

Features

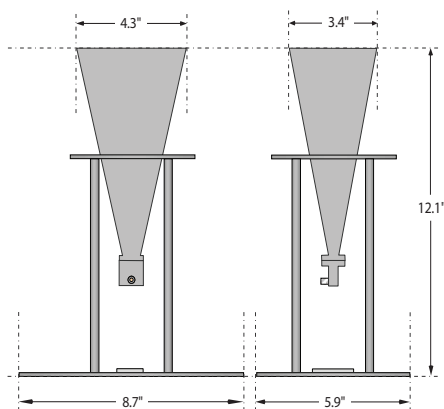
- **Frequency Range**
18 GHz to 26.5 GHz
- **Transmit & Receive Capabilities**
emissions/immunity applications
- **Individual Calibration Included**
per ANSI C63.5 with NIST traceability
- **Three-year Standard Warranty**

Description

The AH-826 is a broadband, linearly polarized Standard Gain Horn Antenna, operating over the frequency range of 18 GHz to 26.5 GHz. It can be used as a receiving or transmitting antenna.

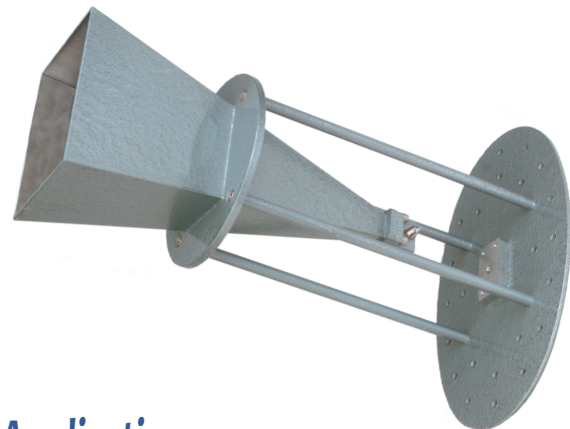
Construction

The AH-826 is designed to be extremely durable, making it an ideal choice for daily use in laboratory environments, both indoors and outdoors, and even under continuous exposure to extreme weather conditions. The antenna is constructed using high grade, corrosion resistant aluminum. The outer surface is also painted to provide additional protection. The antenna is fitted with a high quality SMA-type coaxial connector.



Calibration

Each antenna is individually calibrated per ANSI C63.5 with NIST traceability. The calibration data and certificate is provided. Recognized ISO 17025 accredited calibration is also available upon request.



Application

The AH-826 Standard Gain Horn Antenna is suitable for use as an EMI test antenna for qualification-level regulatory compliance measurements (FCC, CE, Mil-Std, RTCA DO-160, FDA, SAE Automotive, etc.).

The AH-826 is equally suitable for use transmitting antenna for establishing radiated RF fields for product immunity tests, and is capable of handling power levels up to 10 Watts, with the waveguide to coaxial adapter in place. By removing the adapter, and connecting directly, or with a length of flexible waveguide, to your amplifier's waveguide output, field strengths over 1,450 V/m can be achieved with 200 Watts input power.

Another common application for the AH-826 is to use it as a "substitution antenna" for determining the Effective Radiated Power (ERP) and/or Effective Isotropic Radiated Power (EIRP) of intentional radiators (RF transmitters). These tests are typically applicable for products operating within licensed frequency bands requiring FCC/TCB Certification, and also for European acceptance tests per ETSI standards for radio equipment.

Notwithstanding the above applications, the AH-826 can also be used for test site comparisons, shielding effectiveness tests of large enclosures, field monitoring, site surveys, etc.

Mounting

The AH-826 can easily be secured to any tripod or mast via its standard 1/4-inch x 20 mounting hole located in the center of the antenna's base plate.

