



# ANTENNA EXPERTS

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Model LPDP-30-100 30 – 100 MHz. 5 to 8 dBi. Gain

## DUAL POLARIZED LOG PERIODIC DIPOLE ANTENNA

**DESIGN FEATURES:** The LPDP-30-100 dual polarized log periodic antenna uses 6063T6 ultra corrosion resistant architectural anodized aluminum alloy. The LPDP-30-100 dual polarized log periodic antenna is designed to provide wideband directional transmission/reception of horizontal and vertical radio signals from 30-100 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 simultaneously. This high gain LP provides strong performance over the entire frequency of 30-100 MHz as the LPDA does not use loading technique to reduce the overall size of array. Shipping length is 2.65 meters (8.7 feet).



**CONSTRUCTIONS:** The LPDP-30-100 assembled log periodic antennas outer-most dimensions are 4.7 meters (15.5 feet) long and 5 meters (16.5 feet) width & height. The antenna has foldable elements, the longest of which is 2.5 meters. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a stainless steel stud at points along the boom. The antenna is also supplied with epoxy based olive green powder coating finish to protect the antenna further from severe environmental conditions. 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	30-100 MHz.
Gain - Typical	5 to 8 dBi.
Bandwidth	Entire 30-100MHz Band
Polarization	Dual - Vertical and Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	90 +/- 10 Degrees
Front to Back Ratio	15 +/- 2 dB.
VSWR – Better Than	2.5:1
RF Power Handling Capacity	500 Watts
Input Termination	2 x N-Female
Lightning Protection	DC Ground

### MECHANICAL SPECIFICATIONS:

Support Booms & Radiating Elements Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Gross Weight Approx.	45 Kgs.
Wind Rating	180 km/Hr.
Overall Length	4.7 Meters
Overall Width	5.0 Meters
Support Boom - Material – Cross Section	Aluminum – Square Tube
Elements - Materials - Cross Section	Aluminum - Round Tube
Mounting Clamps Position	At Center of the Support Boom
Maximum Mount Pipe Diameter	50-102mm (2-4 Inches)
Final Finish/Color	Olive Green

### 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.