



ANTENNA EXPERTS

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Model # LP-20-500

20 – 500 MHz.

9 dBi. Gain

LOG PERIODIC DIPOLE ANTENNA

DESIGN FEATURES: The LP-20-500 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 20-500 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. The antenna can be assembled in less than 10 minutes. This 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 LPA provides strong performance over the entire frequency of 20-500MHz 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-20-500 assembled log periodic antennas outer-most dimensions are 6 meters (20 feet) long and 7.5 meters (24.5 feet) wide.

The antenna has removable elements, the longest of which is 3.75 meters. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a stainless steel nuts/bolts stud 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 coaxial cable sealed inside the support boom to make it weatherproof.



ELECTRICAL SPECIFICATIONS:

Frequency Range	20-500 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.	110 +/- 10 Degrees
Front to Back Ratio	14 +/- 2 dB.
VSWR – Better than	3:1
RF Power Handling Capacity	1000 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
Net Weight Approx.	40 Kgs.
Wind Rating	180 km/Hr.
Wind Load – Without Ice	1.1 Square Meter
Overall Length	6 Meters.
Overall Width	7.5 Meters
Shipping Length	3.5 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)

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 gain curve, azimuth & elevation radiation patterns and f VSWR graph.

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