

Model LP/6.2-30

2 KW or 4 KW ROTATABLE HF LOG PERIODIC ANTENNA



The LP/6.2-30 is a commercial, lightweight, HF log periodic antenna, designed for medium to long range communications. The LP/6.2-30 operating range is 6.2 - 30.0 MHz and is unique as its physical size is reduced over comparable antennas. Power rated at **2kW** and **4kW** PEP, the LP/6.2-30 is ideally suited for use in broadband ALE (automatic link establishment) or fixed frequency commercial applications where performance and reliability are major factors.

The antenna is constructed of the finest **tubular aluminum**, and all elements are **tapered aluminum** tubing for minimum weight and wind drag.

- Broadband operation available for ALE (automatic link establishment) or frequency hopping operation without complex external tuning units.
- Lightweight, compact array
- Low VSWR and high gain across the operating band

STRUCTURAL CHARACTERISTICS

Boom length	37.75 feet/11.52 m
Longest element	49.4 feet/15.06 m
Turning radius	31.5 feet/9.6 m
Total number of elements	17
Net weight	382 lbs/173.6 kg
Wind loading capability	
No ice	80 mph/128.72 kmph
Radial ice	60 mph/96.54 kmph
Wind surface area	33.24 sq ft/3.09 sq m
Shipping weight	668 lbs/303 kg
Shipping volume	50.7 cubic ft/1.5 cubic m

ELECTRICAL CHARACTERISTICS

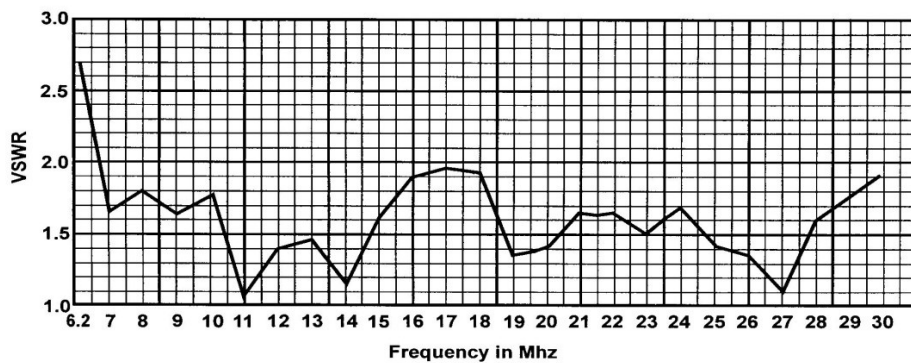
Frequency range	6.2 – 30.0 MHz
Power handling capability	4.0/2.0 kW
PEP/average	
Polarization	Horizontal
Cross polarization	20 dB down
Forward gain over average soil	8dB@6.2 MHz *
conditions (in dBi)	12dB@30 MHz
Front to back ratio	10 dB nominal
Nominal VSWR (with respect to 50Ω)	2.5:1
Input impedance	50
Input connector	N female
Half power beam widths (free space)	
E plane (average)	70°
Vertical angle of maximum radiation	
Low frequency	35°
High frequency	8° *

* At a phase center height of 80 feet/24.4 meters

TAKE-OFF ANGLES AT VARIOUS HEIGHTS ABOVE GROUND AND FREQUENCIES

Height Above Ground	Frequency				
	6.2 MHz	10 MHz	15 MHz	25 MHz	30 MHz
20 feet	90°	90°	55°	29°	24°
40 feet	80°	38°	24°	14°	12°
60 feet	42°	24°	16°	12°	8°
80 feet	24°	16°	14°	9.50	8°
100 feet	25°	20°	12°	5°	3°

Typical VSWR Chart



The LP-6.2-30, when purchased, and installed with a Specific rotator will provide for continuous rotation and remote control wherever you have an Internet connection.

*VSWR depends upon the height of the antenna above ground, ground conditions, and the influence of other structures or antennas in the vicinity. The specification is for ideal conditions.