

## Features

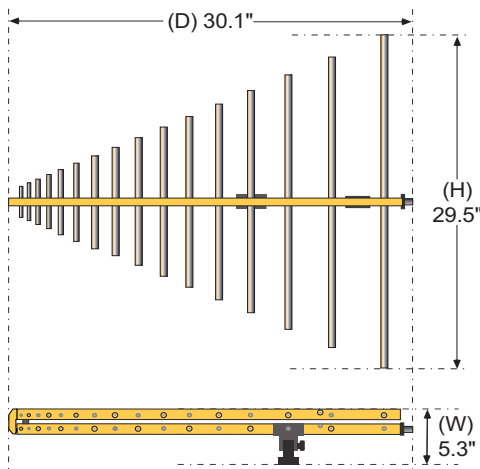
- **Frequency Range**  
200 MHz to 1 GHz
- **Transmit & Receive Capabilities**  
emissions/immunity applications
- **Individual Calibration Included**  
per ANSI C63.5 with NIST traceability
- **Three-year Standard Warranty**

## Description

The ALP-100 is a broadband, linearly polarized Log Periodic Dipole Array (LPDA) Antenna, operating over the frequency range of 200 MHz to 1 GHz. This antenna is geared specifically for high power applications up to 500 watts.

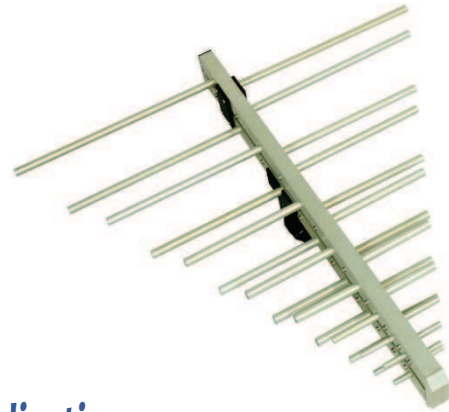
## Construction

The ALP-100 is designed to be extremely durable, making it an ideal choice for daily use in laboratory environments, both indoors and outdoors, and even under continuous exposure to extreme weather conditions. The antenna is constructed using a heavy gauge, high grade, corrosion resistant aluminum.



## Calibration

Each antenna is individually calibrated per ANSI C63.5 with NIST traceability. The calibration data and certificate is provided. Recognized ISO 17025 accredited calibration is also available upon request.



## Application

The ALP-100 Power Log Periodic Antenna is primarily intended for use as a transmitting antenna for establishing radiated RF fields for product immunity tests, and is capable of handling power levels up to 500 Watts.

The ALP-100 is also suitable for use as an EMI test antenna for qualification-level regulatory compliance measurements (FCC, CE, RTCA DO-160, FDA, SAE Automotive, etc.).

In addition, a pair of ALP-100 Log Periodic Antennas can be used in lieu of dipole antennas for Normalized Site Attenuation (NSA) calibrations of Open Area Test Sites (OATS) or Semi-Anechoic Chambers (SAC); thereby avoiding the time-consuming process of tuning the dipole element lengths at each discrete frequency.

Notwithstanding the above applications, the ALP-100 can also be used for test site comparisons, shielding effectiveness tests of large enclosures, field monitoring, site surveys and other general purposes.

## Mounting

The mounting assembly for the the ALP-100 incorporates a hinge mechanism to quickly and easily change the antenna polarization.

The assembly is equipped with a standard 1/4-inch x 20 mounting hole, which allows it to be affixed to Com-Power's **AT-812 Antenna Tripod**, **AM-400 Antenna Mast**, or any other similar structure with compatible mounting arrangements.

