

Dinesh Micro Waves & Electronics

Dinesh Micro Waves & Electronics

Product Overview

The Precision Biconical Antenna is a new generation biconical dipole with linear polarizations that covers the operating frequency range of 20 MHz to 300 MHz and its moderate power handling capability accommodates the majority of immunity testing applications.

Leading-Edge Design precision biconical antenna features an improved biconical element (patent pending) and improved balun design, which provides superior patterns and balance.

Internal Choke An additional feature of the antenna is its highly effective internal choke, which provides immunity to externally induced imbalance.

Features

- Improved balun provides superior patterns and balance
- Improved biconical element design (patent pending)
- Effective internal choke provides immunity to externally induced imbalance
- Moderate power handling capability accommodates a wide range of immunity testing applications

Applications

- Immunity and Emissions testing

Mechanical Specifications

- Size: 138 cm x 53 cm x 72 cm (length x width x height)
- Weight: 3 kg
- Construction: Painted aluminum
- RF Connector: N type female or SC



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

Environmental Characteristics

- Ambient Temperature Limits:
- Operating: 0° to +40° C
- Storage: -10° to +50° C
- Humidity: Up to 95% non-condensing

Dinesh Micro Waves & Electronics

No. 347, (C4 & C5) SLI Complex, 7th Street, Gandhipuram

Coimbatore - 641 012, Tamil Nadu, India

Phone: +(91)-(422)-4371112 / 2694313

Fax: +(91)-(422)-2694313

Mobile: +(91)-9952444222

**Email: dinesh.microwaves@hotmail.com , dinesh.microwaves@airtelmail.in ,
sathish.varadarajan@airtelmail.in**

HIGH POWER BICONICAL

Product Overview

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

Precision Design Designed in-house by our product design engineers, the antenna's patent-pending balun design provides greatly improved balance at low frequencies. The unique cage design provides improved antenna factor at the low end as well as mode-free operation to 300 MHz and higher. The antenna is manufactured using low-tolerance, precision fabrication methods to minimize intrinsic uncertainties. This mechanically-precise, weld-free design yields predictable performance and delivers accurate, consistent measurements.

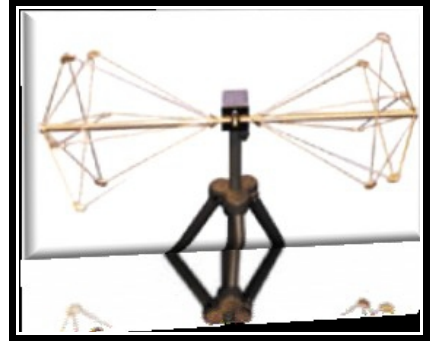
Immunity and Emissions Measurements For radiated immunity testing, the antenna is a highly efficient radiator with a low VSWR (<2.5:1 average) and high power handling capability (3500W continuous) accommodates the majority of immunity test applications.

Applications

- Designed primarily for immunity testing, but the balance and pattern of the HBA-2030 easily meet the requirements for emissions measurements

Features

- Improved balun provides superior patterns and balance
- Improved cage design provides enhanced low frequency performance and mode-free operation to 300 MHz and higher
- Moderate power handling capability accommodates a wide range of immunity testing applications
- Individually calibrated with signed certificate of calibration.



Mechanical Specifications

- Size: 138 cm x 56 cm x 56 cm (56" W x 22" D x 22" H)
- Weight: 4 kg (9lbs)
- Construction: Aluminum
- RF Connector: SC

Electrical Characteristics

- Frequency Range: 20 MHz to 300 MHz
- VSWR: 2.5:1 average
- Polarization: Linear
- Power Handling: 3500 W continuous
- Feedpoint Impedance: 50 ohms nominal

Dinesh Micro Waves & Electronics

No. 347, (C4 & C5) SLI Complex, 7th Street, Gandhipuram

Coimbatore - 641 012, Tamil Nadu, India

Phone: +(91)-(422)-4371112 / 2694313

Fax: +(91)-(422)-2694313

Mobile: +(91)-9952444222

Email: dinesh.microwaves@hotmail.com , dinesh.microwaves@airtelmail.in , sathish.varadarajan@airtelmail.in

Metrology Biconical antenna

The Metrology Biconical Antenna is a new generation metrology biconical dipole that covers the operating frequency range of 20 MHz to 600 Mhz.

