



## AT/10/TB Miniature Triaxial Piezo-Tronic IEPE Accelerometer

1mV/g up to 100mV/g  $\pm 10\%$     8.4gm    125°C Max Temp

A lightweight miniature triaxial IEPE vibration transducer comprising of three voltage output piezo-electric 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 high temperature 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.

The AT/10/TB has a tapped base for stud mounting.

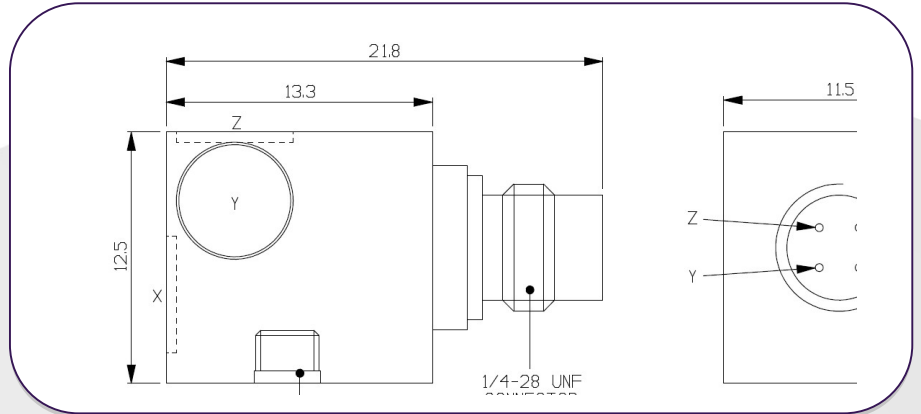
Standard sensitivity options are 1mV/g up to 100mV/g

### Typical Spectral Noise (100mV/g)

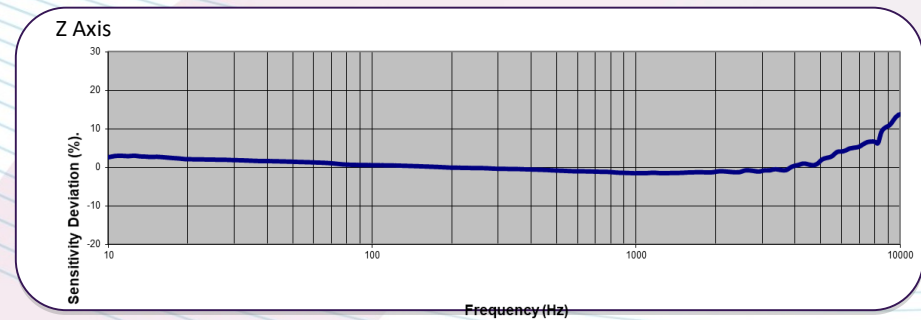
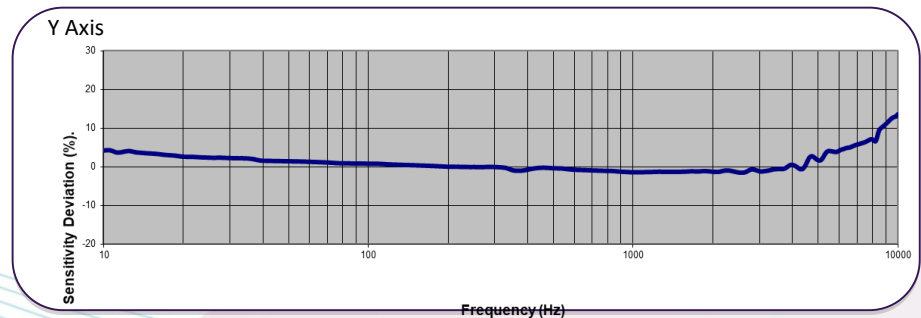
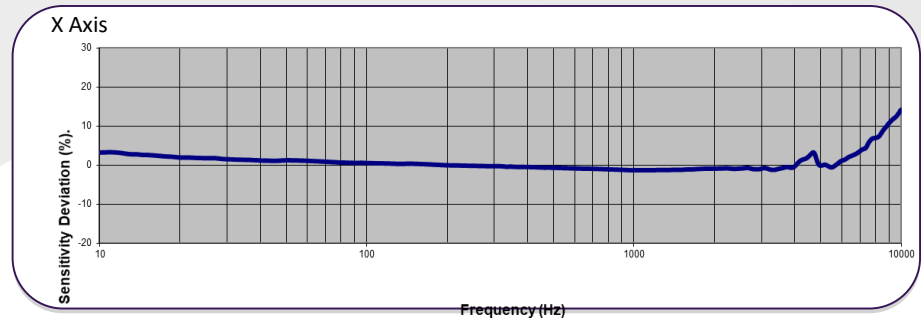
1Hz	393.4 $\mu$ g/ $\sqrt$ Hz
10Hz	174 $\mu$ g/ $\sqrt$ Hz
100Hz	32.1 $\mu$ g/ $\sqrt$ Hz
1kHz	12.7 $\mu$ g/ $\sqrt$ Hz
10kHz	5.1 $\mu$ g/ $\sqrt$ Hz

### Options

AT/10	Side entry, adhesive mount
AT/10/F	Side entry, Flange mount
AT/10/TB	Side entry, Tapped base



### Typical Frequency Responses



Please note: For information and reference only. Data should not be used as pass / fail criteria for calibration purposes

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A UK company with UK-based manufacturing, assembly and calibration in-house.



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	Metric			Imperial		
Voltage Sensitivity @ 20°C $\pm 10\%$	0.1mV/(m/s <sup>2</sup> )	1.02 mV/(m/s <sup>2</sup> )	10.2mV/(m/s <sup>2</sup> )	1mV/g	10mV/g	100mV/g
Resonant Frequency	$\geq 58\text{kHz}$					
Typical Frequency range $\pm 5\%$ $\pm 10\%$	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	$\leq 5\%$ 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	$\leq 100\Omega$					
Bias Voltage (20°C / 68°F)	9 to 12 V DC					
Settling time within 10% bias	<6 seconds					
Amplitude Linearity (%FS)	$\leq 1\%$			$\leq 1\%$		
Broadband resolution	0.002grms			0.002grms		
Shock Limit	49033m/s <sup>2</sup>			5000g		
Saturation limit (equiv. g)	49033m/s <sup>2</sup>	4903m/s <sup>2</sup>	490m/s <sup>2</sup>	5000g	500g	50g
Case Material	Titanium					
Mounting	5-40 UNC x 2.6mm deep			5-40 UNC x 0.10in deep		
Weight	8.4gm			0.3oz		
Case Seal	Welded					
Size	12.5 x 13.3 x 11.5mm			0.49 x 0.52 x 0.45in		
Connector	1/4-28UNF 4 pin					
Base Strain Sensitivity	0.001g/ $\mu$ strain					

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