

Signity RF Solutions



LOG PERIODIC DIPOLE ANTENNA (SRFS 150-500) Frequency: 150~500 MHz / Gain: 9 dBi

Design Features

The SRFS150-500 log periodic antenna is designed to provide wideband directional transmission/reception of horizontal or vertical radio signals from 150-500 MHz bands. The extra spacers are used between the support booms to improve mechanical durability of antenna. The specially designed mounting arrangement results in fast installation. This 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 (one at a time). This high gain LP provides strong performance over the entire frequency of 150-does not use loading technique to reduce the overall size of array.

TECHNICAL SPECIFICATIONS	
Frequency Range	150 ~ 500 MHz
Gain	9 dBi
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width-half power points	60 – Horizontal
Front to Back Ratio	16 dB
VSWR	2.5: 1
RF Power Handling Capacity	250 Watts
Input Termination	N – Female
Lightning Protection	Direct Ground
Mecanical Specifications	
Support booms & Radiating Elements Material	Aluminum Alloy 6063T6
Mounting Hardware Nut and Bolts	Stainless Steel
Net. Weight Approx	6 Kg
Overall length	1 Mtr
Overall Width	1.1 Mtr
Wind Rating	200 km/hr
Elements Material – cross section	Aluminium Round Table
Support Boom Materials - Cross section	Aluminium Round Square table
Mounting Clamps Position	At back end of the support boom
Maximum Mounting pipe Diameter	51 mm (2 inches)
Environmental Specification	
Operating Temperature	-30 °C ~ +70 °C
Storage Temperature	-30 °C ~ +80 °C
Humidity	0 + 95% RH

Construction

The SRFS 150-500 assembled log periodic antennas outer-most dimensions are 1 meters (3.5 feet) long and 1.1 meters (3.5 feet) width & height. The antenna has foldable elements, the longest of which is 0.5 meter. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a fast deployment self-locking device 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 stainless steel.