



# ANTENNA EXPERTS

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Model # LP-130-190 130-190 MHz. 9 dBi Gain

## VHF High Band High Gain Log Periodic Dipole Antenna

**DESIGN FEATURES:** The LP-130-190 high gain VHF band 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 130-190 MHz bands for base station sites for ground-to-ground and ground-to-air communication without having the requirement of multiple antennas. The complete log periodic antenna is supplied with olive green epoxy based powder coating finish to protect it further from severe environmental conditions. The extra spacers are used between the support booms to improve mechanical durability of log periodic antenna. The specially designed mounting arrangement results in fast installation. The LP antenna can be assembled in less than 5 minutes. This log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, scanning and jamming applications due to its broad band design feature, and small size. This log periodic antenna provides strong performance over the entire 130-190 MHz VHF band. Log periodic antenna does not use loading technique to reduce the overall size of array. The shipping length of antenna is less than 1.6meters making it highly suitable for mobile and tactical applications.

**CONSTRUCTIONS:** The high gain LP-130-190 assembled log periodic antennas outer-most dimensions are 1.5 meters (5 feet) long and 1.2 meters (4 feet) wide. The antenna has removable elements, the longest of which is 0.57 meter, making it highly suitable for easy of shipping/carrying/transportation and handling. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via stainless steel nuts & bolts systems at points along the boom. The tactical 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 high gain tactical log periodic dipole antenna are made of type 316 marine grade stainless steel. The mounting arrangement of log periodic antenna permits to change the polarization from horizontal to vertical and vice-versa. The antenna is supplied with standard Olive Green Military Color finish. The mounting hardware/bracket/latch is permanently fixed/welded at the rear/back end of the high gain log periodic dipole antenna

### ELECTRICAL SPECIFICATIONS:

Frequency Range	130 - 190 MHz.
Gain – Typical	9 dBi.
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width –Half Power Points	60 Degrees Typical
Vertical Beam-width –Half Power Points	50 Degrees Typical
Front to Back Ratio	16 dB. Typical
VSWR – Equal to or Better Than	2:1
RF Power Handling Capacity	2.5KW CW
Input Termination	N-Female
Lightning Protection	Direct Ground

### MECHANICAL SPECIFICATIONS:

Antenna Materials	6063T6 Aluminum Alloy
Mounting Hardware	Marine Grade Stainless Steel
Gross Weight	8 Kgs. (9 Pound)
Wind Rating	200 Km/Hr. (125 MPH)
Overall Length	1500 mm (59 Inches)
Overall Width	1200 mm (48 Inches)
Shipping Length	1.60 Meters (63 Inches)
Support Boom -Cross Section –Outer diameter	Aluminum-Square Tube-25.4mm (1")
Elements -Cross Section –Outer diameter	Aluminum-Round Tube-12.7mm (1/2")
Insulator Material	Teflon & Nylon
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Standard Color/Finish	Olive Green
Anti-Corrosion Treatment	Epoxy Based Power Olive Green Coating
Mounting Clamp Position	At Rear End of the Support Boom

### 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. [Contact us for pattern and VSWR graphs](#)