

## 1 or 2 KW ROTATABLE HF LOG PERIODIC ANTENNA



The LP-230 provides excellent reliability in medium to long range HF circuits. The rotatable antenna allows communication between a fixed station and mobile stations, such as ships, aircraft, or tactical deployments. This Log Periodic antenna is a lightweight, high-strength antenna which provides excellent HF performance in the 2 to 30 MHz frequency band. A rotary joint allows continuous rotation.

The LP-230 lightweight, rotatable, horizontal log periodic antenna, produced to Navy & U.S. Air Force requirements, is suitable for use where limited space and difficult access are encountered. The LP-230 system is supplied with or without a 60-foot tower. Primarily constructed of aluminum with the longest single piece being twelve feet, the entire system can easily be roof-mounted. A sixty foot self-supporting tower is also available ask to our sales@comsystems.com and rotator is controlled remotely to any azimuth, with lights indicating the antenna heading.

- 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

This Log Periodic can include: antenna, tower, rotator, controller, roof mount

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### STRUCTURAL CHARACTERISTICS

42feet/12 m

Boom length L

Longest element W *	70 feet/21 m	
Turning radius	32 feet/9.6 m	
Net weight	382 lbs/173.6 kg	
Wind loading capability No ice Radial ice Shipping weight Shipping volume	100 mph, no ice 65 mph, ½" ice 1800 lbs/816 kg 56cubic ft/1.58 cubic	

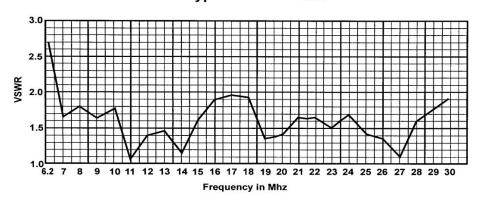
<sup>\*</sup> At a phase center height of 63feet/19.2 meters

#### **ELECTRICAL CHARACTERISTICS**

	Frequency range	2 — 30.0 MHz
	Power handling capability PEP/average	1Kw(A) or 2 kw (B)
	Polarization	Horizontal
	Cross polarization	20 dB down
	Forward gain over average soil	9dB@6.2-12MHz *
	conditions (in dBi)	12dB@12-30 MHz
	Front to back ratio	10 dB nominal
Nominal VSWR (with respect to $50\Omega$ ) 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° *



# Typical VSWR Chart



<sup>\*</sup>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.