

Features

Frequency range: 30 MHz to 300 MHz

Collapsible antenna elements

Part of ANK series antenna kits

Individual Calibration

Three year warranty



Description

The ABF-900 is a linearly polarized broadband Biconical antenna. It has a frequency range of 30-300 MHz. It has the same performance as the AB-900, but it is shipped with a set of collapsible conical elements. This antenna is part of the ANK series antenna kits.

The ABF-900 antenna has a N type connector. The antenna is capable of handling up to 50 Watts of input to generate electromagnetic fields during EMC immunity testing.

These antennas are individually calibrated at 10 meter distance using procedures described in ANSI 63.4. This data is shipped with each antenna. Optional calibration at 1 meter or any user specified distance is available upon request. Accredited calibration services are also available.

The ABF-900 balun has a 1/4 inch x 20 threaded hole on the back. It can be mounted on Com-Power AT-120 tripod or any other antenna tripod with matching threads. It can be also mounted on a antenna mast with a similar mounting arrangement. As an alternate mounting method, ATC-001 clamp can be used. This clamps fits around the PVC tube on the balun to securely attach the antenna to a tripod or the antenna mast without the threaded mounting bolt.

Application

The ABF-900 Biconical antenna has collapsible antenna elements for easy storage and transport. It is good choice for off site EMC measurements. The broadband characteristics of the ABF-900 antenna make it ideal for making sweep measurements. It can be purchased separately or as part of the ANK-310, ANK-910L and ANK-910M antenna kits.

In addition to emc emission or immunity measurement, the biconical antenna can be used for site EMC site calibrations. The ABF-900 Biconical antenna has smaller elements and is easier to use. Especially for vertical site attenuation measurements at low frequencies. Dipole antennas which are typically recommended for site calibration have long element lengths at lower frequencies (5 meters at 30 MHz) According to ANSI 63.4 specification, a calibrated biconical antennas can be used for site attenuation measurements.

The calibration data provided with each antenna is used to calculate field strength measured for the selected frequency. The antenna factor (dB/m) for the selected frequency is added to the measured output (dBV) displayed by the EMI receiver to obtain field strength (dBV/m)

Specifications

Product Name	Biconical Antenna with collapsible elements
Frequency Range	30 to 300 MHz
Application	EMC measurements
Antenna factors	5.6 to 20.5 dB/m
Nominal Impedance	50 ohms
VSWR	3.0:1 (Average)
Connector Type	N type (female)
Power handling	50 Watts
Dimensions both elements (expanded)	52" x 21 inches 132 cm x 53 cm
Dimensions conical elements (Collapsed)	24 x 2 inches 60 x 5 cm
Weight	10 lbs. 4.5 kg



ABF-900 with fully collapsed elements

Typical Data

