

# High-Power LPDA Antenna

20 – 520 MHz

Product Code: LPDA-A0077

VERSION: 2.5



## FEATURES:

- Low frequency coverage up to 520 MHz in a single antenna
- Low VSWR
- High gain of 5 dBi over most of the band
- High feed power handling of 1000 W
- Easy construction of detachable elements with spring fasteners
- Compact storage as unit is easily broken into smaller parts

## APPLICATIONS:

- Wideband monitoring
- High-power

## SPECIFICATIONS:

<b>Electrical:</b>	
Frequency range	20 – 520 MHz
VSWR	< 2.5:1
Nominal input impedance	50 $\Omega$
Connector	7/16 female
Feed power handling	1000 W continuous
Gain	> 5 dBi, 30 – 520 MHz > 2.5 dBi, 20 – 30 MHz
E-plane 3 dB beamwidth	$\geq 60^\circ$
H-plane 3 dB beamwidth	$\geq 75^\circ$
Polarisation	Adjustable with deployment (vertical and horizontal)
Front-to-back ratio	$\geq 12$ dB, 30 – 520 MHz $\geq 6$ dB, 20 – 30 MHz
Earth connection	Earth connector allowing to connect a grounding cable
<b>Mechanical:</b>	
Dimensions (w x l)	7000 mm x 5200 mm
Weight	< 50 kg
Material	Aluminium, stainless steel, tufnol, fibreglass
Mounting method	Bracket onto a mast
Packaging	Transportable bag or crate
MTBF	100,000 h
<b>Environmental: designed to meet the following specifications</b>	
Temperature	According to Stanag 2895
Wind survival on mast	120 km/h (ice $\leq 3$ mm)

## PRODUCT DESCRIPTION:

This high-powered LPDA is a directional log-periodic dipole array primarily designed for EW applications. It covers the frequency band from 20 to 520 MHz. It can handle a continuous input power of 1000 W and has a gain greater than 5 dBi. The polarisation is adjustable between vertical and horizontal. The antenna can be broken down into pieces smaller than 2.7 m in length which allows compact storage. The antenna can be erected from packaging in less than 10 minutes.

## AUTHORIZED USA DISTRIBUTION BY:

Cyntony Corporation  
 195 Follen Road  
 Lexington, Massachusetts  
 sales@cyntony.com  
 781-430-0675



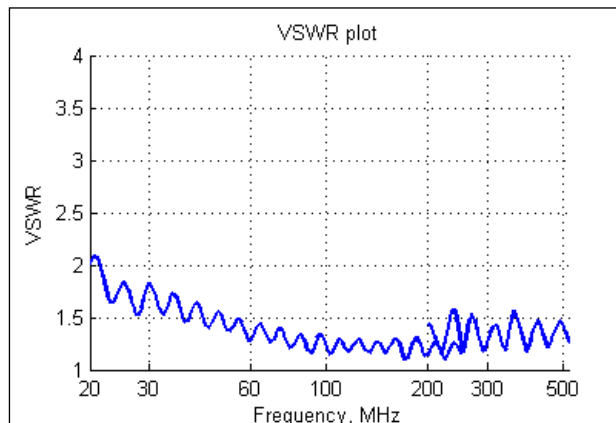
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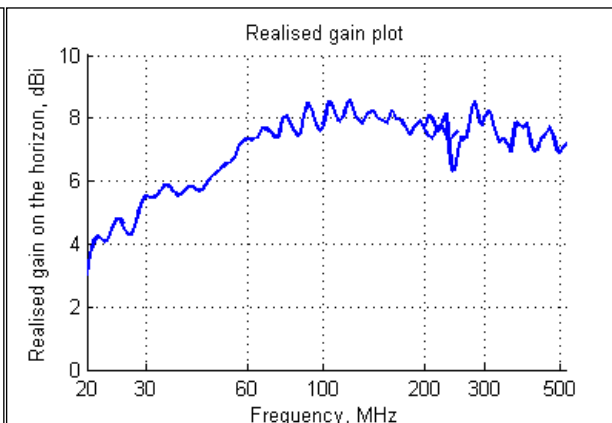
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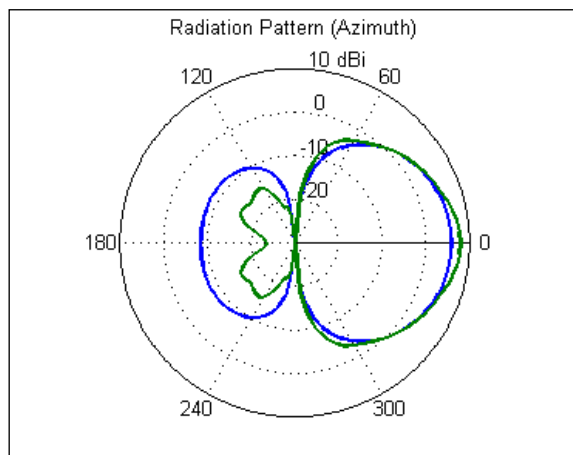
## SIMULATED VSWR:



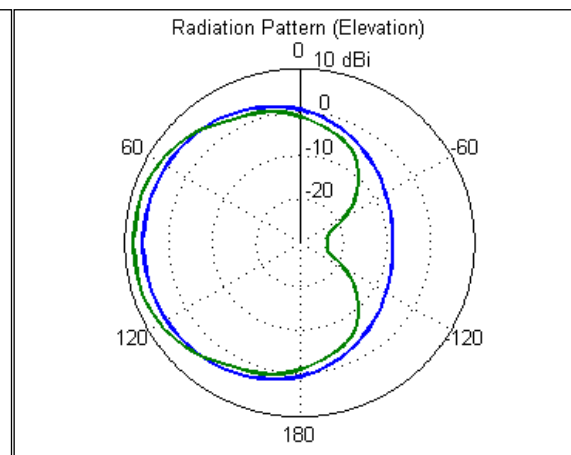
## SIMULATED GAIN:



## E-PLANE PATTERN:

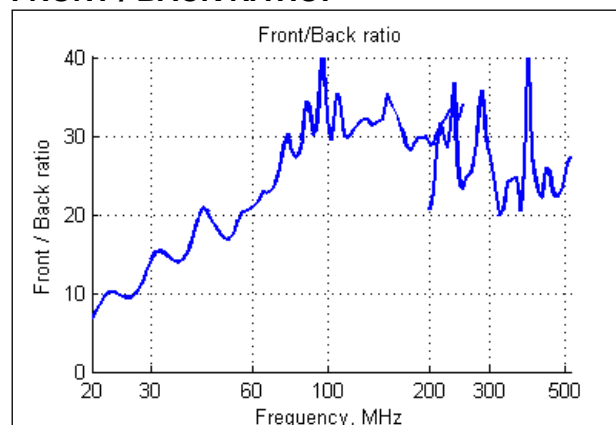


## H-PLANE PATTERN:



Blue = 30 MHz. Green = 100 MHz, typical for high frequencies

## FRONT / BACK RATIO:



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