



## PRODUCT DESCRIPTION:

The LPDA-A0139 is a directional log-periodic dipole array that covers the frequency band 100 to 500 MHz at 200 W of feed power with a typical gain of 7 dBi. Off-centre mounted on a mast (not supplied) with the integrated mast mounting bracket.

Polarisation is adjustable between vertical and horizontal via the mounting bracket.

The antenna boom can be folded, and the elements removed for compact and lightweight storage and transportation in a carry bag which is supplied with the antenna.

## PRODUCT FEATURES:

- Low VSWR and high gain over the frequency band
- High feed power handling of 200 W
- Vertical and horizontal polarisation
- Easy to assemble and disassemble
- Lightweight, yet rugged construction

## SPECIFICATIONS:

<b>Electrical:</b>	
Frequency range	100 – 500 MHz
VSWR	< 2.0 :1
Nominal input impedance	50 Ω
Feed power handling	200 W CW
Connectors	N-type (f)
Gain on horizon	> 7 dBi typical (see graph)
E-plane 3 dB beamwidth	45° typical
H-Plane 3 dB beamwidth	90° typical
Polarisation	Linear, adjustable vertical and horizontal
MTBF	50,000 hrs
<b>Mechanical:</b>	
Deployed dimensions (l x w)	1779 mm x 1500 mm including bracket
Stowed length	< 1000
Material	Aluminium, stainless steel
Total mass	7 kg including bracket
Mounting	Off – centre with a mast mounting bracket
<b>Environmental: designed to meet the following specifications</b>	
Operating Temperature	- 30 °C to + 65 °C
Storage Temperature	- 40 °C to + 85 °C
Humidity	MIL-STD-810F, Method 507.3, Procedure III (cycle with extreme at 95% RH, + 60 °C)
Blowing Rain	MIL-STD-810F, Method 506.4, Procedure I (rainfall rate 150mm/h, wind speed 30m/s)
Corrosion	MIL-STD-810F, MIL-1250A
Sand and Dust	MIL-STD-810F, Method 510.4, Procedure I
Random Vibration (packaged)	MIL-STD-810G, Method 514.6, Procedure I, Category 20 Figure 514.6C-3
Shock (packaged)	MIL-STD-810G, Method 516.6, Procedure I, 20g 11ms, Table 516.6-II, sawtooth waveform Figure 516.6-1D
Icing / Freezing Rain (Non-Operating)	MIL-STD-810F, Method 521.2 (6 mm)
Solar Radiation	MIL-STD-810F, Method 505.4 Procedure I
Wind Speed	200 km/h (without ice load)

