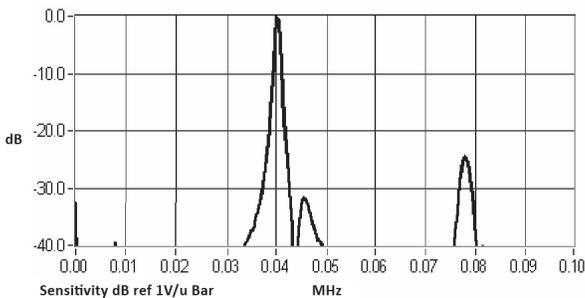
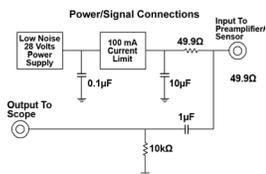
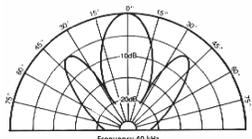
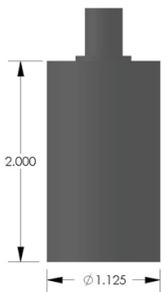


PRODUCT DATA SHEET

AM4I Sensor
Airborne Sensor



DESCRIPTION AND FEATURES

The AM4I Sensor is a rugged, high sensitivity airborne, AE Transducer with its peak sensitivity at around 40 kHz. The narrow frequency response reduces noise and increases signal to noise ratio. The sensor's enclosed diaphragm design ensures a high sensitivity and protects the sensing element from the environment. The sensor has a 40 dB preamplifier inside its cavity. It can be connected to PAC standard AE Data Acquisition Systems just like other PAC AE Sensors, using phantom power (where power supply input and sensor output signal are combined on the co-ax center conductor).

APPLICATIONS

The sensor is typically used in airborne leak detection applications. It may also be used to monitor other types of faults and failure conditions that emit airborne ultrasonic sound at or very near the sensor's resonant frequency.

OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/ μ bar 0 dB
 Operating Frequency Range 39-42 KHz
 Resonant Frequency, Ref V/(m/s); [V/ μ bar] 40 kHz
 Total Beam Angle (-3 dB points) 20°

Environmental

Temperature Range -25 to 75°C
 Shock Limit 500 g
 Completely enclosed crystal for RFI/EMI immunity

Physical

Dimensions 1.13" OD X 2.0" H
 29 mm OD X 51 mm H
 Weight 81 grams
 Case Material Stainless Steel
 Connector BNC
 Seal Epoxy

Electrical

Input Voltage 16-29 VDC
 Operating/Max Current 20/120 mA
 Internal Preamp Gain 40 dB
 Noise RTI (referred to input μ V) < 2.4

ORDERING INFORMATION AND ACCESSORIES

AM4I AM4I
 Cable (specify length in 'XX' m at end of PN) 1234-X
 Preamp to System Cable (specify length in 'm') 1234-X
 Amplifier Subsystems AE2A

Sensors include

NIST Calibration Certificate & Warranty



WORLDWIDE HEADQUARTERS:
 195 Clarksville Rd •
 Princeton Jct, NJ 08550 • USA
 T: +1.609.716.4000 • F: +1.609.716.0706
 E-MAIL: sales.systems@mistrasgroup.com

CANADA T: +1.403.556.1350
CHINA T: +86.10.5877.3631
FRANCE T: +331.498.26040
GERMANY T: +49.040.2000.4025
GREECE T: +30.210.2846.801-4

HOLLAND T: +31.010.245.0325
INDIA T: +91.22.2586.2444
JAPAN T: +81.33.498.3570
MALAYSIA T: +60.9.517.3788
MIDDLE EAST T: +973.17.729.356

RUSSIA T: +7495.789.4549
SCANDINAVIA T: +46(0)31.252040
S. AMERICA T: +55.11.3082.5111
UK T: +44(0)1954.231.612