



ANTENNA EXPERTS

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Model # LP-300-470

300 – 470 MHz.

11 dBi Gain

UHF Band STL Log Periodic Dipole Antenna

DESIGN FEATURES: The LP-300-470 high gain UHF band 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 300-470 MHz bands for STL sites for ground-to-ground without having the requirement of multiple antennas. The complete log periodic antenna is supplied with epoxy based 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 300-470 MHz UHF aviation band. Log periodic antenna does not use loading technique to reduce the overall size of array. The shipping length of antenna is 3 feet making it highly suitable for mobile and tactical applications. The antenna is designed and supplied as per 810G MIL standards.

CONSTRUCTIONS: The LP-300-470 assembled log periodic antennas outer-most dimensions are 0.9 meter (36 Inches) long and 0.5 meters (20 Inches) wide. The antenna has removable elements, the longest of which is 0.25 meter (10 Inches), 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. The antenna is supplied with olive green finish.

HIGH POWER VERSION (OPTIONAL): This high power high gain log periodic antenna can be supplied with 4KW power handling capacity. The antenna uses coaxial cable made by Times Microwave which has a low density PTFE (TEFLON) dielectric, a solid BCCA1 inner conductor and tinned copper with aluminium tape as outer conductor. This high power log periodic antenna is supplied with either DIN-Female connector. The part number for this option is LPHP-300-470.

ELECTRICAL SPECIFICATIONS:

Frequency Range	300-470 MHz.
Gain - Typical	11 dBi.
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half Power Points	65 Degrees
Vertical Beam-width –Half Power Points	55 Degrees
Front to Back Ratio – Better Than	18 dB.
VSWR – Equal to or Better Than	2:1
RF Power Handling Capacity	500 Watts
Input Termination	N-Female
Lightning Protection	Direct Ground

MECHANICAL SPECIFICATIONS:

Antenna Materials	6063T6 Aluminum Alloy
Mounting Hardware	Marine Grade Stainless Steel
Gross Weight	4 Kgs. (8.8 lbs)
Wind Rating	200 Km/Hr. (125 mph)
Overall Length	900 mm (36 Inches)
Overall Width	500 mm (20 Inches)
Shipping Length	1000 mm (40 Inches)
Support Boom -Cross Section –Outer diameter	Aluminum-Square Tube-25.4mm (1 Inch)
Elements -Cross Section –Outer diameter	Aluminum-Round Tube-12.7mm (1/2 Inch)
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Final Finish	Olive Green Mil Color

ENVIRONMENTAL SPECIFICATIONS:

High Temperature	MIL-STD-810G, Method 500.5, Procedures I & II
Low Temperature	MIL-STD-810G, Method 502.5, Procedures I & II
Humidity	MIL-STD-810G, Method 507.5, Procedures I & II
Shock	MIL-STD-810G, Method 516.6, Procedure IV
Vibration	MIL-STD-810G, Method 514.6, Procedure I
Rain	MIL-STD-810G, Method 506.5, Procedure I
Fungus Resistance	MIL-STD-810G, Method 508.6
Salt Fog	MIL-STD-810G, Method 509.5

Note: All information contained in the datasheet is subject to change without any prior notice. [Contact us for pattern and VSWR graphs](#)

