# Data Sheet

# LPDA-8003 Log Periodic Dipole Antenna

### **Product Overview**

The TDK LPDA-8003 Log Periodic Dipole Antenna is a new generation compact antenna used for transmitting and receiving broadband radio signals. It is especially suited for dual band communication testing where the antenna must not interfere with the measurement environment. The LPDA-8003 provides optimal performance over the wide operating frequency range of 800 MHz to 3 GHz. The LPDA-8003 features reduced cross polarization, improved pattern symmetry, and moderate power handling capability, making it an excellent choice for both communications testing as well as the most stringent metrology applications.

**Leading-Edge Design** The LPDA-8003's compact design features a reduced boom size which results in excellent cross polarization rejection. The antenna's patent-pending balun design provides improved pattern symmetry and a low VSWR.



The TDK LPDA-8003 Log Periodic Dipole Antenna features an improved design offering superior performance over the ultra-wide frequency range of 800 MHz to 3 GHz.

### **Features**

- Compact broadband design
- Improved pattern symmetry
- Reduced cross polarization
- Moderate power capability (500W)
- Fits common antenna mounts;
   TDK RF Solutions mounts are also available
- Individually calibrated according to ANSI C63.5 with signed certificate of calibration

## **Applications**

- Communications equipment testing
- Land mobile communication bands, GSM, ISM testing
- Site attenuation
- Calibration
- Transmission loss measurements



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### **Electrical Characteristics**

Frequency Range: 800 MHz to 3 GHz

Gain: 8 dBi

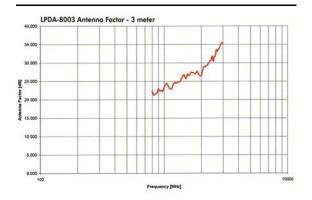
VSWR: 2:1 average

Polarization: Linear

Power Handling: 500W CW

Feedpoint Impedance: 50 ohms nominal

### Antenna Data



# **Mechanical Specifications**

Size: 91 cm x 23 cm x 3 cm

 $(36" L \times 9" W \times 1" H)$ 

Weight: <1 kg

Construction: Aluminum with gold

chromate finish

RF Connector: N-type female

# **Ordering Information**

Product: Log Periodic Dipole

Antenna

Model Number: LPDA-8003

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:

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