Leading-Edge Design The antenna features an improved biconical element and improved balun design, which provides superior patterns and balance. Also, the design of the product allows the polarization to be changed without moving the phase center.

Internal Choke An additional feature of the metrology biconical antenna is its highly effective internal choke, which provides immunity to externally induced imbalance.

Features

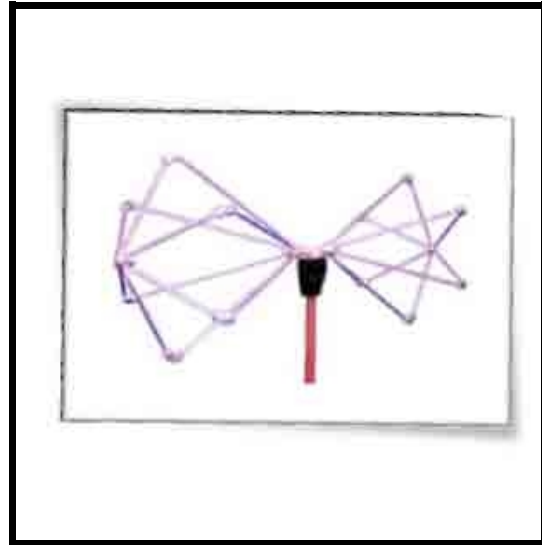
- Improved balun provides superior patterns and balance
- Improved biconical element design
- Effective internal choke provides immunity to externally induced imbalance
- Fits common antenna mounts;

Applications

- Site attenuation
- Calibration
- Transmission loss measurements

Mechanical Specifications

- Size: 75 cm x 27.5 cm x 27.5 cm (length x width x height)
- Weight: <1 kg
- Construction: Aluminum
- RF Connector: SMA or APC 3.5



Dinesh Micro Waves & Electronics

No. 347, (C4 & C5) SLI Complex, 7th Street, Gandhipuram
Coimbatore - 641 012, Tamil Nadu, India
Phone: +(91)-(422)-4371112 / 2694313
Fax: +(91)-(422)-2694313
Mobile: +(91)-9952444222

**Email: dinesh.microwaves@hotmail.com , dinesh.microwaves@airtelmail.in ,
sathish.varadarajan@airtelmail.in**

E-Field Generator

Performance The **E-Field Generator** is a transmission-line type electric/magnetic field generator which provides an unprecedented level of flexibility in the generation of controlled, high-intensity electric and magnetic fields over the frequency range of 10 kHz to 100 MHz. It is capable of generating over 500 V/m over its entire operating frequency range using 2.5 kW amplifier and provides a large uniform field area, thus accommodating a very large variety of DUTs.

Non-Radiating Because the E-Field Generator is a non-radiating device, the electric and magnetic fields are essentially confined to the DUT area. Also, it provides extremely low VSWR over its entire operating range thus reducing stress on the amplifier.

Unique Design The unique mechanical design of the E-Field Generator greatly facilitates the characterization of unwieldy DUTs. Large or bulky DUTs can simply be wheeled or placed under the system with the aid of equipment (such as a pallet jack or forklift).

Applications

- Immunity testing on large, heavy or bulky DUTs

Features

- 10kHz - 100 MHz operating range
- High power field generator
- Up to 500 V/m RSM
- Low VSWR
- Adjustable height for optimizing performance

Mechanical Specifications

- Height: 195.6 cm (77 in.)
- Length: 335.3 cm (132 in.)
- Width: 76.2 cm (30 in.)
- Construction: Fiberglass and PVC



Electrical Specifications

- Input Power: 3500 W maximum continuous
- Operation Frequency
- Range: 10 kHz - 100 MHz
- Input Impedance: 50 ohms nominal
- Field Strength: Up to 500 v/M RMS

