



ANTENNA EXPERTS

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Model # LPDP-20-80-500

20 – 500 MHz.

6.5 dBi. Gain

TACTICAL DUAL POLARIZED LOG PERIODIC ANTENNA

DESIGN FEATURES: The LPDP-20-80-500 tactical cross polarized log periodic dipole antenna use 6063T6 ultra corrosion resistant architectural anodized aluminum alloy and designed to provide wideband directional spectrum monitoring of radio signals from 20-500 MHz bands. The complete tactical dual polarized log periodic antenna is supplied with powder coating to protect it further from severe environmental conditions. The extra spacers are used between the support booms to improve mechanical durability of tactical dual log periodic antenna. The specially designed mounting arrangement results in fast installation. The tactical dual polarized LP antenna can be assembled in less than 10 minutes. This tactical cross elements log periodic dipole antenna system is particular suitable for spectrum monitoring applications or low power Tx. application due to its broad band design feature, small size and its capability of receiving / transmitting both the E & H polarized signals simultaneously. This tactical cross log periodic antenna uses loading technique to reduce the overall size of array. The shipping length of antenna is 8.3 feet making it highly suitable for mobile and tactical applications.

CONSTRUCTIONS: The LPDP-20-80-500 assembled tactical dual polarized log periodic antennas outer-most dimensions are 2.5 meters (8.2 feet) long and 2 meters (6.6 feet) wide & high. The tactical dual LP antenna has foldable elements, the longest of which is 1 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 tactical dual 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 dual polarized log periodic dipole antenna are made of type 316 marine grade stainless steel.

ELECTRICAL SPECIFICATIONS:

Frequency Range	20-500 MHz.
Gain	6.5 dBi Typical
Bandwidth	Entire Band
Polarization	Dual - Vertical and Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	110 Degrees typical
Vertical Beam-width –Half power Points.	60 Degrees typical
Front to Back Ratio	14 +/- 2 dB.
VSWR – Max	3:1 over 90 % of the band
RF Power Handling Capacity	Receive only or 500 Watts
Input Termination	2 x N-Female
Lightning Protection	Direct Ground

MECHANICAL SPECIFICATIONS:

Support Booms & Radiating Elements Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Marine Grade Stainless Steel
Net Weight Approx.	25 Kgs.
Wind Rating	180 km/Hr.
Overall Length – less than	2.5 Meters.
Overall Width – less than	2 Meters
Overall Height – less than	2 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	50-77mm (2-3 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.