

APPLICATIONS

The LPH-1A 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.

FEATURES

The LPH-1A rotatable log periodic array (RLPA) 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.

CHARACTERISTICS

The LPH-1A lightweight, rotatable, horizontal log periodic antenna, produced to U.S. Air Force requirements, is suitable for use where limited space and difficult access are encountered. The LPH-1A system is supplied with 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. The rotator is controlled remotely to any azimuth, with lights indicating the antenna heading.

HORIZONTAL POLARIZATION

MIL TYPE AS-3250/F

LIGHTWEIGHT

ROTATABLE

EQUIPMENT SUPPLIED

Array, balun transformer, rotator, sixty-foot guyed tower, and remote control unit.

OPTIONAL EQUIPMENT

Tower from 24 to 60 feet (12-foot increments), erection kit, erection winch, and obstruction lights. Coaxial cable, connector adapters and mating adapters. Computer controller with RS-232 interface.

SPECIFICATIONS

SPECIFICATIONS	1A	1B
FREQUENCY RANGE	2-30 MHz	6.2-30MHz
POWER CAPABILITY	1kW avg/2 kW PEP	4kW avg/8 kW PEP
INPUT IMPEDANCE	50 Ohms unbalanced	50 Ohms unbalanced
VSWR	2.5:1 Maximum	2.5:1 Maximum
INPUT CONNECTOR	Type "N"	Type "N"
GAIN	6.2-12 MHz 9dBi 12-30 MHz 12 dBi	9dBi 12dBi
FRONT-TO-BACK RATIO	6.2-12 MHz Bi-directional 12-30 MHz 10 dB	Bi-directional 10 dB
AZIMUTH BEAM WIDTH	65 Degrees nominal	65 Degrees nominal
ROTATION	.3 rpm continuous	.3 rpm continuous
WIND LOADING	100 mph, no ice 65 mph, ½" ice	100 mph, no ice 65 mph, ½" ice
ERECTED DIMENSIONS (H x L x W)	63' H x 42' L x 70.7' W	63' H x 42' L x 70.7' W
TURNING RADIUS	32 ft	32 ft
SHIPPING WEIGHT	1,800 lbs	1,800 lbs
SHIPPING VOLUME	56 cu ft	56 cu ft

