

ANTENNA EXPERTS

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Model # LP-170-860 170 – 860 MHz. 9 dBi Gain

LOG PERIODIC DIPOLE ANTENNA

DESIGN FEATURES: The LP-170-860 log periodic dipole antenna uses 6063T6 ultra corrosion resistant architectural anodized aluminium alloy and designed to provide wideband directional radio signals from 170 to 860 MHz frequency band. The extra spacers are used between the support booms to improve

mechanical durability of antenna. This log periodic dipole antenna system is particular suitable for analogue terrestrial television transmissions and receptions application. This high gain LPA provides strong performance over the entire frequency of 170-860 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.

CONSTRUCTIONS: The LP-170-860 assembled log periodic antennas outer-most dimensions are 1.5 meters (5 feet) long and 0.9 meters (3 feet) wide. The antenna has removable elements, the longest of which is 0.45 meter. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a fast deployment studs system 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 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	170 - 860 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	2.5:1
RF Power Handling Capacity	500 Watts
Input Termination	N-Female
Lightning Protection	Direct Ground
MECHANICAL SPECIFICATIONS:	
Support Booms & Radiating Elements Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Gross Weight	5 Kgs.
Wind Rating	200 Km/hr.
Overall Length	1.5 Meters
Overall Width	0.9 Meters
Shipping Length	1.55 Meters
Support Boom – Materials - Cross Section	Aluminum – Square Tube
Elements – Materials - Cross Section	Aluminum - Round Tube
Insulator Materials	Teflon & Nylon
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