ANTENNA EXPERTS

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Model LPDP-20-1300 20 – 1300 MHz. 7 dBi. Gain

DUAL POLARIZED LOG PERIODIC DIPOLE ANTENNA

DESIGN FEATURES: The LPDP-20-500 dual polarized log periodic antenna uses 6063T6 ultra corrosion resistant architectural anodized aluminum alloy. The LPDP-20-1300 dual polarized log periodic antenna is designed to provide wideband directional transmission/reception of horizontal and vertical radio signals from 20-1300 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. This dual polarized log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, scanning and jamming applications due to its capability of receiving/transmitting both the E & H polarized signals simultaneously. This high gain cross elements LP antenna provides greater than 7 dBi gain over the 95% of the 20-1300 MHz band as the LPDA does not use loading technique to reduce the overall size of array.

CONSTRUCTIONS: The LPDP-20-1300 assembled log periodic antennas outer-most dimensions are 6 meters (20 feet) long and 7.5 meters (24.5 feet) width & height. The antenna has foldable elements, the longest of which is 3.75 meters. All elements are supplied in two segments for easy of shipping and handling. The complete antenna can be assembled within 10 minutes by two operators with simple hand tools. The elements are attached via a fast deployment self-locking device at points along the boom. The antenna is also supplied with powder coating finish to protect the antenna further from severe environmental conditions. 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	20-1300 MHz.
Gain	7 dBi. Typical
Bandwidth	Entire Band
Polarization	Dual - Vertical and Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	120 +/- 20 Degrees
Front to Back Ratio	14 +/- 3 dB.
VSWR	1:3.0
RF Power Handling Capacity	250 Watts
Input Termination	2 x N-Female
Lightning Protection	DC Ground
MECHANICAL SPECIFICATIONS:	
Support Booms & Radiating Elements Materials	All Aluminum
Mounting Hardware -Materials	Stainless Steel
Net Weight Approx.	85 Kgs.
Wind Rating	160 km/Hr.
Overall Length	6 Meters.
Overall Width	7.5 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	50-102mm (2-4 Inches)
ENVIRONMENTAL SPECIFICATIONS:	
Operating Temperature	(-)30 to + 70 Degrees Celsius
Storage Temperature	(-) 40 to +80 Degrees Celsius
Humidity	0 to 95 % RH