

SMART ELECTRONICS COMMUNICATION

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DUAL POLARIZED LOG PERIODIC DIPOLE ANTENNA

DESIGN FEATURES: The dual polarized log periodic antenna is designed to provide wideband directional transmission/reception of horizontal and vertical radio signals in full frequency band. Extra spacers are used between the support booms to improve mechanical strength of antenna. 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 signals. This LPDA provide strong performance over the entire frequency as it does not use loading technique to reduce the overall size of array.

CONSTRUCTIONS: All elements are supplied in pairs for compact packing, shipping and easy handling while antenna installation. The installer can attach all the elements very easily at marked positions of elements along the boom. The dual polarized 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:	
Model No.	SLPDP500G8
Frequency Range (MHz)	50-1000 MHz
Gain (dBi)	8 dBi (typ.)
Bandwidth	Full band
Polarization	Dual Polarized for both - Vertical and Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Beam-width	80°±10°
VSWR	≤ 2.5 : 1 (typ.)
RF Power Handling Capacity	1KW @ VHF band & 500W @UHF
Input Termination	2 X [N-Female / DIN-Female (optional)]
Lightning Protection	Direct Ground
MECHANICAL SPECIFICATIONS:	
Support Booms and Radiating Elements Materials	Aluminium Alloy 6063T6
Mounting Hardware	Stainless Steel / Fiberglass / Delrin
Weight (approx)	22 Kg
Length (approx)	2.8 Meters
Width (approx)	3 Meters
Height (approx)	3 Meters
Shipping Length (approx)	3 meters
Wind Rating	180 Km/Hr.
Elements Materials-Cross Section	Aluminium-Round Tube
Support Boom Materials-Cross Section	Aluminium-Square Tube
Mounting Clamps Position	At mid of the Support Boom
Maximum Mounting Pipe Diameter	50 mm (2 inches)
ENVIRONMENTAL SPECIFICATIONS:	
Operating Temperature	(-)30° to +70° Celsius
Storage Temperature	(-)40° to +80° Celsius
Humidity	0 to 90% RH

Note: All information contained in the datasheet is subject to change without any prior notice.