Data Sheet

# PBA-2030 Precision Biconical Antenna

## Product Overview

The TDK PBA-2030 Precision Biconical Antenna is a new generation biconical dipole that covers the operating frequency range of 20 MHz to 300 MHz. The PBA-2030 offers an unprecedented combination of power handling, balance, and pattern control, which makes it an excellent choice for both immunity and emissions measurements.

**Immunity and Emissions Measurements** For radiated immunity testing, the PBA-2030 is a highly efficient radiator with a low VSWR (<2.5:1 average). The PBA-2030's moderate power handling capability (100W CW) accommodates the majority of IEC 1000-4-3 immunity test applications. For emissions testing, the PBA-2030's improved balun provides superior patterns and balance, while the internal choke effectively provides immunity to externally induced imbalance.

**Precision Design** Designed in-house by our product design engineers, the PBA-2030 is manufactured using tight-tolerance, precision fabrication methods to minimize intrinsic uncertainties. This mechanically-precise, weld-free design yields predictable performance and delivers accurate, consistent measurements.



**The TDK PBA-2030 Precision Biconical Antenna features a patent pending design that provides optimum performance over the frequency range of 20 MHz to 300 MHz.**

## Features

- Improved balun provides superior patterns and balance
- Effective internal choke provides immunity to externally induced imbalance
- Moderate power handling capability accommodates a wide range of immunity testing applications
- Individually calibrated according to ANSI C63.5, with signed certificate of calibration

## Applications

- Emissions testing
- Immunity testing

## Options

- **Antenna Tripod TRI-150R**
  The TDK TRI-150R antenna tripod is a manually adjusted tripod (100 cm to 150 cm) designed for quick and easy mounting in EMC test environments.

1101 Cypress Creek Road ■ Cedar Park, Texas 78613, USA ■ 1-512-258-9478 ■ FAX 1-512-258-0740

# PBA-2030 Precision Biconical Antenna

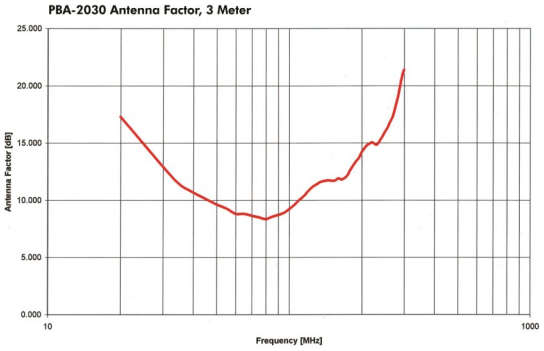
## Electrical Characteristics

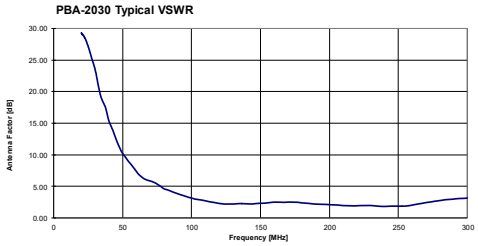
| | |
|---|---|
| Frequency Range: | 20 MHz to 300 MHz |
| VSWR: | 2.5:1 average |
| Polarization: | Linear |
| Power Handling: | 100 W maximum |
| Feedpoint Impedance: | 50 ohms nominal |

## Mechanical Specifications

| | |
|---|---|
| Size: | 137 cm x 53 cm x 72 cm (length x width x height) |
| Weight: | 3 kg |
| Construction: | Aluminum with gold chromate finish |
| RF Connector: | N type female |

## Antenna Data




## Ordering Information

| | |
|---|---|
| Product: | Precision Biconical Antenna |
| Model Number: | PBA-2030 |
| 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: 1-512-258-9478
Fax: 1-512-258-0740
E-mail: info@tdkrf.com
World Wide Web: www.tdkrfsolutions.com

TOTAL RF EXPERTISE™
S SYSTEMS | C CHAMBERS | P PRODUCTS | SW SOFTWARE | TS TEST SERVICES
**www.tdkrfsolutions.com**

**To learn more about TDK's wide range of innovative test products, solutions and services visit www.tdkrfsolutions.com**
Copyright © TDK RF Solutions Inc. All rights reserved. Specifications subject to change without notice. Rev. 2018-11-26