ANTENNA EXPERTS

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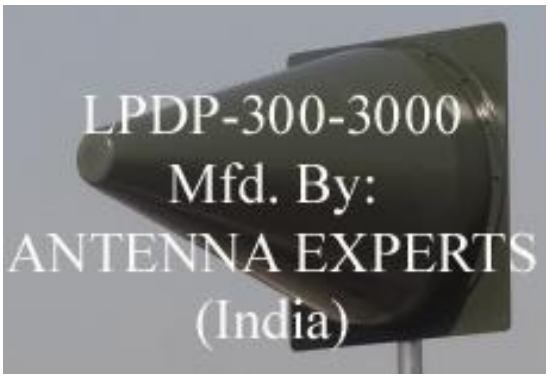
LPDP-300-3000 300 – 3000 MHz. 9 dBi. Gain

DUAL POLARIZED CROSS ELEMENTS LOG PERIODIC DIPOLE ANTENNA WITH RADOME

DESIGN FEATURES: The LPDP-300-3000 dual polarized log periodic antenna uses 6063T6 ultra corrosion resistant architectural anodized aluminum alloy. It is designed to provide wideband directional transmission/reception of horizontal and vertical radio signals from 300-3000 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 LP provides strong performance over the entire frequency of 300-3000 MHz as the LPDA does not use loading technique to reduce the overall size of array.



CONSTRUCTIONS: The LPDP-300-3000 assembled log periodic antennas outer-most dimensions are 0.95 meter (38 Inches) long and 0.71 meters (28 Inches) width & height. The antenna is supplied complete in assembled condition. The antenna is also supplied with powder coating finish to protect the antenna further from severe environmental conditions. The mounting hardware is permanently welded at the back end of the support boom eliminating the requirements of non-metallic isolated pole/mast. All the elements are welded at points along the support 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 dual log periodic dipole antenna are made of type 316 marine grade stainless steel. The antenna is supplied with olive green color.

OPTIONAL: The antenna is supplied with radome/enclosure/housing in order to make it 100% weather proof. Conical enclosure is used for low wind loading and for minimal effect of ice formation on the dual polarized antenna operation as well as providing an aesthetically pleasing appearance.

ELECTRICAL SPECIFICATIONS:	
Frequency Range	300-3000 MHz.
Gain - Typical	9 dBi.
Bandwidth	Entire Band
Polarization	Dual - Vertical and Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	70 +/- 10 Degrees
Front to Back Ratio	16 +/- 1 dB.
Cross Polarization Discrimination – Greater than	25 dB.
VSWR – Better than	3:1
RF Power Handling Capacity	200 Watts @ 2700MHz.
Input Termination	2 x N-Female
Lightning Protection	DC Ground
MECHANICAL SPECIFICATIONS:	
Support Booms & Radiating Elements Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Net Weight Approx.	15 Kgs. With Radome
Wind Rating	200 km/Hr.
Overall Length	950 mm (38 Inches)
Maximum Radome Width / Diameter	400 mm (24 Inches)
Miniimum Radome Width / Diameter	100 mm (4 Inches)
Reflector cum Mounting Plate Size	710 mm (28 Inches)
Support Boom - Material – Cross Section	Aluminum – Square Tube
Elements - Materials - Cross Section	Aluminum - Round Rod
Mounting Clamps Position	At rear end of the antenna
Maximum Mount Pipe Diameter	52mm (2 Inches)
Final Finish / Color	Olive Green or Customized
ENVIRONMENTAL SPECIFICATIONS:	
Operating Temperature	(-) 30 to + 70 Degrees Celsius
Storage Temperature	(-) 40 to +80 Degrees Celsius
Humidity	0 to 95 % RH