Environmental Specifications

- Ambient Temperature Limits
- Operating: 0° to +40° C
- Storage: -10° to +50° C

Dinesh Micro Waves & Electronics

No. 347, (C4 & C5) SLI Complex, 7th Street, Gandhipuram

Coimbatore - 641 012, Tamil Nadu, India

Phone: +(91)-(422)-4371112 / 2694313

Fax: +(91)-(422)-2694313

Mobile: +(91)-9952444222

**Email: dinesh.microwaves@hotmail.com , dinesh.microwaves@airtelmail.in ,
sathish.varadarajan@airtelmail.in**

E-Filed Generator

Product Overview E-field generator designed to produce controlled, high intensity electric fields over the frequency range of 10 kHz to 100 MHz and generates a minimum of 500 V/m between the elements. Its capability to handle high input power and its low VSWR makes a powerful and effective Efield generator.

High Input Power The E-Field Generator utilizes an external load that permits the field generator to handle input power up to 3500 Watts (continuous) without the use of forced air or water cooling. This makes the E-Field Generator ideal for immunity test applications which require high input power, high intensity fields in a compact design.

Robust Design The E-Field Generator features an extremely robust transformer design which greatly improves the low frequency response.

Complete Positioning Control The E-Field Generator is integrated mast provides complete manual control of height, tilt, and polarization and the positioning gimbal allows manual control of tilt to $\pm 10^\circ$ and provides full 360° rotation of the E-Field Generator with indexing at 0° and 90° for quick and easy polarization changes. A locking pin secures the mounting arm in position. The E-Field Generator mast, base, and mounting arm are constructed of heavy-duty square fiberglass tubing with a protective water seal. The mast features four locking swivel casters for safety and ease of movement.

Features

- 10kHz - 100 MHz operating range
- High intensity field generator
- Generates greater than 500 V/m
- Low VSWR
- Adjustable height for optimizing performance



Mechanical Specifications

- Element Dimensions: 87 cm x 155 cm (34" H x 61" W)
- Height Adjustment: 87 cm to 209 cm (34" to 83"), other heights available
- Weight: 68 kg (150 lbs.)
- Input Connector: Special high voltage SC connector (other connector types available)
- Cooling: Not Required

Electrical Specifications

- Input Power: 3.5 kW
- Operation Frequency
- Range: 10 kHz - 100 MHz
- Input Impedance: 50 ohms

Dinesh Micro Waves & Electronics

No. 347, (C4 & C5) SLI Complex, 7th Street, Gandhipuram

Coimbatore - 641 012, Tamil Nadu, India

Phone: +(91)-(422)-4371112 / 2694313

Fax: +(91)-(422)-2694313

Mobile: +(91)-9952444222

**Email: dinesh.microwaves@hotmail.com , dinesh.microwaves@airtelmail.in ,
sathish.varadarajan@airtelmail.in**

HORN ANTENNA

Dinesh Micro waves and Electronics Horn Antenna is a wide band, double-ridged horn used to transmit and receive microwave signals over the frequency range of 1 GHz to 18 GHz. The Horn Antenna generates high electric fields required for radiated immunity and emissions measurements, and features high gain, low VSWR, moderate power handling (300W), and a robust mechanical design.

Antenna Features

- Operating frequency of 1 -18 GHz
- High gain
- Low VSWR
- Robust mechanical design

Applications

- Immunity testing
- Emissions testing
- Probe calibration

Mechanical Specifications

- Overall Size: Width: 23.4 cm (9.21 in)
- Depth: 29 cm (11.54 in) with mounting bracket ; 21 cm (8.27 in) without bracket
- Height: 14.5 cm (5.71 in)
- Weight: 1.9 kg (4.2 lbs) with mounting bracket
- Construction: Aluminum with a gold chromate finish
- RF Connector: Type N female

Electrical Specifications

- Frequency Range: 1 GHz to 18 GHz
- VSWR: <1.5:1 average
- Polarization: Linear
- Power Handling: 300W
- Feedpoint Impedance: 50 ohms (nominal)

