

# HF Log Periodic Antenna

10 – 30 MHz

Product Code: LPDA-A0048

## SPECIFICATIONS:



### Electrical:

Frequency range	10 – 30 MHz
VSWR	< 2.5:1 over the frequency band
Nominal input impedance	50 $\Omega$
Feed power handling	1000 W
Front-to-back ratio	
Gain	6 dBi typical over the frequency band with a minimum of 4.5 dBi.
Elevation 3 dB beamwidth	70°
Azimuth 3 dB beamwidth	120° – 180°
Polarisation	Horizontal
Connectors	7/16

### Mechanical:

Dimensions (w x l)	15 m x 10 m
Material	Aluminium, stainless steel, fibreglass
Total mass	120 kg

### Environmental: designed to meet the following specifications

Wind survival	160 km/h calculated when guyed
Water and dust resistance	IP66
Temperature (operational)	- 30 °C (no icing) to +65 °C
Corrosion	Appropriate anti-corrosion measures are taken in the design of antenna for harsh environmental conditions.

## PRODUCT FEATURES:

- HF frequency 10 MHz to 30 MHz
- Low VSWR
- Gain of typically 6 dBi over 90% of the band
- Rugged construction and compact packaging
- Easy to assemble and disassemble
- Also configured for fixed applications

## PRODUCT APPLICATIONS:

- Wideband monitoring
- HF jamming

## PRODUCT DESCRIPTION:

The LPDA-A0048 is a directional log-periodic dipole array (LPDA) designed for EW monitoring and jamming applications. It covers the 10 MHz to 30 MHz frequency band with a typical gain of 6 dBi.

This antenna is supplied with a boom that breaks into three sections. All the elements are also removable with the longer ones being in sections as well so that they can be stored in a roll-up canvas bag for compact storage. The antenna can be assembled and erected by two people. For fixed installations the boom and elements can be configured for permanent erection. This antenna can be customised if required for different frequency ranges.

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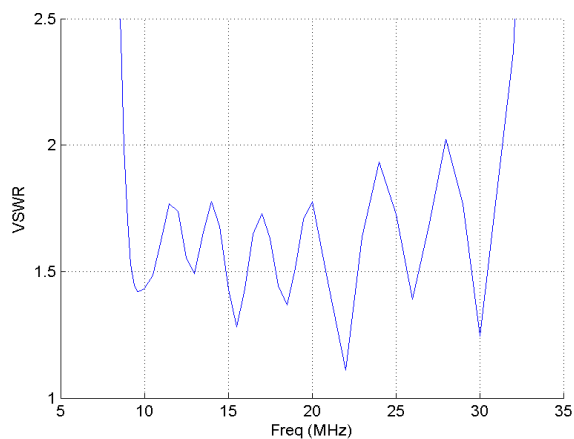
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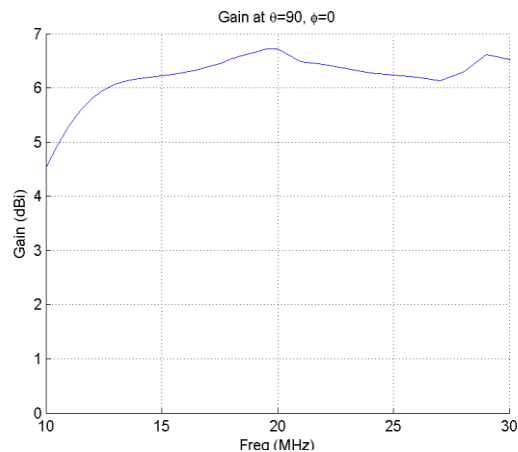
VERSION: 3.5

## VSWR AND GAIN GRAPHS:

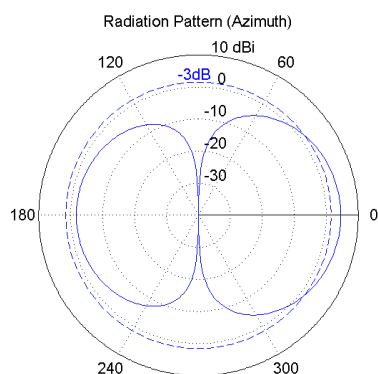
### Typical VSWR:



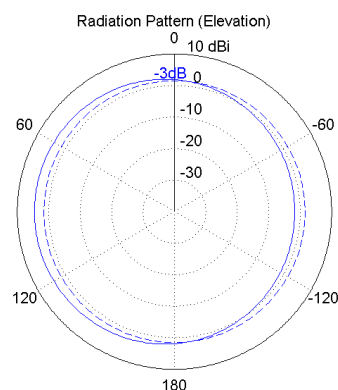
### GAIN:



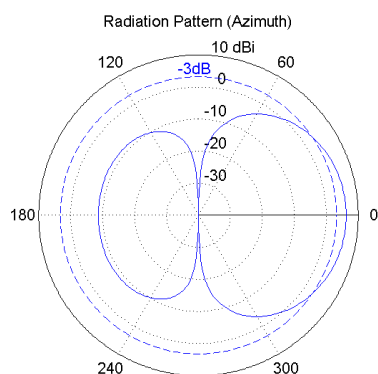
### E-plane plot at 10 MHz:



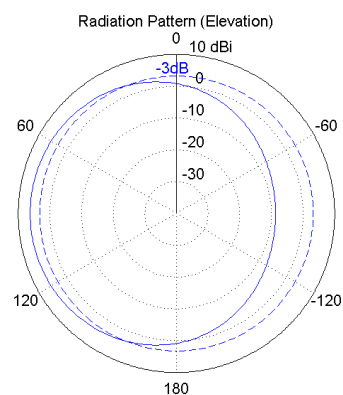
### H-plane plot at 10 MHz:



### E-plane plot at 15 MHz:



### H-plane plot at 15 MHz:



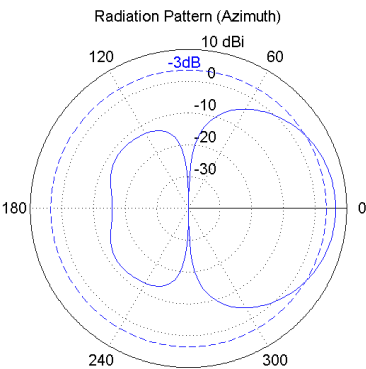
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E-plane plot at 30 MHz:



H-plane plot at 30 MHz:

