

## Features

- **Frequency Range**  
88 MHz to 108 MHz (Usable from 80 MHz to 120 MHz)
- **Transmit & Receive Capabilities**  
emissions/immunity applications
- **Individual Calibration Included**  
per SAE ARP 958 with NIST traceability

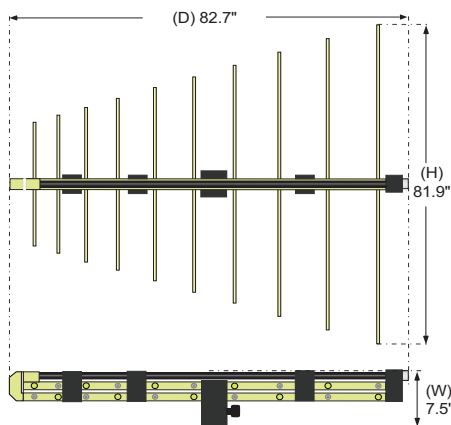


## Description

The ALFM-80120 is a linearly polarized Log Periodic Dipole Array (LPDA) Antenna, operating over the frequency range of 80 MHz to 120 MHz. This antenna is geared specifically for high power applications up to 2500 watts.

## Construction

The ALFM-80120 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 SAE ARP 958 with NIST traceability. The calibration data and certificate is provided. Recognized ISO 17025 accredited calibration is also available upon request.

## Application

The ALFM-80120 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 2500 Watts.

The ALFM-80120 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.).

Notwithstanding the above applications, the ALFM-80120 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 ALFM-80120 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>88 MHz to 108 MHz (usable from 80 MHz to 120 MHz)</b>
Polarization	<b>Linear</b>
Nominal Impedance	<b>50Ω</b>
Power Handling	<b>2500 Watts (continuous)</b>
Connector	<b>7-16 DIN (female)</b>
Antenna Factor	<b>6 to 8 [dB(m<sup>-1</sup>)]</b>
Isotropic Gain	<b>1.5 to 5 dBi (@ 1 mtr)</b>
VSWR	<b>&lt;1.3 (80 to 88 MHz)</b> <b>&lt;1.25 (88 to 108 MHz)</b> <b>&lt;1.45 (108 MHz to 120 MHz)</b>
Dimensions (H x W x D)	<b>7.5 x 81.9 x 82.7 Inches [19 x 208 x 210 cm]</b>
Weight	<b>13.5 lbs. [6.1 kg]</b>

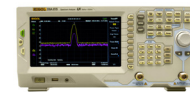
Accessories available  
from Com-Power:



PAM-103 Preamplifier



AT-812 Antenna Tripod



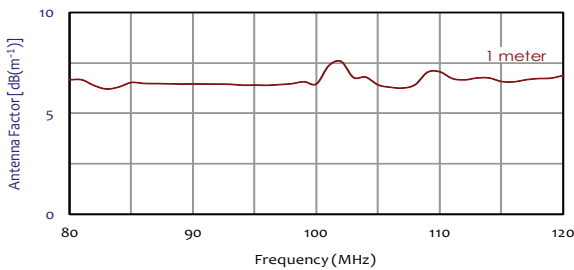
SPA-815TGE Spectrum Analyzer

Also Available:

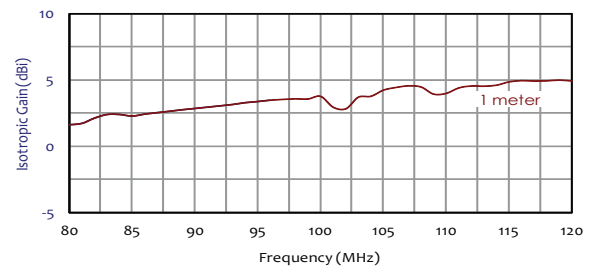
AB-900 Biconical Antenna  
AM-741 Active Monopole Antenna  
ALC-100 & AL-100 Log Periodic Antennas

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

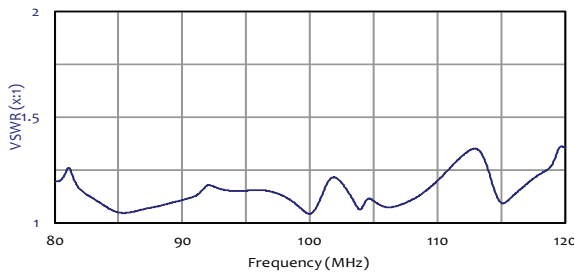
### Antenna Factors



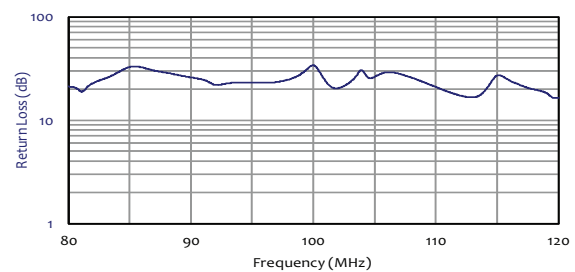
### Isotropic Gain



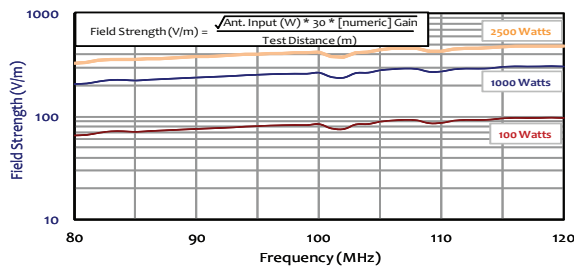
### Voltage Standing Wave Ratio (VSWR)



### Return Loss



### Typical Field Strength @ 1 mtrs



### Typical Forward Power Levels

