

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

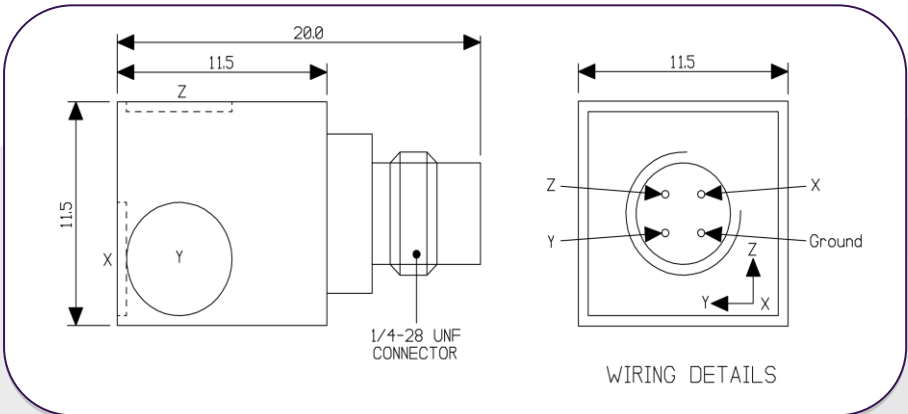
1mV/g up to 100mV/g  $\pm 10\%$     6.9gm    125°C Max Temp (185°C HT)



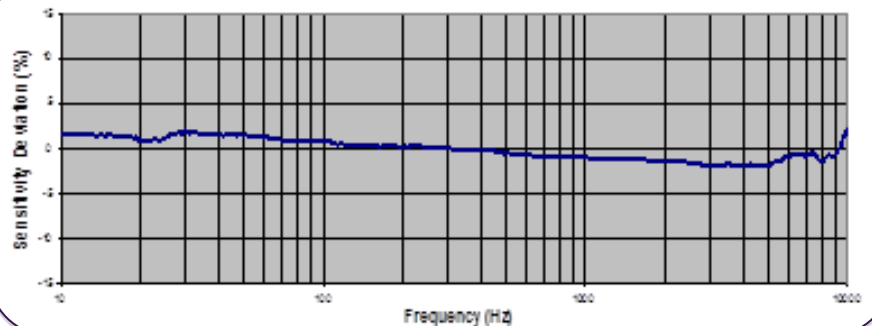
A lightweight miniature triaxial IEPE vibration transducer comprising of three voltage output piezo-electric accelerometer elements mounted orthogonally within a titanium block. The use of independent Konic Shear sensing elements ensures a rugged and repeatable triaxial measurement under the most extreme 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 is available with DJB's unique high temperature IEPE solution capable of testing up to 185°C as an option.

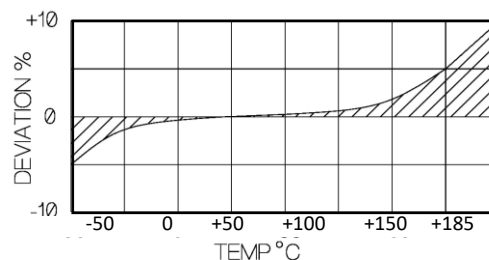
Standard sensitivity options are 1mV/g up to 100mV/g



### Typical Frequency Response



### Temperature Response



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

1Hz	650 $\mu$ g/vHz
10Hz	174 $\mu$ g/vHz
100Hz	32 $\mu$ g/vHz
1kHz	12 $\mu$ g/vHz
10kHz	7 $\mu$ g/vHz

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	Metric			Imperial		
Voltage Sensitivity @ 20°C mV/g $\pm 10\%$	0.51mV/(m/s <sup>2</sup> )	1.02 mV/(m/s <sup>2</sup> )	10.2 mV/(m/s <sup>2</sup> )	5mV/g	10mV/g	100mV/g
Resonant Frequency kHz	$\geq 58\text{kHz}$			$\geq 58\text{kHz}$		
Cross Axis Error % max	$\leq 5$			$\leq 5$		
Typical Frequency range (X/Y/Z Axis) ( $\pm 5\%$ ) ( $\pm 10\%$ )	1Hz to 7kHz 0.7Hz to 9kHz	1Hz to 7kHz 0.7Hz to 9kHz	15Hz to 7kHz 10Hz to 9kHz	1Hz to 7kHz 0.7Hz to 9kHz	1Hz to 7kHz 0.7Hz to 9kHz	15Hz to 7kHz 10Hz to 9kHz
Temperature Range	-50/ +125°C (+185°C HT)			-58/ +257°F (+365°F HT)		
Voltage Sensitivity re 20°C/68°F	-5% @ -50°C +5% @ +125°C +10% @ +185°C			-5% @ -58°F +5% @ +257°F +10% @ +365°C		
Excitation Current	2-20mA			2-20mA		
Max Continuous accn.g sine	49,033m/s <sup>2</sup>			5000g		
Saturation limit (equiv. g)	9,806m/s <sup>2</sup>	4,903 m/s <sup>2</sup>	490 m/s <sup>2</sup>	1000g	500g	50g
Supply Voltage VDC	15V to 35V standard			15V to 35V standard		
Bias Voltage VDC (20.C)	9 to 10VDC			9 to 10VDC		
Case Material	Titanium			Titanium		
Mounting	Adhesive			Adhesive		
Weight	6.9gm			0.24oz		
Case Seal	Welded			Welded		
Connector	¼-28UNF 4 pin			¼-28UNF 4 pin		
Size	11.5 x 11.5 x 11.5mm			0.45 x 0.45 x 0.45in		