

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

10mV/g up to 500 mV/g ± 10%

19gm

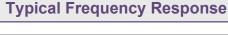
Std Temp 125°C

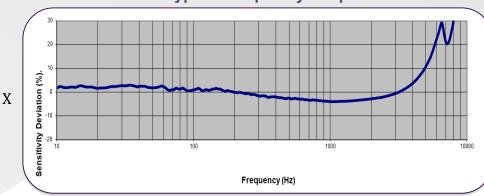


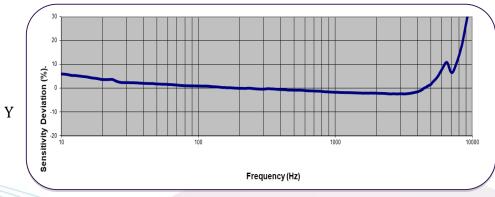
lightweight triaxial vibration transducer compromising three, Konic shear® IEPE all welded inserts, bonded orthogonally into anodized aluminum housing. The electrically insulated, inserts are individually and from the housing eliminating ground loop interference. Low impedance O/P provides a high degree 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 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.

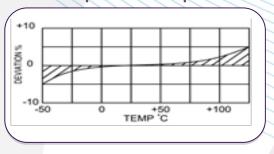
# A/131/V Tol + 0.13mm2 holes on a 18.82 P.C.D

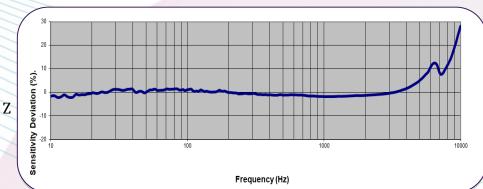






#### **Temperature Response**





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

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

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



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

| 1Hz   | 345µg/√Hz  |
|-------|------------|
| 10Hz  | 156µg/√Hz  |
| 100Hz | 44µg/√Hz   |
| 1kHz  | 12.1µg/√Hz |
| 10kHz | 8.2µg/√Hz  |

|   | Metric  |                   | Imperial                  |         |  |
|---|---|-------------------|---------------------------|---------|--|
| Voltage Sensitivity ±10%                  | 1.02mV/(m/s²)   | 10.2mV/(m/s²)     | 10mV/g                    | 100mV/g |  |
| Resonant frequency                        | X/Y Axis 25 kHz Z Axis 28 kHz   |                   |                           |         |  |
| Typical Frequency Response ±5% ±10%       | 1Hz - 3kHz<br>0.7Hz – 4kHz  |                   |                           |         |  |
| Cross axis error                          | ≤5% max   |                   |                           |         |  |
| Temperature range                         | -50/+125°C  |                   | -58/+257°F                |         |  |
| Voltage sensitivity deviation (20°C/68°F) | -5% @ -50°C<br>+5% @+125°C  |                   | -5% @-58°F<br>+5% @+257°F |         |  |
| Supply voltage                            | 15/35 VDC   |                   |                           |         |  |
| Supply current                            | 2/20mA  |                   |                           |         |  |
| Bias voltage                              | 10/14 VDC   |                   |                           |         |  |
| Base strain sens/strain                   | <0.01g/µ strain   |                   |                           |         |  |
| Shock level                               | 9806  | im/s <sup>2</sup> | 1000g                     |         |  |
| Case/Block Material                       | Inserts stainless steel 303 S31/<br>Aluminium Mounting Block            |                   |                           |         |  |
| Mounting                                  | 2x3.57mm th   | rough holes       | 2x 0.14in through holes   |         |  |
| Weight                                    | 19  | )g                | 0.67oz                    |         |  |
| Case seal                                 | Transducer inserts welded and bonded into hard anodized aluminium block |                   |                           |         |  |
| Size                                      | 19.1 x 19.1   | x 11.7mm          | mm 0.75 x 0.75 x 0.46in   |         |  |
| Connector                                 | 3 x 10-32 UNF Microdot  |                   |                           |         |  |

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