

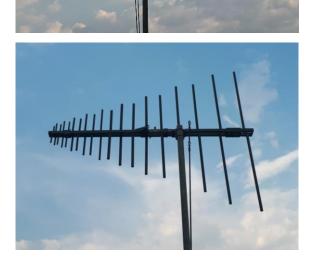
VERSION: 1.7

Tactical LPDA

100 – 500 MHz Product Code: LPDA-A0139

SPECIFICATIONS:

Electrical:	
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
Mechanical:	
Deployed dimensions (I 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
Environmental: designed to meet the following specifications	
Environmental: designed to m	neet the following specifications
Environmental: designed to m Operating Temperature	eet the following specifications - 30 °C to + 65 °C
Operating Temperature	- 30 °C to + 65 °C
Operating Temperature Storage Temperature	- 30 °C to + 65 °C - 40 °C to + 85 °C MIL-STD-810F, Method 507.3, Procedure III (cycle with extreme at 95% RH, + 60 °C) MIL-STD-810F, Method 506.4, Procedure I (rainfall rate 150mm/h, wind speed 30m/s)
Operating Temperature Storage Temperature Humidity	- 30 °C to + 65 °C - 40 °C to + 85 °C MIL-STD-810F, Method 507.3, Procedure III (cycle with extreme at 95% RH, + 60 °C) MIL-STD-810F, Method 506.4, Procedure I (rainfall rate 150mm/h, wind speed 30m/s) MIL-STD-810F, MIL-1250A
Operating Temperature Storage Temperature Humidity Blowing Rain Corrosion Sand and Dust	 - 30 °C to + 65 °C - 40 °C to + 85 °C MIL-STD-810F, Method 507.3, Procedure III (cycle with extreme at 95% RH, + 60 °C) MIL-STD-810F, Method 506.4, Procedure I (rainfall rate 150mm/h, wind speed 30m/s) MIL-STD-810F, MIL-1250A MIL-STD-810F, Method 510.4, Procedure I
Operating Temperature Storage Temperature Humidity Blowing Rain Corrosion	- 30 °C to + 65 °C - 40 °C to + 85 °C MIL-STD-810F, Method 507.3, Procedure III (cycle with extreme at 95% RH, + 60 °C) MIL-STD-810F, Method 506.4, Procedure I (rainfall rate 150mm/h, wind speed 30m/s) MIL-STD-810F, MIL-1250A MIL-STD-810F, Method 510.4,
Operating Temperature Storage Temperature Humidity Blowing Rain Corrosion Sand and Dust Random Vibration (packaged) Shock (packaged)	 - 30 °C to + 65 °C - 40 °C to + 85 °C MIL-STD-810F, Method 507.3, Procedure III (cycle with extreme at 95% RH, + 60 °C) MIL-STD-810F, Method 506.4, Procedure I (rainfall rate 150mm/h, wind speed 30m/s) MIL-STD-810F, MIL-1250A MIL-STD-810F, Method 510.4, Procedure I MIL-STD-810G, Method 514.6, Procedure I, Category 20 Figure 514.6C-3 MIL-STD-810G, Method 516.6, Procedure I, 20g 11ms, Table 516.6- II, sawtooth waveform Figure 516.6- 1D
Operating Temperature Storage Temperature Humidity Blowing Rain Corrosion Sand and Dust Random Vibration (packaged) Shock (packaged) Icing / Freezing Rain (Non- Operating)	 - 30 °C to + 65 °C - 40 °C to + 85 °C MIL-STD-810F, Method 507.3, Procedure III (cycle with extreme at 95% RH, + 60 °C) MIL-STD-810F, Method 506.4, Procedure I (rainfall rate 150mm/h, wind speed 30m/s) MIL-STD-810F, MIL-1250A MIL-STD-810F, Method 510.4, Procedure I MIL-STD-810G, Method 514.6, Procedure I, Category 20 Figure 514.6C-3 MIL-STD-810G, Method 516.6, Procedure I, 20g 11ms, Table 516.6- II, sawtooth waveform Figure 516.6- 1D MIL-STD-810F, Method 521.2 (6 mm)
Operating Temperature Storage Temperature Humidity Blowing Rain Corrosion Sand and Dust Random Vibration (packaged) Shock (packaged) Icing / Freezing Rain (Non-	 - 30 °C to + 65 °C - 40 °C to + 85 °C MIL-STD-810F, Method 507.3, Procedure III (cycle with extreme at 95% RH, + 60 °C) MIL-STD-810F, Method 506.4, Procedure I (rainfall rate 150mm/h, wind speed 30m/s) MIL-STD-810F, MIL-1250A MIL-STD-810F, Method 510.4, Procedure I MIL-STD-810G, Method 514.6, Procedure I, Category 20 Figure 514.6C-3 MIL-STD-810G, Method 516.6, Procedure I, 20g 11ms, Table 516.6- II, sawtooth waveform Figure 516.6- 1D



