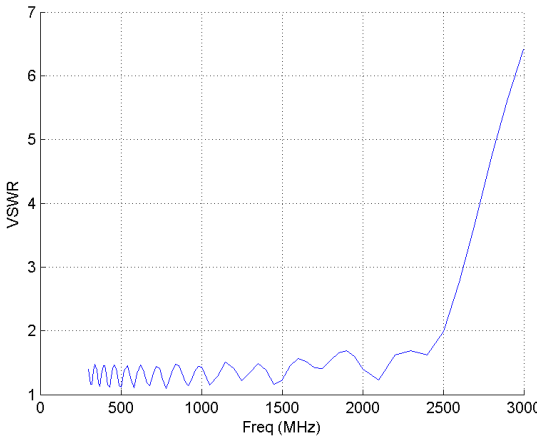
VSWR AND GAIN GRAPHS:

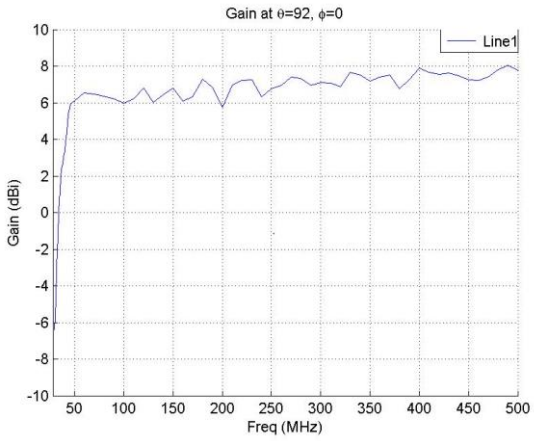
LOW FREQUENCY BAND VSWR:



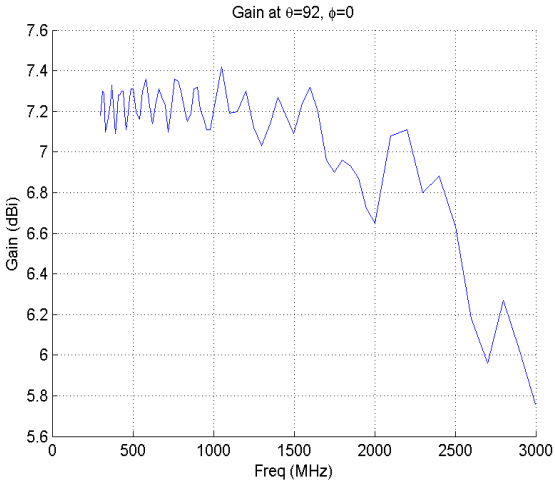
HIGH FREQUENCY BAND VSWR:



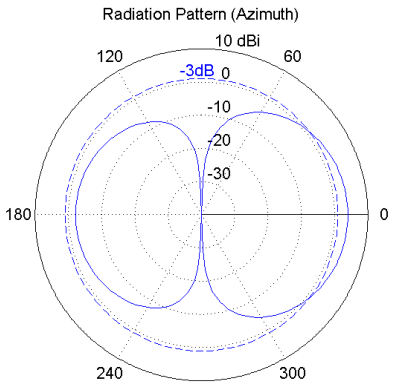
LOW FREQUENCY BAND GAIN:



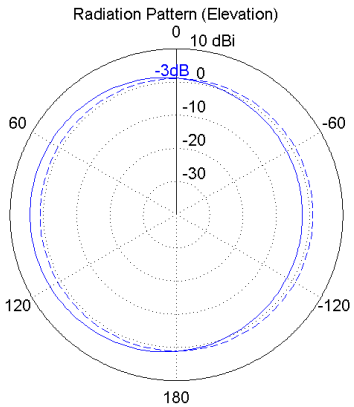
HIGH FREQUENCY BAND GAIN:



E-plane plot at 30 MHz:



H-plane plot at 30 MHz:



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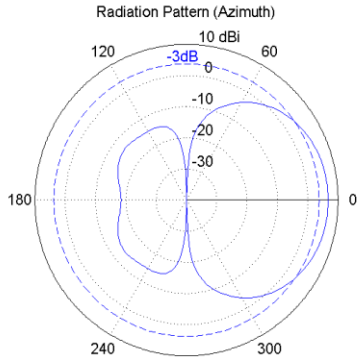
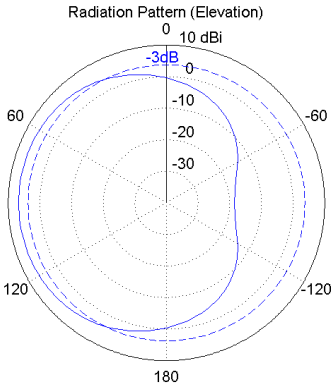
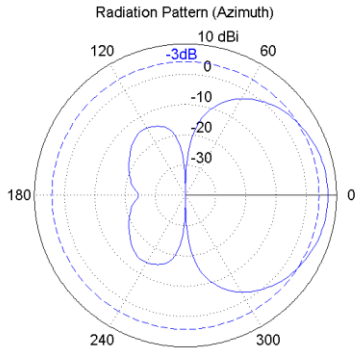
E-plane plot at 100 MHz:



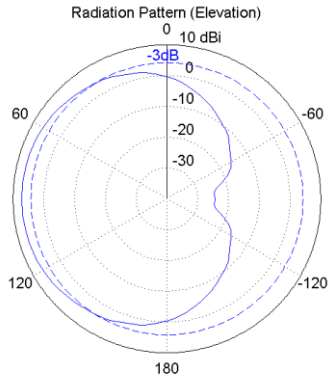
H-plane plot at 100 MHz:



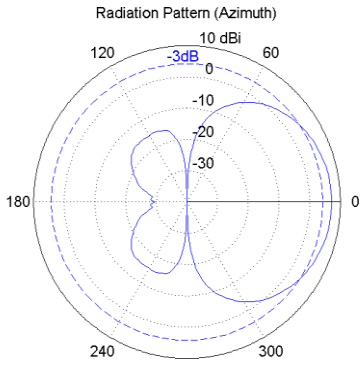
E-plane plot at 300 MHz:



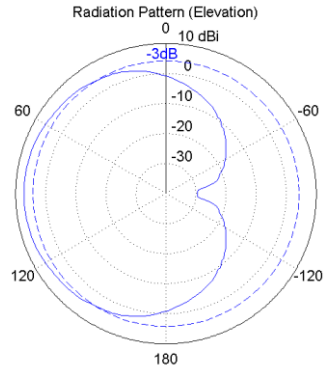
H-plane plot at 300 MHz:



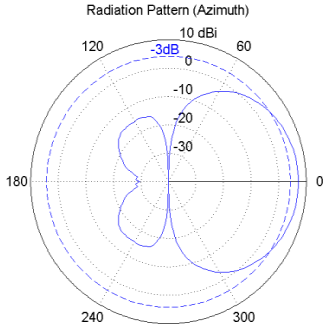
E-plane plot at 1000 MHz:



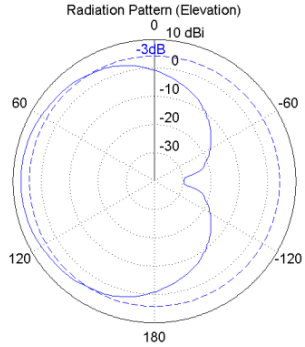
H-plane plot at 1000 MHz:



E-plane plot at 2500 MHz:



H-plane plot at 2500 MHz:



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