



ANTENNA EXPERTS

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Model # LP-100-512

100 – 512 MHz.

9 dBi Gain

High Gain Log Periodic Dipole Antenna

DESIGN FEATURES: The LP-100-512 log periodic dipole antenna uses 6063T6 ultra corrosion resistant architectural anodized aluminium alloy and designed to provide wideband directional radio signals from 100 to 512 MHz frequency band. The extra spacers are used between the support booms to improve mechanical durability of antenna. The mounting arrangement of log periodic antenna permits to change the polarization from horizontal to vertical and vice-versa. This log periodic dipole antenna system is particular suitable for Tx, Rx, monitoring, signal intelligence and jamming application. This high gain LPA provides strong performance over the entire frequency of 100-512 MHz as the LPDA does not use loading technique to reduce the overall size of array. The antenna can be assembled with just one spanner within 5 minutes. The coaxial cable is passed thru support boom and came out at the rear end of antenna.



CONSTRUCTIONS: The LP-100-512 assembled log periodic antennas outer-most dimensions are 1.5 meters (5 feet) long and 1.5 meters (5 feet) wide. 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 stainless steel stud 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. The complete LP antenna is supplied with epoxy base paint finish to protect it further from severe environmental condition. All the screws, nuts and bolts of log periodic dipole antenna are made of type 316 marine grade stainless steel.

ELECTRICAL SPECIFICATIONS:

Frequency Range	100 - 512 MHz.
Gain	9 dBi.
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam width –Half Power Points	60 Degrees
Front to Back Ratio	18 dB.
VSWR – Better Than	2.2:1
RF Power Handling Capacity	400 Watts @500MHz
Input Termination	N-Female
Lightning Protection	Direct Ground

MECHANICAL SPECIFICATIONS:

Support Booms & Radiating Elements Materials	6063T6 Aluminium Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Gross Weight	6 Kgs.
Wind Rating	200 Km/hr.
Overall Length	1.5 Meters
Overall Width	1.5 Meters
Shipping Length	1.55 Meters
Support Boom – Materials - Cross Section	Aluminium – Square Tube – 25.4mm
Elements – Materials - Cross Section	Aluminium - Round Tube – 19mm
Insulator Materials	Teflon & Nylon
Maximum Mount Pipe Diameter	38-77 mm (1.5 to 3 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.