DUAL POLARIZED LOG PERIODIC DIPOLE ANTENNA

DESIGN FEATURES: The LPDP-80-1300 dual polarized log periodic antenna is designed to provide wideband directional transmission/reception of horizontal and vertical radio signals from 80-1300 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. This high gain LP provides strong performance over the entire frequency of 80-1300 MHz as the LPDA does not use loading technique to reduce the overall size of array.

CONSTRUCTIONS: The LPDP-80-1300 assembled log periodic antennas outer-most dimensions are 2.2 meters (7.2 feet) long and 1.9 meters (6.1 feet) width & height. The antenna has foldable elements, the longest of which is 0.95 meter. 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 stainless steel.

ELECTRICAL SPECIFICATIONS:

- Frequency Range: 80-1300 MHz.
- Gain: 8 dBi.
- Bandwidth: Entire Band
- Polarization: Dual - Vertical and Horizontal
- Input Impedance: 50 Ohms
- Radiation Pattern: Directional
- Horizontal Beam-width –Half power Points: 80 +/- 10 Degrees
- Front to Back Ratio: 16 +/- 2 dB.
- VSWR: 1:2.5
- 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.: 15 Kgs.
- Wind Rating: 190 km/Hr.
- Overall Length: 2.2 Meters.
- Overall Width: 2.3 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: 52mm (2 Inches)

ENVIRONMENTAL SPECIFICATIONS:

- 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.