ANTENNA EXPERTS

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Model # HF-LP-10-30 **10 – 30 MHz.** **4 to 7 dBi. Gain**

HF LOG PERIODIC DIPOLE ANTENNA

DESIGN FEATURES: **The HF-LP-10-30 HF 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 10-30 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 15 minutes by two technicians. This log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, scanning, signal intelligence, electronic warfare (EW) and jamming applications due to its broad band design feature. The HF log periodic antenna provides typical 7 dBi gain over 90% of the frequency band 10-30 MHz as the HF LPDA does not use loading technique to reduce the overall size of array hence provides the strong performance as compare to the loaded or active technique.**

CONSTRUCTIONS: **The HF-LP-10-30 assembled log periodic antennas outer-most dimensions are 10 meters (32.85 feet) long and 15 meters (49.25 feet) wide. The antenna has foldable elements, the longest of which is 7.5 meters. All elements are supplied in two segments for easy of shipping and handling except the longest one which is supplied in three sections. The 10 Meters long support boom of HF log periodic antenna is supplied in three segments for easy of shipping and handling which can be assembled at with simple hand tools, makes the antenna highly suitable for tactical application. 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:	
Frequency Range	**10-30 MHz.**
Gain	**4 to 7 dBi.**
Bandwidth	**Entire Band**
Polarization	**Vertical or Horizontal**
Input Impedance	**50 Ohms**
Radiation Pattern	**Directional**
Horizontal Beam-width –Half power Points	**145 +/- 20 Degrees**
Vertical Beam-width –Half power Points	**70 +/- 5 Degrees**
Front to Back Ratio	**12 +/- 3 dB.**
VSWR – Better than	**1:3.0**
RF Power Handling Capacity	**1000 Watts**
Input Termination	**N-Female**
Lightning Protection	**DC Ground**
MECHANICAL SPECIFICATIONS:	
Support Booms & Radiating Elements Materials	**6063T6 Aluminum**
Mounting Hardware -Materials	**Marine Grade Stainless Steel**
Net Weight Approx.	**110 Kgs.**
Wind Rating	**160 km/Hr.**
Overall Length	**10 Meters.**
Overall Width	**15 Meters**
Shipping Length	**3.3 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	**76-115mm (3-4.5 Inches)**
ENVIRONMENTAL SPECIFICATIONS:	
Operating Temperature	**(-)30 to + 70 Degrees Celsius**
Storage Temperature	**(-) 40 to +80 Degrees Celsius**
Humidity	**0 to 95 % RH**