### Specifications

Product Name	<b>Power Log Periodic Antenna</b>
Frequency Range	<b>200 MHz to 1 GHz</b>
Polarization	<b>Linear</b>
Nominal Impedance	<b>50Ω</b>
Power Handling	<b>500 Watts</b> (continuous)
Connector	<b>N-type</b> (female)
Antenna Factor	<b>11.7 to 24.0</b> (average: 18.7) [dB(m <sup>-1</sup> )]
Isotropic Gain	<b>4.4 to 6.9</b> (average: 6.2) dBi
VSWR	<b>1.42 to 2.28</b> (average: 1.83) :1
Return Loss	<b>8.2 to 15.2</b> (average: 10.9) dB
Specifications	<b>FCC, CISPR, EN, ETSI, FAA, MIL-STD-461, SAE, etc.</b>
Dimensions (H x W x D)	<b>29.5" x 5.3" x 30.1"</b> [74.9 x 13.5 x 76.5 cm]
Weight	<b>4 lbs.</b> [1.8 kg]

All specifications are subject to change without notice.  
All values are typical, unless specified.

### Accessories available from Com-Power:



PAM-103 Preamplifier



AT-812 Antenna Tripod

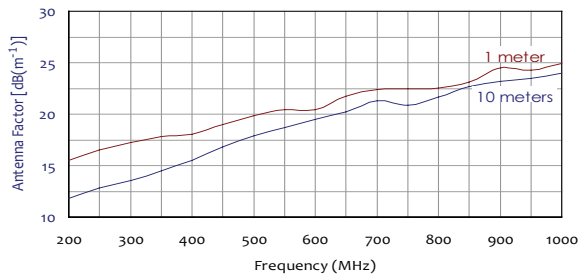


SPA-800 Spectrum Analyzer

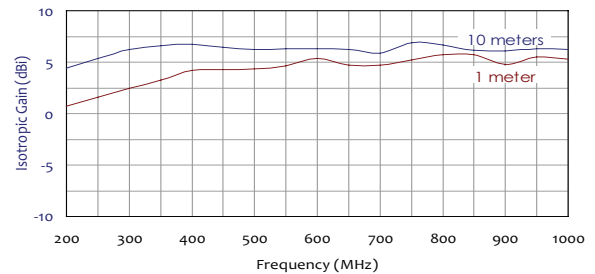
### Also Available:

- AB-900 Biconical Antenna
- AM-741 Active Monopole Antenna
- ALC-100 & AL-100 Log Periodic Antennas

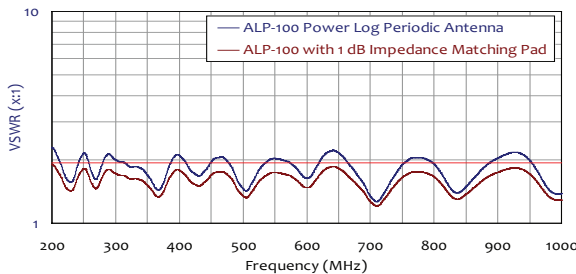
### Antenna Factors



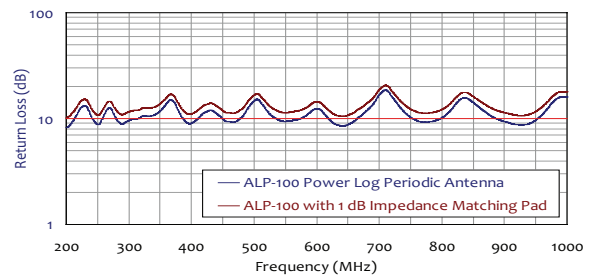
### Isotropic Gain



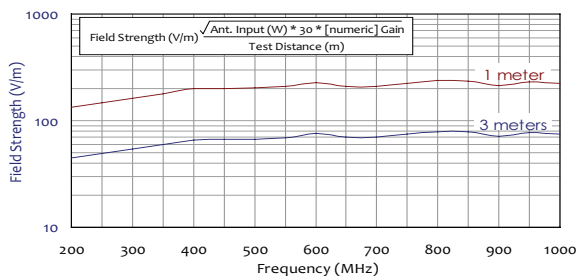
### Voltage Standing Wave Ratio (VSWR)



### Return Loss



### Typical Field Strength with 500W Input Power



### Typical Forward Power Levels

