



## A/131/V Triaxial Piezo-Tronic IEPE Accelerometer

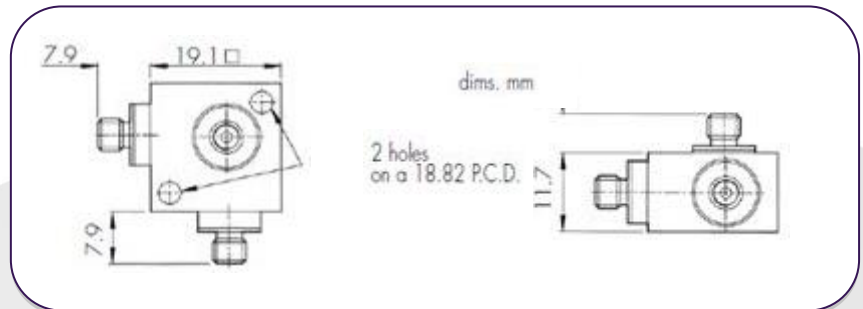
10mV/g up to 500 mV/g  $\pm 10$  19gm Std Temp 125°C (185 °C)

A lightweight triaxial vibration transducer comprising three, Konic shear IEPE all welded inserts, bonded orthogonally into hard anodized aluminum housing. The inserts are electrically insulated, individually and from the housing eliminating ground loop interference. Low impedance O/P provides a high degree of noise immunity (80dB improvement vs. equiv. charge source device @ 50Hz) and allows use with low cost coaxial cable. The additional mechanical isolation implicit in the construction provides also near elimination of strain induced error.

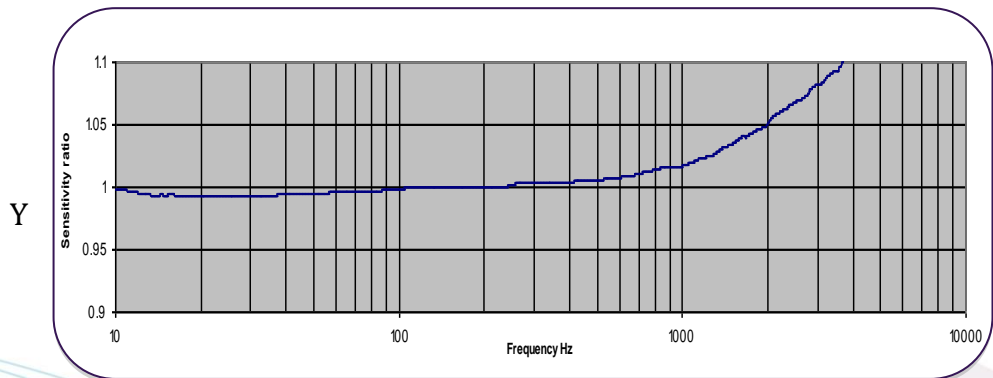
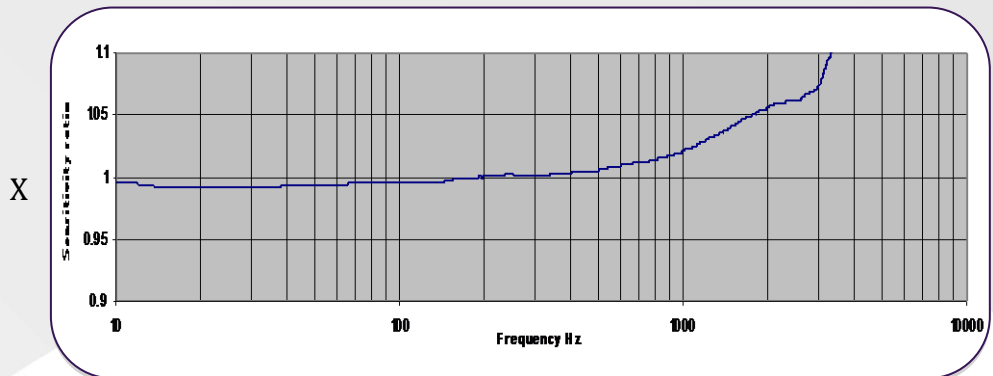
The d33 component suppression property of the Konic design minimises cross axis error, and is particularly advantageous for three axis measurement integrity.

