



# ANTENNA EXPERTS

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**Model # LP-20-3000**

**20 – 3000 MHz.**

**6-9 dBi. Gain**

## WIDE BAND LOG PERIODIC DIPOLE ANTENNA

**DESIGN FEATURES:** The LP-20-3000 log periodic dipole antenna use 6063T6 ultra corrosion resistant architectural anodized aluminum alloy and designed to provide wideband directional transmission/reception of radio signals from 20-3000 MHz bands. The complete 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 antenna. The antenna can be assembled in less than 10 minutes by two technicians. This log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, scanning and jamming applications due to its broad band design feature. The shipping length of antenna is 10 feet making it highly suitable for mobile and tactical application. Specially designed mounting arrangement results in fast installation. Two mounting brackets are fitted on the support boom one for horizontal polarization and other for vertical polarization.

**CONSTRUCTIONS:** The LP-20-3000 assembled log periodic antennas outer-most dimensions are 6.2 meters (20.5 feet) long and 7.5 meters (24 feet) wide. The antenna has foldable elements, the longest of which is 3.65 meters. Similarly the support boom of antenna is supplied in two sections for easy of shipping/transportation and handling. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via stainless steel stud systems with spring washer 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 type 316 marine grade stainless steel. The polarization can be changed from horizontal or vertical and vice-versa.



### ELECTRICAL SPECIFICATIONS:

Frequency Range	20-3000 MHz.
Gain	6-9 dBi. Typical
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half power Points.	100+/-15 Degrees typical
Vertical Beam-width –Half power Points.	65+/-10 Degrees typical
Front to Back Ratio	15 +/- 2 dB.
VSWR – Better than	2.5:1
RF Power Handling Capacity	1000 Watts @1GHz; 500W@3GHz
Input Termination	DIN-Female or 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.	32 Kgs.
Wind Rating	160 km/Hr.
Overall Length	6.2 Meters.
Overall Width	7.5 Meters
Shipping Length	3.0 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

Please contact us for further information like Azimuth & Elevation radiation patterns and frequency Vs VSWR graph frequency Vs gain curve of the antenna.

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