Features

Broadband - 30 MHz to 300 MHz
Transmit and receive capability
Individual calibration
Two year warranty

Description

The AB-900 is a linearly polarized broadband Biconical antenna specifically designed for EMC testing. It has a frequency range of 30-300 MHz. This antenna can be used for both emissions and immunity testing.

For immunity testing, the AB-900 antenna has a balun that is capable of accepting up to 50 Watts at its input terminals to generate electromagnetic fields.

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

Both antenna models have the same mounting base, with a 1/4 inch x 20 threaded hole. It can be mounted on a Com-Power AT-100 tripod or any other antenna tripod with matching threads.

Application

Biconical antennas are used for emissions and immunity testing to meet various EMC standards specified by FCC, CISPR and EN. The broadband characteristics of the biconical antenna make it a good choice for making sweep measurements and for automated measurement systems.

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 and a log periodic 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 (dBV) displayed by the EMI meter to obtain field strength (dBV/m).
Specifications

Frequency Range: 30 MHz-300 MHz
Polarization: Linear
Power handling: 50 Watts continuous
Impedance: 50 Ω
Connector: BNC (f)
Weight: 7 lbs. (3.5 kg) max.
Size: (L x W) 28.75" x 52.75" (73 cm x 134 cm)

Typical Antenna Factors:

Field strength (dBV/m) = Output measured (dBV) + Antenna Factor (dB/m)

Mechanical Outline:

Values are typical values unless specified.
Dimensions are given in inches.
All specifications are subject to change without notice.