ANTENNA EXPERTS

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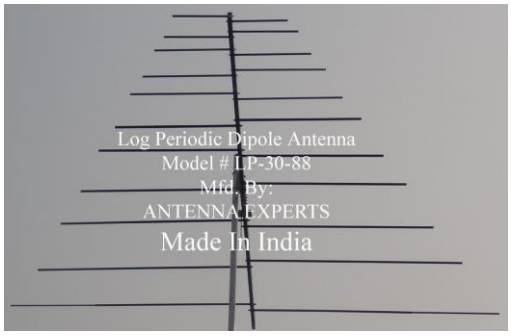
Model # LP-30-88 30 – 88 MHz. 8 dBi. Gain

Log periodic Dipole Antenna

DESIGN FEATURES: The LP-30-88 MIL grade log periodic dipole antenna use 6063T6 ultra corrosion resistant architectural anodized aluminum alloy and designed to provide wideband directional transmission/reception of radio signals from 30-88 MHz bands. The specially designed mounting arrangement of LP antenna results in fast installation. The extra spacers are used between the support booms to improve mechanical durability of LP antenna. The high power log periodic antenna can be assembled in less than 5 minutes by 2 technicians. This high power log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, scanning and jamming applications due to its broad band design feature. This high gain high power LPA provides strong performance over the entire frequency of 30-88 MHz as the LPDA does not use loading technique to reduce the overall size of array. Powder coating of the complete log periodic antenna provides extra protection against corrosion in saline weather present in coastal areas. The shipping length of antenna is 2.6 meters making it highly suitable for mobile and tactical applications.



CONSTRUCTIONS: The LP-30-88 assembled log periodic antennas outer-most dimensions are 4 meters long and 5 meters wide. The antenna has foldable elements, the longest of which is 2.5 meters. All the elements are supplied in two segments for easy of shipping and handling. The elements are attached via a stainless steel stud system which is fixed at each element end for attaching the same on the corresponding marked position on support 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 antenna is supplied with epoxy based powder coating finish to protect it further from severe environmental conditions All the screws, nuts and bolts of high gain log periodic dipole antenna are made of type 316 marine grade stainless steel. The LP Antenna is supplied with olive green military colour finish. The mounting arrangement of log periodic antenna permits to change the polarization from horizontal to vertical and vice-versa

HIGH POWER VERSION (OPTIONAL): This high power high gain log periodic antenna can be supplied with 4KW power handling capacity. The antenna uses coaxial cable made by Times Microwave which has a low density PTFE (TEFLON) dielectric, a solid BCCAI inner conductor and tinned copper with aluminium tape as outer conductor. This high power log periodic antenna is supplied with either DIN-Female connector. The part number for this option is LPHP-30-88.

ELECTRICAL SPECIFICATIONS:	
Frequency Range	30-88 MHz.
Gain - Typical	8 dBi.
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	90 +/- 10 Degrees 6
Vertical Beam-width –Half power Points.	75 +/- 10 Degrees
Front to Back Ratio	15 +/- 2 dB.
VSWR – Better Than	2.5:1
RF Power Handling Capacity	500 Watts
High RF Power Handling Capacity	4KW (Optional)
Input Termination	N-Female (DIN-Female Optional)
Lightning Protection	Direct Ground
MECHANICAL SPECIFICATIONS:	
Support Booms & Radiating Elements Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Gross Weight Approx.	18 Kgs.
Wind Rating	180 km/Hr.
Overall Length	4.0 Meters
Overall Width	5.0 Meters
Shipping Length	2.6 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	50-100mm (2-4 Inches)
Finish/Colour	Olive Green
Corrosion Protection	Epoxy Based Paint (Powder Coating)
ENVIRONMENTAL SPECIFICATIONS:	
High Temperature	MIL-STD-810G, Method 500.5, Procedures I & II
Low Temperature	MIL-STD-810G, Method 502.5, Procedures I & II
Humidity	MIL-STD-810G, Method 507.5, Procedures I & II
Shock	MIL-STD-810G, Method 516.6, Procedure IV
Vibration	MIL-STD-810G, Method 514.6, Procedure I
Rain	MIL-STD-810G, Method 506.5, Procedure I
Fungus Resistance	MIL-STD-810G, Method 508.6
Salt Fog	MIL-STD-810G, Method 509.5

Note: All information contained in the datasheet is subject to change without any prior notice. Contact us for pattern and VSWR graphs