



# ANTENNA EXPERTS

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Model LPDP-100-500 100 – 500 MHz. 9 dBi. Gain

## DUAL POLARIZED LOG PERIODIC DIPOLE ANTENNA

**DESIGN FEATURES:** The LPDP-100-500 dual polarized log periodic antenna is designed to provide wideband directional transmission/reception of horizontal and vertical radio signals from 100-500 MHz bands. The extra spacers are used between the support booms to improve mechanical durability of antenna. The specially designed mounting arrangement results in fast installation. This dual polarized log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, scanning and jamming applications due to its capability of receiving/transmitting both the E & H polarized signals. This high gain LP provides strong performance over the entire frequency of 100-500 MHz as the LPDA does not use loading technique to reduce the overall size of array.



**CONSTRUCTIONS:** The LPDP-100-500 assembled log periodic antennas outer-most dimensions are 1.5 meters (5 feet) long and 1.5 meters (5 feet) width & height. The antenna has foldable elements, the longest of which is 0.75 meter. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a fast deployment self-locking device at points along the boom. The log periodic antenna operates at D.C. ground with low resistance discharge path for protection against lightning and immunity to noise. All the screws, nuts and bolts of log periodic dipole antenna are made of stainless steel.

### ELECTRICAL SPECIFICATIONS:

Frequency Range	100-500 MHz.
Gain	9 dBi.
Bandwidth	Entire Band
Polarization	Dual - Vertical and Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	65 Degrees
Front to Back Ratio	16 dB.
VSWR	1:2.5
RF Power Handling Capacity	250 Watts
Input Termination	2 x N-Female
Lightning Protection	DC Ground

### MECHANICAL SPECIFICATIONS:

Support Booms & Radiating Elements Materials	All Aluminum
Mounting Hardware -Materials	Stainless Steel
Net Weight Approx.	10 Kgs.
Wind Rating	190 km/Hr.
Overall Length	1.5 Meters.
Overall Width	1.6 Meters
Support Boom - Material – Cross Section	Aluminum – Square Tube
Elements - Materials - Cross Section	Aluminum - Round Tube
Mounting Clamps Position	At Back End of the Support Boom
Maximum Mount Pipe Diameter	52mm (2 Inches)

### ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-)30 to + 70 Degrees Celsius
Storage Temperature	(-) 40 to +80 Degrees Celsius
Humidity	0 to 95 % RH

Note: All information contained in the datasheet is subject to change without any prior notice.