

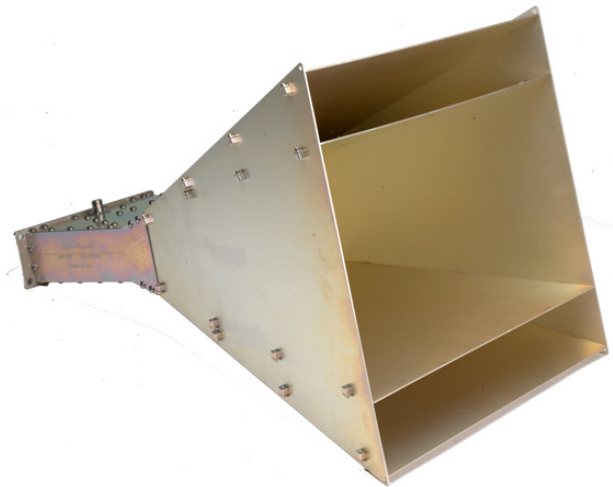
Features

Frequency Range: 800 MHz to 5.5 GHz

High Power Handling

Transmit or receive capability

Three year warranty



Description

The AH-8055 antenna is a part of a family of microwave frequency Horn antennas. The Horn antenna model 8055 is a high gain broadband microwave antenna. This antenna was designed specifically for EMC immunity measurements from 800 MHz to 5.5 GHz that require high field intensity.

It has an average VSWR of 1.7 and can handle up to 450W CW (@ 5 GHz) input signal.

It has corrosion resistant chemical finish for indoor and outdoor use.

Each antenna is individually calibrated at 3 meters. The calibration data and certificate will be shipped with each antenna.

AH-8055 is compact and lightweight for easy mobility.

The AH-8055 is ideally suited for radar pulse testing for automotive testing, especially in the range of 1.2–1.4 GHz and 2.7–3.1 GHz bands.

Application

This antenna is suitable for ANSI C63.4, CISPR16, EN 55022, FAA and other EMC standards that require emissions and immunity testing.

The high gain reduces input power requirements to generate high electromagnetic field levels for immunity testing.

For immunity testing, the input power requirement **P** in Watts to generate **E** Electric Field Strength in V/m at a distance in **D** meters can be calculated by using the following formula:

$$P = E^2 \times D^2 / 30 \times \text{Numeric Gain}$$

$$G = 20 \log F - 29.79 - AF$$

$$G = 10 \log (\text{Numeric Gain})$$

Where

G= gain in dBi

F = Frequency in MHz

AF = antenna factor in dB

Specifications

Antenna Type	Horn Antenna
Frequency Range	800 MHz to 5.5 GHz
Antenna Factors	17 to 25 dB/m
Gain (min)	10.6 dBi
VSWR	1.7:1 (average)
3 dB beamwidth	6° to 55°
Impedance	50 ohms
Max. Input Power	450 Watts @ 5 GHz
Front to back ratio (min)	14 dB
Connector Type	N-type (female)
Dimensions	17 x17 x 27.5 inches 13.1 x 13.1 x 69.8 cm
Weight	19.5 lbs. / 8.8 kg

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

Antenna Factors (typical)

AH-8055 HORN ANTENNA - 10-meter distance, 2-meter height