The multi sensor solution also offers the benefit of being repairable. If an insert is damaged it can usually be removed and replaced saving the cost of a new accelerometer.

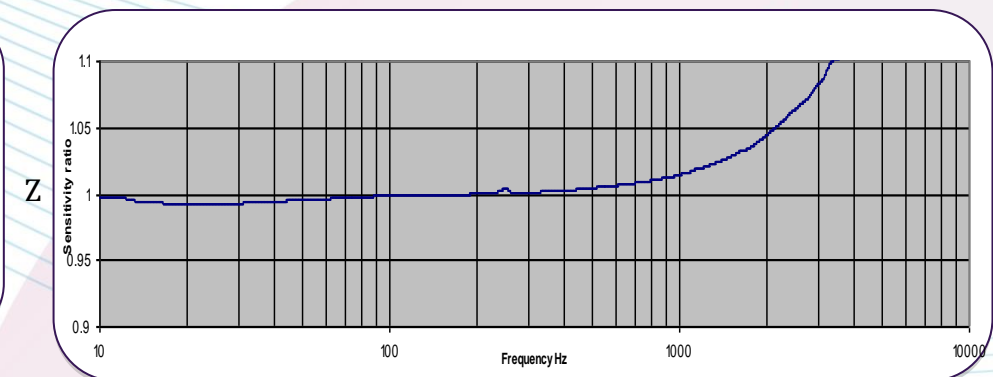
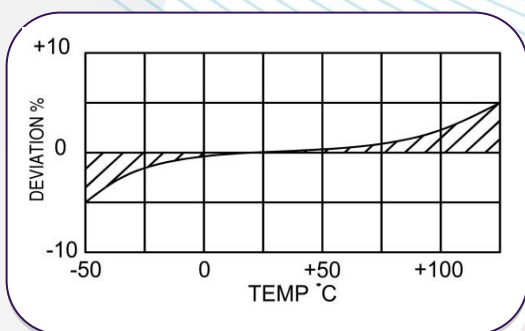
A/131/V



Typical Frequency Response



Temperature Response





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### Options

- Wideband temperature calibration

### Spectral Noise

1Hz	761 $\mu$ g/ $\sqrt$ Hz
10Hz	193 $\mu$ g/ $\sqrt$ Hz
100Hz	37.8 $\mu$ g/ $\sqrt$ Hz
1kHz	11.2 $\mu$ g/ $\sqrt$ Hz
10kHz	4.2 $\mu$ g/ $\sqrt$ Hz

	Metric		Imperial	
Voltage Sensitivity $\pm 10\%$	1.02mV/(m/s <sup>2</sup> )	10.2mV/(m/s <sup>2</sup> )	10mV/g	100mV/g
Resonant frequency kHz	X(25); Y(25); Z(28)		X(25); Y(25); Z(28)	
Frequency Response Hz	1 – 5k		1 – 5k	
Cross axis error % max	5		5	
Temperature range	-50/+125°C		-58/+257 °F	
Voltage sensitivity deviation re 20°C/68°F	-5% @ -50°C +5% @ +125°C $\pm 10\%$ @ +185°C		-5% @ -58°F +5% @ +257°F $\pm 10\%$ @ +365°F	
Bias voltage V DC	9/10		9/10	
Base strain sens/ strain	<0.01		<0.01	
Max continuous accn. sine	9,806m/s <sup>2</sup>		1000g	
Supply voltage, V DC	15/35		15/35	
Supply current, mA	2/20		2/20	
Case/Block Material	s/steel 303 S31 Aluminium Mounting Block		s/steel 303 S31 Aluminium Mounting Block	
Mounting	2x3.57mm through holes		2x 0.14in through holes	
Weight	19g		0.67oz	
Connector	3 x 10-32 UNF Microdot		3 x 10-32 UNF Microdot	
Case seal	Transducer inserts welded and bonded into hard anodized al block		Transducer inserts welded and bonded into hard anodized al block	
Size	19.1 x 19.1 x 11.7mm		0.75 x 0.75 x 0.46in	

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

DJB Iss.1