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

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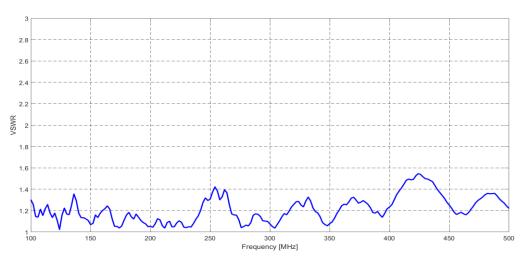
Alaris Antennas has a policy of continuous improvement and hence specifications may change without notice GAIN THE ADVANTAGE

Tactical LPDA

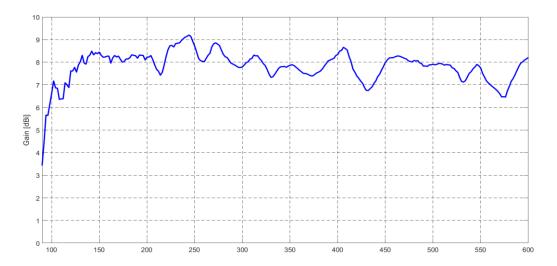
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VSWR AND GAIN GRAPHS:

Typical VSWR:



Typical Gain:



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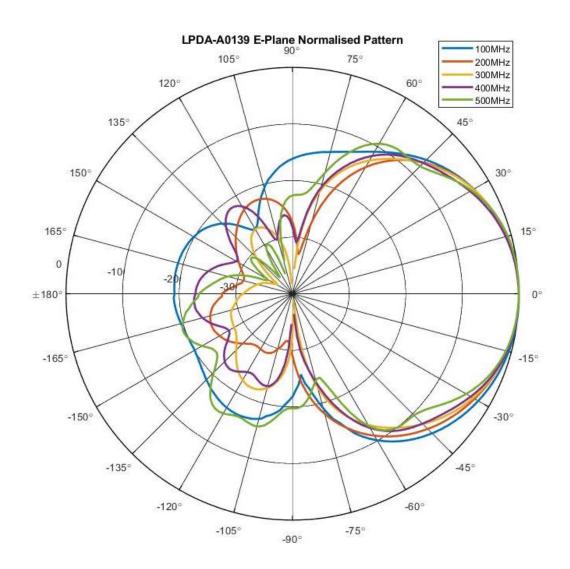
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E-plane:



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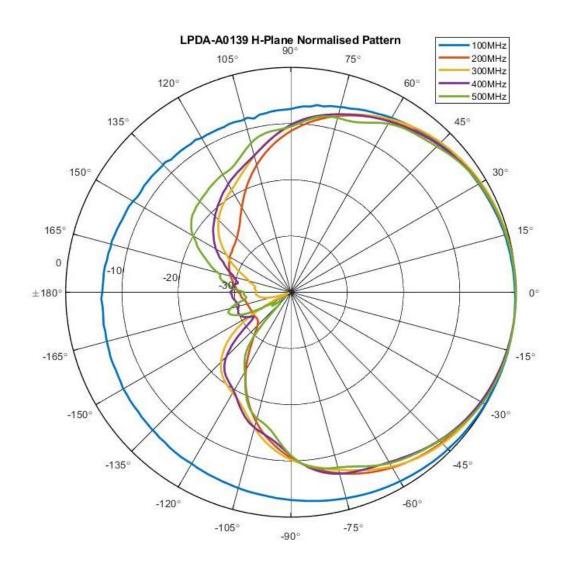
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H-plane:



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