

Horn Antenna

Features

Frequency Range: 200 MHz to 2 GHz

High Power Handling

Transmit or receive capability

Individual calibration

Three year warranty



Description

The model AH-220 is a broadband double ridged waveguide horn antenna. It operates in the frequency range of 200 MHz to 2 GHz. The AH-220 has a N type connector that can handle up to 800 W of CW power input. It also has at least 3.9 dBi isotropic gain over the entire frequency range.

This antenna can be used indoor or outdoor. The antenna is constructed using light weight aluminum. The aluminum parts are treated with corrosion resistance conductive coating to maximize service life and increase measurement reliability.

The AH-220 has a tripod mounting plate on either side of the antenna. These plates have 1/4 inch x 20 threaded holes. This allows the antenna to be rotated for horizontal or vertical polarization measurements. The AH-220 is compatible with the AT-220 antenna tripod. The AT-220 has good center of balance to hold the AH-220 in position without tipping and to set the antenna height.

Each antenna is individually calibrated per ARP-958 at 1 meter distance using NIST traceable test equipment. The data and certificate of calibration is shipped with each antenna. Calibration at user specified distances and accredited calibration services are also available upon request

Application

The AH-220 horn antenna is suitable for EMC testing to verify compliance to various EMC standards. It can be used for EMC emission or immunity testing. The AH-220 Horn antenna's wide frequency range makes it a good choice for sweeps measurements and for automated testing from 200 MHz to 2 GHz.

For immunity testing, the antenna's high gain and low VSWR over its operating frequency translates into efficient amplifier use and higher field strengths. In addition, the higher gain increases antenna sensitivity to low level signals during emissions measurements.

The calibration data supplied with each antenna include antenna correction factors (dB/m). This factor is one of the variables needed to determine the corrected field strength during EMI radiated emission measurements. This factor is added to EMC receiver readings.

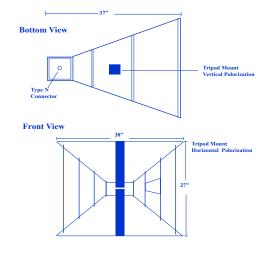
Com-Power also offers a high gain preamplifier model PAM-2000 that operates in the frequency range of 10 MHz to 2GHz. The preamplifier increases overall measurement sensitivity of EMI receiver and optimizes the use of AH-220 Horn antenna during EMC emissions measurements.



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Specifications

Antenna Type	Horn Antenna
Frequency Range	200 to 2000 MHz
Antenna Factors	11 to 27 dB/m
Isotropic Gain	3.9 to to 9.5 dBi
VSWR	1.5:1 (average)
Impedance	50 ohms
Max. Input Power	800 Watts
Connector Type	N-type (female)
Tripod mouting	1/4 inch 20 threads
Dimensions	37 x 38 x 27.5 inches
	94 x 96.5 x 68.5 cm
Weight	27.5 lbs. / 12.2 kg



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

Antenna Factors (typical)

