



ANTENNA EXPERTS

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Model LP-50-500

50 – 500 MHz.

9 dBi. Gain

LOG PERIODIC DIPOLE ANTENNA

DESIGN FEATURES: The LP-50-500 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 50-500 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 antenna. This log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, surveillance, scanning and jamming applications due to its broad band design feature. This high gain LPA provides strong performance over the entire frequency of 50-500 MHz as the LPDA does not use loading technique to reduce the overall size of array.



CONSTRUCTIONS: The LP-50-500 assembled log periodic antennas outer-most dimensions are 2.5 meters (8.2 feet) long and 3 meters (10 feet) wide. The antenna has foldable elements, the longest of which is 1.5 meters. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a fast deployment self-locking device 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.

ELECTRICAL SPECIFICATIONS:

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|---|------------------------|
| Frequency Range | 50-500 MHz. |
| Gain | 9 dBi. |
| Bandwidth | Entire Band |
| Polarization | Vertical or Horizontal |
| Input Impedance | 50 Ohms |
| Radiation Pattern | Directional |
| Horizontal Beam-width –Half power Points. | 70 Degrees |
| Front to Back Ratio | 16 dB. |
| VSWR | 1:2.5 |
| RF Power Handling Capacity | 500 Watts |
| Input Termination | N-Female |
| Lightning Protection | DC Ground |

MECHANICAL SPECIFICATIONS:

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|--|-------------------------------|
| Support Booms & Radiating Elements Materials | 6063T6 Aluminum |
| Mounting Hardware -Materials | Marine Grade Stainless Steel |
| Gross Weight | 10 Kgs. |
| Wind Rating | 195 km/Hr. |
| Overall Length | 2.5 Meters |
| Overall Width | 3.0 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 | 51 mm (2 Inches) |

ENVIRONMENTAL SPECIFICATIONS:

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|-----------------------|-------------------------------|
| Operating Temperature | (-)30 to + 70 Degrees Celsius |
| Storage Temperature | (-) 40 to +80 Degrees Celsius |
| Humidity | 0 to 95 % RH |

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