LPDA-0801 Log Periodic Dipole Array

Product Overview

The TDK LPDA-0801 is a medium gain Log Periodic Dipole Array that provides strong performance over the operating frequency range of 80 MHz to 1 GHz. The LPDA-0801 features very high power handling (2.5 kW continuous) capabilities to accommodate the most extreme EMC test requirements.

Patent-Pending Design The LPDA-0801 features a patent-pending boom/feedline design that greatly enhances the antenna’s performance over traditional LPDA models while maintaining a compact form factor. This unique design facilitates heat transfer, which yields very high power handling with extremely low loss and greatly improved efficiency.

Dual Use The LPDA-0801 is designed for immunity measurements, but the reduced sized precision feedline cross section translates into low cross-polarization and excellent pattern symmetry, making the LPDA-0801 an excellent emissions measurements as well.

Robust Construction The LPDA-0801 is precision built to very tight tolerances and features an ultra-robust mechanical design, resilient gold chromate finish, and a highly durable feed to withstand the rigors of daily use in EMC test environments. The antenna can be mounted on a conventional antenna tower or on one of TDK’s line of antenna masts.

Applications

- Immunity and Emission testing

Features

- Wide frequency range of 80 MHz to 1 GHz
- High power handling (2.5 kW)
- High efficiency and low loss
- Robust mechanical design

Options

- **Manual Vertical Mast MVM-200R**
  The TDK MVM-200R antenna mast provides manual control of the height, tilt, and polarization. The MVM-200R adjusts from 1 m to 1.5 m in height and supports antennas up to 18 kg.
LPDA-0801 Log Periodic Dipole Array

**Electrical Specifications**

- Frequency Range: 80 MHz to 1 GHz
- Gain: 5 - 6 dBi
- VSWR: 1.5:1 average
- Polarization: Linear
- Power Handling: 2.5 kW (continuous)
- Impedance: 50 Ohms nominal

**Mechanical Specifications**

- Dimensions: 142 cm L x 170 cm W x 5 cm H (14 cm with mount)
- Weight: 4 kg
- Connector: 7/16 female
- Construction: Aluminum with gold chromate finish

**Antenna Data**

- **VSWR**
  - Frequency (MHz)
  - Plot showing VSWR values across the frequency range.
- **Gain**
  - Frequency (MHz)
  - Plot showing gain values across the frequency range.
- **Antenna Factor**
  - Frequency (MHz)
  - Plot showing antenna factor values across the frequency range.

**Ordering Information**

- **Product**: Log Periodic Dipole Antenna
- **Model Number**: LPDA0801
- **Warranty**: 1 year limited

To place an order or to learn more about the TDK products that best meet your needs, contact your TDK sales representative:

**TDK RF Solutions Inc.**

1101 Cypress Creek Rd.
Cedar Park, Texas 78613 USA

Phone: 512-258-9478
Fax: 512-258-0740
Email: info@tdkrf.com
World Wide Web: www.tdkrfolutions.com

**To learn more about TDK’s wide range of innovative test products, solutions and services visit www.tdkrfolutions.com**

Copyright © TDK RF Solutions Inc. All rights reserved. Specifications subject to change without notice.

Rev. 2014-1029