



# ANTENNA EXPERTS

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Model # LP-118-400

118 – 400 MHz.

11 dBi Gain

## VHF/UHF Aviation Band Log Periodic Dipole Antenna

**DESIGN FEATURES:** The LP-118-400 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 118-400 MHz bands for ATC sites for ground-to-ground and ground-to-air communication without having the requirement of multiple antennas. The complete log periodic antenna is supplied with powder coating finish to protect it further from severe environmental conditions. The extra spacers are used between the support booms to improve mechanical durability of log periodic antenna. The specially designed mounting arrangement results in fast installation. The LP antenna can be assembled in less than 5 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, and small size. This log periodic antenna provides strong performance over the entire 118-400 MHz VHF UHF aviation band. Log periodic antenna does not use loading technique to reduce the overall size of array.



**CONSTRUCTIONS:** The LP-118-400 assembled log periodic antennas outer-most dimensions are 1.45 meters (4.75 feet) long and 1.28 meters (4.2 feet) wide. The antenna has removable elements, the longest of which is 0.64 meter, making it highly suitable for easy of shipping/carrying/transportation and handling. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via stainless steel nuts & bolts systems at points along the boom. The tactical 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 tactical 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	118 - 400 MHz.
Gain	11 dBi.
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Beam-width –Half Power Points	65 Degrees
Front to Back Ratio	16 dB.
VSWR – Equal to Better Than	2:1
RF Power Handling Capacity	500 Watts
Input Termination	N-Female
Lightning Protection	Direct Ground

### MECHANICAL SPECIFICATIONS:

Antenna Materials	Powder Coated 6063T6 Aluminum
Mounting Hardware	Marine Grade Stainless Steel
Gross Weight	6 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	1.45 Meters
Shipping Length	1.55 Meters
Support Boom -Cross Section –Outer diameter	Aluminum-Square Tube-25.4mm
Elements -Cross Section –Outer diameter	Aluminum-Round Tube-19 - 12mm
Maximum Mount Pipe Diameter	52 mm (2 Inches)

### ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-) 30 to +75 Degrees Celsius
Storage Temperature	(-) 40 to +85 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.