



# ANTENNA EXPERTS

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**Model # LPHP-800-2000                      800 – 2000 MHz.                      9 dBi. Gain**

## High Power Log Periodic Dipole Antenna With Fiber Glass Radome

**DESIGN FEATURES:** The LPHP-800-2000 high power log periodic dipole antenna uses 6063T6 ultra corrosion resistant architectural anodized aluminium alloy with welded elements. The complete antenna is supplied with powder coating finish to protect it further from severe environment conditions. The LPHP-800-2000 log periodic dipole antenna is designed to provide wideband directional transmission/reception of radio signals from 800 to 2000MHz bands. The extra spacers are used between the support booms to improve mechanical durability of antenna. This high power high gain log periodic dipole antenna provides strong performance over the entire frequency of 800-2000MHz as the LPDA does not use loading technique to reduce the overall size of array. Powder coating of the complete log periodic antenna provides extra protection against corrosion in saline weather present in coastal areas.

**CONSTRUCTIONS:** The high power log periodic dipole antenna is supplied complete in assembled condition. The LPHP-800-2000 assembled high power log periodic antennas outer-most dimensions are 450mm long and 250mm wide. The compact size of the log periodic antenna allows easy handling and specially designed mounting arrangement results in fast installation. The log periodic antenna operates at D.C. ground with low resistance discharge path for protection against lightning and for immunity to noise. Output of log periodic antenna is provided via low loss coaxial cable whose N-Female termination is fixed at the back end of the antenna mounting plate All the screws, nuts and bolts of log periodic dipole antenna are made of stainless steel.



**RADOME:** All elements of LPHP-800-2000 high power log periodic antenna are fully welded to its support boom to prevent RF inter-modulation and antenna is completely protected within a high-tech ruggedized radome which is made of fiberglass to ensure survivability in the worst environments conditions The heavy duty fiberglass enclosure has excellent transparency for RF signals and enough strength to withstand more than specified wind loads. Tapered enclosure is used for low wind loading and for minimal effect of ice formation on the high power log periodic antenna operation as well as providing an aesthetically pleasing appearance. The antenna is supplied with olive green color finish. Other customized housing/radome color can also be supplied on request.

### ELECTRICAL SPECIFICATIONS:

Frequency Range	800 - 2000 MHz.
Gain	9 dBi. Typical
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam width – Half Power Points	60 +/- 5 Degrees
Vertical Beam width – Half Power Points	50 +/-5 Degrees
Front to Back Ratio	18 +/-2 dB.
VSWR – Better Than	2.5:1
RF Power Handling Capacity	400 Watts
Input Termination	N-Female
Lightning Protection	Direct Ground

### MECHANICAL SPECIFICATIONS:

Support Booms & Radiating Elements Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Stainless Steel
Wind Rating	200 Km/Hr.
Overall Length	450 mm (18 Inches)
Overall Width	250 mm (10 Inches)
Shipping Length	550 mm (22 Inches)
Support Boom - Materials	Aluminum - Square Tube
Elements - Materials	Aluminum - Round Rod
Mounting Clamps Position	At the back end of antenna
Maximum Mount Pipe Diameter	51 mm (2 Inches)
Gross Weight – Approx.	2.5 Kgs.

### ENVIRONMENTAL SPECIFICATIONS:

High Temperature	MIL-STD-810G, Method 500.5, Procedures I & II
Low Temperature	MIL-STD-810G, Method 502.5, Procedures I & II
Humidity	MIL-STD-810G, Method 507.5, Procedures I & II
Shock	MIL-STD-810G, Method 516.6, Procedure IV
Vibration	MIL-STD-810G, Method 514.6, Procedure I
Rain	MIL-STD-810G, Method 506.5, Procedure I
Fungus Resistance	MIL-STD-810G, Method 508.6
Salt Fog	MIL-STD-810G, Method 509.5

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