	High Gain Dual Polarized Log Periodic Antenna		
	LPDP-100-500	100-500 MHz	9 dBi Gain

High-Gain Dual Polarization & Broadband RF Versatility: The **LPDP-100-500** is an ultra-wideband **dual-polarized log-periodic antenna** engineered for high-performance **directional transmission and reception** across the critical **100–500 MHz VHF/UHF frequency spectrum**. Delivering a **powerful 9 dBi gain**, this **log-periodic dipole array (LPDA)** is uniquely capable of handling horizontal and vertical radio signals simultaneously (**dual E & H polarization**), making it an ideal choice for advanced signal intelligence, **spectrum monitoring, scanning, and electronic warfare (jamming)**. Unlike smaller, compromised designs, this high-gain array completely avoids size-reduction loading techniques, **guaranteeing maximum radiation efficiency**, clean radiation patterns, and an exceptionally stable, **low VSWR** across the entire operating bandwidth.

Tactical Ruggedized Engineering & Rapid Field Deployment: Constructed for ultimate field survivability, the **LPDP-100-500** is fabricated from high-grade **6063-T6 ultra-corrosion-resistant architectural anodized aluminum alloy**, treated with an **epoxy-based olive green powder coating** for low-visibility tactical concealment and defenses against UV radiation, acid rain, and salt spray. The structural architecture utilizes specialized heavy-duty spacers between the dual support booms to **maximize mechanical durability** against high winds. Designed with logistics in mind, the antenna features a modular footprint with **removable elements** and multi-segment pieces for compact shipping and fast installation. For robust electrical protection, all assembly hardware is made of **high-grade stainless steel**, and the entire system operates at **DC ground** to provide a low-resistance discharge path, offering superior **lightning protection** and high immunity to environmental RF noise.

Electrical Specifications:	
Frequency Range	100-500 MHz.
Gain	9 dBi. Typical
Bandwidth	Entire Band
Polarization	Dual - Vertical and Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	65+/-5 Degrees
Vertical Beam-width –Half power Points.	55+/-5 Degrees
VSWR – Better Than	2.5:1
RF Power Handling Capacity	250 Watts
Input Termination	2 x N-Female
Lightning Protection	DC Ground
Mechanical Specifications:	
Support Booms & Radiating Elements Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	High Grade Stainless Steel
Net Weight Approx.	10 Kgs.
Wind Rating	190 km/Hr.
Overall Length	1.5 Meters.
Overall Width	1.6 Meters
Mounting Clamps Position	At Back End of the Support Boom
Maximum Mount Pipe Diameter	52mm (2 Inches)
Corrosion Protection	Epoxy-Based Powder Coating
Final Finish	Olive Green or Customized
Environmental Specifications:	
Operating Temperature	(-)30 to +70 Degrees Celsius
Storage Temperature	(-)40 to +80 Degrees Celsius
Humidity	0 to 95% RH

Please contact us for further information like Azimuth & Elevation radiation patterns and frequency Vs VSWR graph.