

AT/10 Miniature Triaxial Piezoelectric IEPE Accelerometer

1mV/g up to 100mV/g $\pm 10\%$ 6.9grams 125°C Max Temp



A lightweight miniature triaxial IEPE vibration transducer comprising of three voltage output piezoelectric accelerometer elements mounted orthogonally within a titanium block. The use of independent Konic Shear® sensing elements ensures a rugged and repeatable triaxial measurement under the most extreme conditions. This design will outperform single element devices.

The AT/10 uses piezo-ceramics as standard to ensure thermal stability. Using the industry standard 1/4-28 UNF 4 pin connector for a single cable connection, cable assemblies of any length can be provided breaking out to 3 BNC plugs.

Standard sensitivity options are 1mV/g up to 100mV/g

Options

Various mounting options available

Compatible cables available on request

Low outgassing

Extended low & high frequency response calibration cert

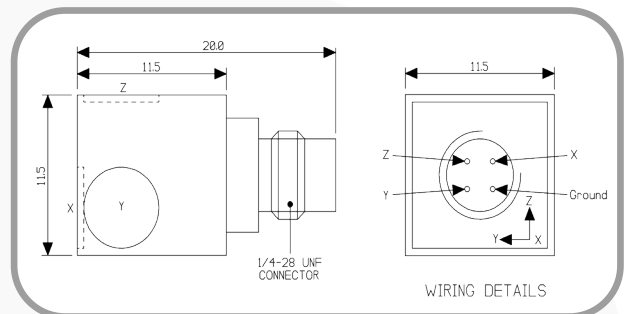
Wideband temperature calibration $-50/+125^{\circ}\text{C}$

TEDS

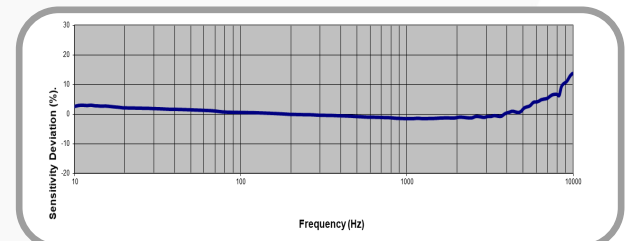
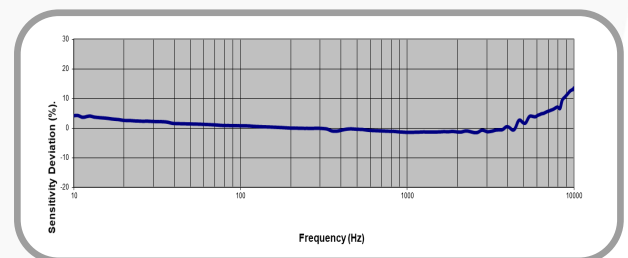
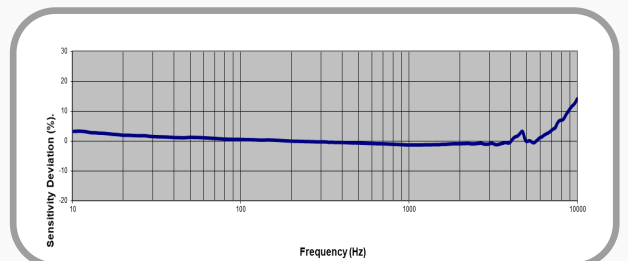
Typical Spectral Noise (100mV/g)

1Hz	393.4 $\mu\text{g}/\sqrt{\text{Hz}}$
10Hz	174 $\mu\text{g}/\sqrt{\text{Hz}}$
100Hz	32.1 $\mu\text{g}/\sqrt{\text{Hz}}$
1kHz	12.7 $\mu\text{g}/\sqrt{\text{Hz}}$
10kHz	5.1 $\mu\text{g}/\sqrt{\text{Hz}}$

AT/10



Typical Frequency Responses



Specifications may be subject to change without prior notice.

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	Metric			Imperial		
<u>Voltage Sensitivity @20°C ±10%</u>	0.1mV/(m/s²)	1.02mV/(m/s²)	10.2mV/(m/s²)	1mV/g	10mV/g	100mV/g
Resonant Frequency	≥58kHz					
Typical Frequency range ±5% ±10%	1Hz - 7kHz 0.7Hz - 8kHz	1Hz - 7kHz 0.7Hz - 8kHz	2Hz - 7kHz 1Hz - 8kHz	1Hz - 7kHz 0.7Hz - 8kHz	1Hz - 7kHz 0.7Hz - 8kHz	2Hz - 7kHz 1Hz - 8kHz
Cross Axis Error	≤5% max					
Temperature Range	-50/ +125°C			-58/ +257°F		
Voltage Sensitivity deviation (20°C / 68°F)	+5% @ +125°C			+5% @ +257°F		
Supply Voltage	15V to 35V standard					
Supply Current	2-20mA					
Output Impedance	≤100Ω					
Bias Voltage (20°C / 68°F)	9 to12 V DC					
Settling time within 10% Bias	<6 seconds					
Amplitude Linearity (%FS)	≤1%			≤1%		
Broadband resolution	0.002grms			0.002grms		
Shock Limit	49033m/s²			5000g		
Saturation limit (equiv. g)	49033m/s²	4903m/s²	490m/s²	5000g	500g	50g
Case Material	Titanium					
Mounting	Adhesive					
Weight	6.9gm			0.24oz		
Case Seal	Welded					
Size	11.5 x 11.5 x 11.5mm			0.45 x 0.45 x 0.45in		
Connector	¼-28UNF 4 pin					
Base Strain Sensitivity	0.001g/μ strain					

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