

Features

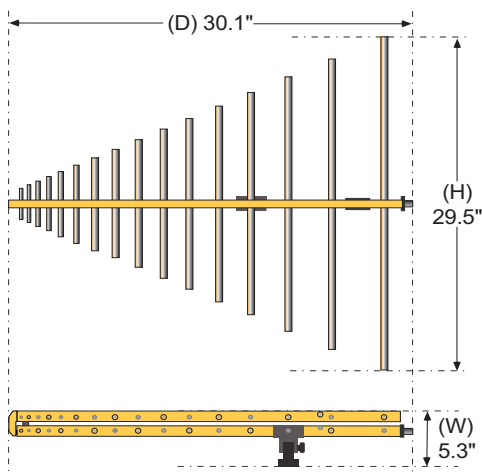
- **Frequency Range**
200 MHz to 1 GHz
- **Transmit & Receive Capabilities**
emissions/immunity applications
- **Individual Calibration Included**
per ANSI C63.5 with NIST traceability
- **Three-year Standard Warranty**

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.

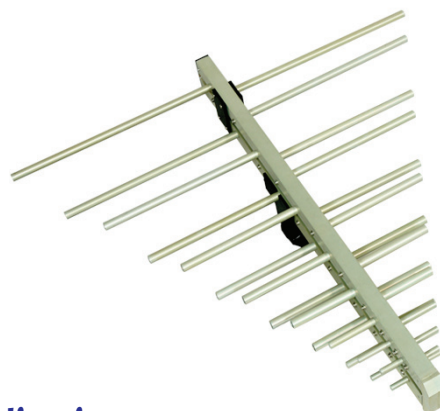
Construction

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	Power Log Periodic Antenna
Frequency Range	200 MHz to 1 GHz
Polarization	Linear
Nominal Impedance	50Ω
Power Handling	500 Watts (continuous)
Connector	N-type (female)
Antenna Factor	11.7 to 24.0 (average: 18.7) [dB(m ⁻¹)]
Isotropic Gain	4.4 to 6.9 (average: 6.2) dBi
VSWR	1.42 to 2.28 (average: 1.83) :1
Return Loss	8.2 to 15.2 (average: 10.9) dB
Specifications	FCC, CISPR, EN, ETSI, FAA, MIL-STD-461, SAE, etc.
Dimensions (H x W x D)	29.5" x 5.3" x 30.1" [74.9 x 13.5 x 76.5 cm]
Weight	4 lbs. [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-900TG Series Spectrum Analyzers

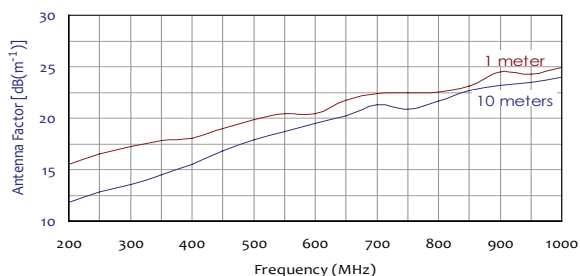
Also Available:

AL-130R Active Loop Antenna

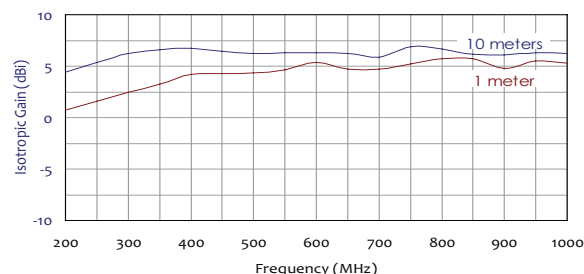
AM-741R Active Monopole Antenna

AB-900A/ABF-900A Biconical Antennas

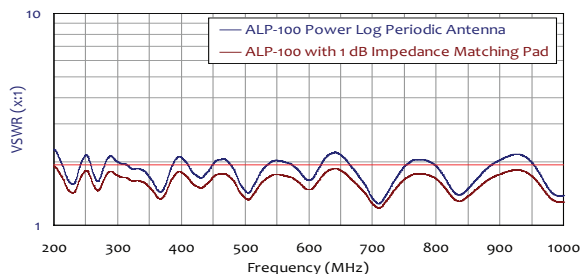
Typical Antenna Factors



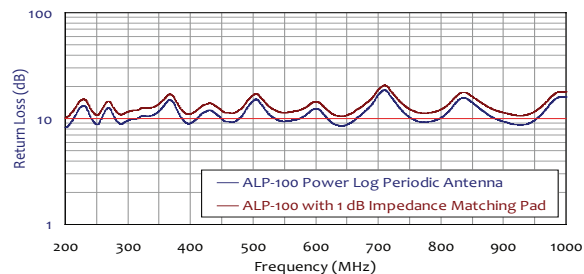
Typical Isotropic Gain



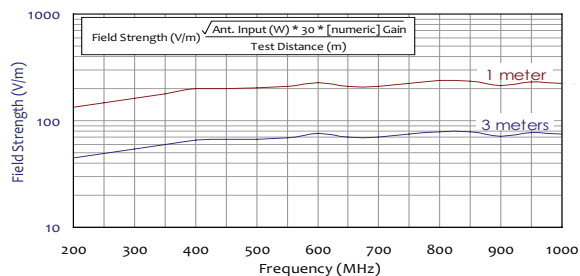
Typical Voltage Standing Wave Ratio (VSWR)



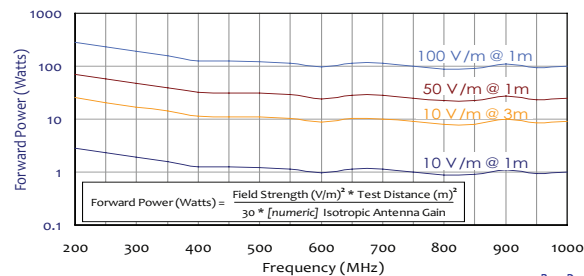
Typical Return Loss



Typical Field Strength with 500W Input Power



Typical Forward Power Levels



Rev. D10.18