



# ANTENNA EXPERTS

E-mail: [info@antennaexperts.in](mailto:info@antennaexperts.in)

Website: [www.antennaexperts.in](http://www.antennaexperts.in)

**Model # LP-30-512**

**30 – 512 MHz.**

**9 dBi. Gain**

## LOG PERIODIC DIPOLE ANTENNA

**DESIGN FEATURES:** The LP-30-512 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 30-512 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 log periodic antenna. The antenna can be assembled in less than 15 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 30-512 MHz as the LPDA does not use loading technique to reduce the overall size of array.

**CONSTRUCTIONS:** The LP-30-512 assembled log periodic antennas outer-most dimensions are 4.8 meters (15.8 feet) long and 5 meters (16.5 feet) wide. The antenna has removable elements, the longest of which is 2.5 meters. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a fast deployment stainless steel studs & nuts 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. The complete antenna is supplied with powder coating finish to protect it further from severe environmental conditions 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	30-512 MHz.
Gain	9 dBi. Typical
Bandwidth	30-512MHz
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	100 +/- 10 Degrees
Vertical Beam-width –Half power Points.	70 +/- 5 Degrees
Front to Back Ratio	16 +/- 2 dB.
VSWR - Better Than	2.5:1
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
Gross Weight Approx.	30 Kgs.
Wind Rating	180 km/Hr.
Overall Length	4.8 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	38-75mm (1.5-3 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 frequency Vs gain curve of the antenna.

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