

Features

Frequency Range: 30 MHz to 300 MHz

Collapsible Conical Elements

Transmit and Receive Capability

Individual Calibration

Three Year Warranty



Description

The ABF-900 is a linearly polarized broadband Biconical antenna specifically designed for EMC testing. This antenna is the same as the AB-900 biconical antenna, except the two conical elements can be collapsed for storage. It is part of the Com-Power ANK series antenna kit. It has a frequency range of 30-300 MHz. This antenna can be used for both EMC emissions and immunity testing.

For immunity testing, the ABF-900 antenna has a balun that is capable of accepting up to 50 Watts CW signals for generating electromagnetic fields at the input N type connector.

The ABF-900 antennas is individually calibrated using procedures described in ANSI 63.4. The calibration data is shipped with the antenna to maximize measurement accuracy.

The antenna balun has a 1/4 inch x 20 threaded hole in the back so that it can be mounted to a antenna tripod with a matching bolt. Com-Power also has antenna tripods available.

Application

The ABF-900 biconical antenna collapsible elements makes it ideal for easy transportation and also storage when not in use. The antenna uses the same balun as the AB-900. Therefore, it has same performance as AB-900 biconical antenna.

The broadband characteristics of the ABF-900 antenna make it a good choice for making sweep measurements and for automated measurement systems.

The ABF-900 can also be used for site attenuation measurements. Normally, tuned dipole antennas are used for EMC site attenuation measurements for better accuracy. However, the biconical antenna is easier to use for vertical site attenuation measurements, because of the long dipole element lengths at lower frequencies (5 meters at 30 MHz). According to ANSI 63.4 specification, a calibrated biconical antenna 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 (dBuV) displayed by the EMI meter to obtain field strength (dBuV/m).

Specifications

Antenna Type	Biconical Antenna
Frequency Range	30 MHz to 300 MHz
Antenna Factor range	13 to 21 dB/m
VSWR	3:1 (average)
Impedance	50 ohms
Max. Input Power	50 Watts
Dimensions with both Elements fully expanded with balun attached (See photo)	52 x 21 inches 132 x 53 cm
Dimensions of each Conical Element Collapsed	24 x 2 inches 60 x 5 cm
Connector Type	N-type (female)
Weight	10 lbs. (4.5 kg)

All values are typical values unless otherwise specified.
Specifications are subject to change without notice.

Both Conical Elements Expanded



Antenna Factor (typical)