Specifications

| | |
|-------------------------|--|
| Product Name | Standard Gain Horn Antenna |
| Frequency Range | 18 GHz to 26.5 GHz |
| Polarization | Linear |
| Nominal Impedance | 50Ω |
| Power Handling (CW) | 10/200 Watts [with/without] waveguide to coaxial adapter) |
| Connector | SMA (female) |
| -3 dB Beamwidth | [see graph below] |
| Antenna Factor | [see graph below] |
| Isotropic Gain | [see graph below] |
| VSWR/Return Loss | [see graphs below] |
| Radiated Field Strength | [see graph below] |
| Specifications | FCC, CISPR, EN, ETSI, FAA, Mil-Std, Automotive, etc. |
| Dimensions (L x W x H) | 8.7" x 5.9" x 12.1" [22 x 15 x 30.8 cm] |
| Weight | 1.5 lbs. [0.7 kg] |

All specifications are subject to change without notice.
All values are typical, unless specified.

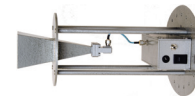
Accessories available from Com-Power:



PAM-840A Preamplifier (18-40 GHz)



AT-812 Antenna Tripod

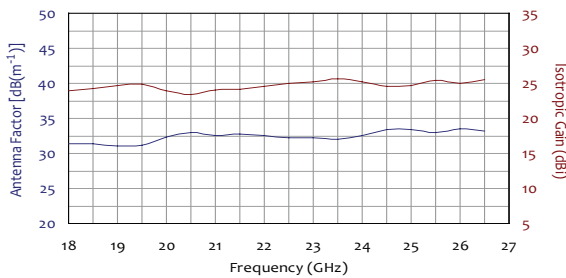


AHA-840 Active Horn Antenna (18-40 GHz)

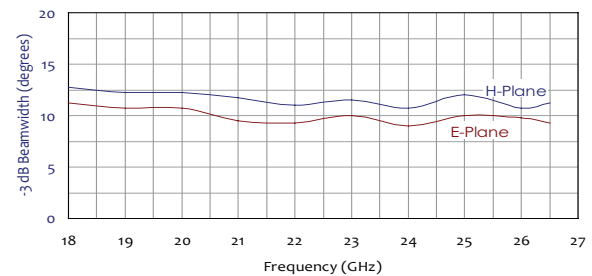
Also Available:

- AH-640 Horn Antenna (26.5-40 GHz)
- AHA-118 Active Horn Antenna (1-18 GHz)
- AL-100, ALC-100, ALP-100 Log Periodic Antennas

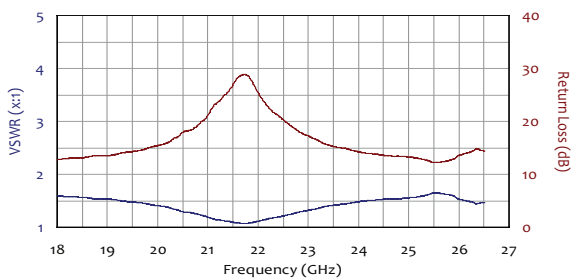
Antenna Factors / Isotropic Gain



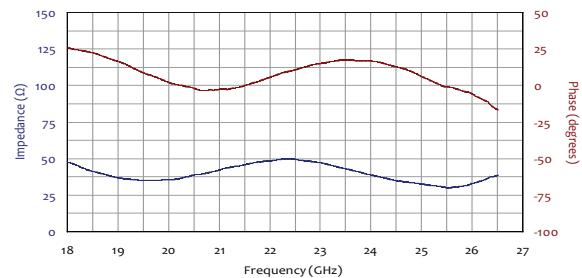
-3 dB Beamwidth



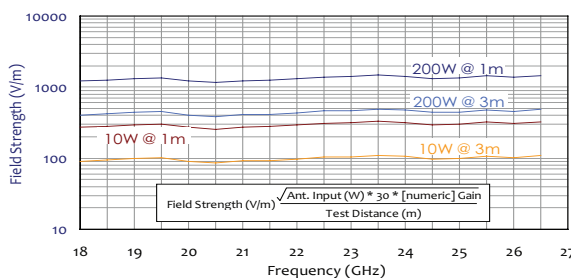
VSWR/Return Loss Characteristics



Impedance/Phase Characteristics



Field Strength with 10/200W Input Power



Forward Power Levels vs Field Strength

