# ANTENNA EXPERTS

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Model # LP-215-470 215 – 470 MHz. 10 dBi Gain

UHF Aviation Band High Gain Log Periodic Dipole Antenna

DESIGN FEATURES: The LP-215-470 high gain UHF air 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 215-470 MHz bands for ATC 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 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 215-470 MHz UHF aviation band. Log periodic antenna does not use loading technique to reduce the overall size of array. The shipping length of antenna is less than 4 feet making it highly suitable for mobile and tactical applications.


CONSTRUCTIONS: The high gain LP-215-470 assembled log periodic antennas outer-most dimensions are 1.05 meters (3.45 feet) long and 0.7 meters (2.3 feet) wide. The antenna has removable elements, the longest of which is 0.35 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 | 215 - 470 MHz. |
| Gain – Typical | 10 dBi. |
| Bandwidth | Entire Band |
| Polarization | Vertical or Horizontal |
| Input Impedance | 50 Ohms |
| Radiation Pattern | Directional |
| Horizontal Beam-width –Half Power Points | 65 Degrees Typical |
| Vertical Beam-width –Half Power Points | 45 Degrees Typical |
| Front to Back Ratio | 16 dB. Typical |
| VSWR – Equal to or Better Than | 2:1 |
| RF Power Handling Capacity | 250 Watts CW |
| Input Termination | N-Female |
| Lightning Protection | Direct Ground |
| MECHANICAL SPECIFICATIONS: | |
| Antenna Materials | 6063T6 Aluminum Alloy |
| Mounting Hardware | Marine Grade Stainless Steel |
| Gross Weight | 4 Kgs. (9 Pound) |
| Wind Rating | 200 Km/Hr. (125 MPH) |
| Overall Length | 1050 mm (41 Inches) |
| Overall Width | 700 mm (28 Inches) |
| Shipping Length | 1.15 Meters (46 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 Coating |
| 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