# Tactical LPDA

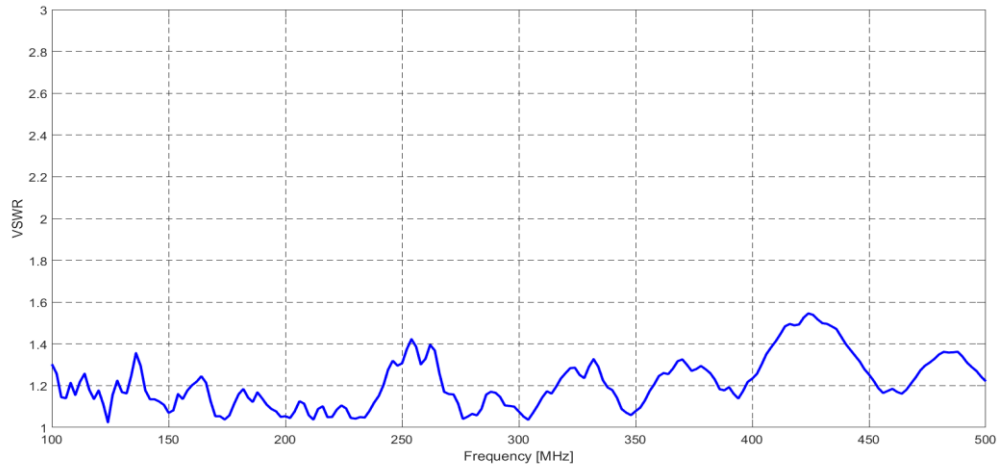
100 – 500 MHz

Product Code: LPDA-A0139

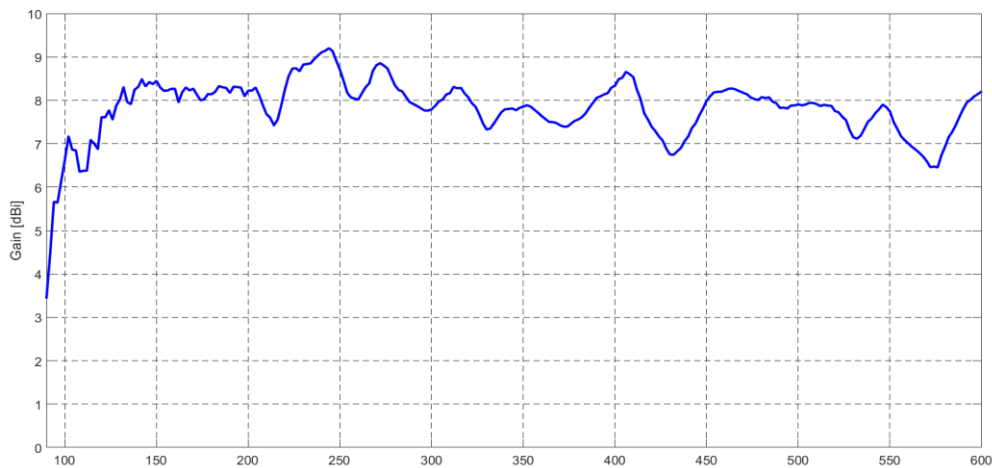
VERSION: 1.8

## VSWR AND GAIN GRAPHS:

### Typical VSWR:



### Typical Gain:



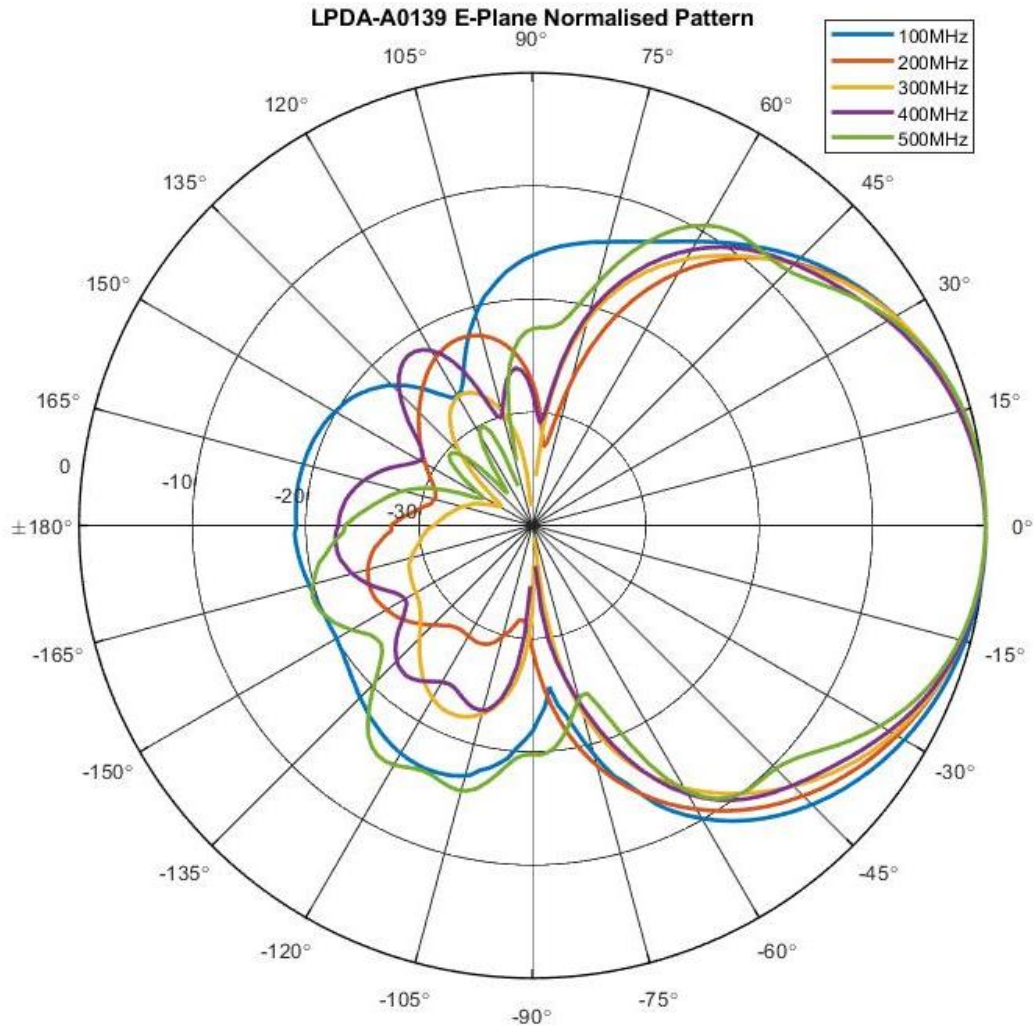
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E-plane:



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H-plane:

