



ANTENNA EXPERTS

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Model LP-50-500

50 – 500 MHz.

9 dBi. Gain

LOG PERIODIC DIPOLE ANTENNA

DESIGN FEATURES: The LP-50-500 log periodic dipole antenna uses 6063T6 ultra corrosion resistant architectural anodized aluminum alloy and designed to provide wideband directional transmission/reception of radio signals from 50-500 MHz bands. The specially designed mounting arrangement results in fast installation. The extra spacers are used between the support booms to improve mechanical durability of antenna. The specially designed mounting arrangement results in fast installation. The LP antenna can be assembled in less than 5 minutes. This log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, surveillance, scanning and jamming applications due to its broad band design feature. This high gain LPA provides strong performance over the entire frequency of 50-500 MHz as the LPDA does not use loading technique to reduce the overall size of array.

CONSTRUCTIONS: The LP-50-500 assembled log periodic antennas outer-most dimensions are 2.8 meters (9.1 feet) long and 3 meters (10 feet) wide. The antenna has removable elements, the longest of which is 1.5 meters. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a fast deployment studs & nuts system at points along the boom. The complete log periodic antenna is supplied with powder coating finish to protect it 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 type 316 marine grade stainless steel. The mounting arrangement of log periodic antenna permits to change the polarization from horizontal to vertical and vice-versa.



ELECTRICAL SPECIFICATIONS:

Frequency Range	50-500 MHz.
Gain	9 dBi. Typical
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	70 Degrees
Front to Back Ratio	16 dB.
VSWR – Better Than	2.5:1
RF Power Handling Capacity	500 Watts
Input Termination	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	10 Kgs.
Wind Rating	195 km/Hr.
Overall Length	2.8 Meters
Overall Width	3.0 Meters
Shipping Length	2.9 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	51 mm (2 Inches)

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.

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