

Low Noise Triaxial Accelerometers

Dytran have recently introduced several new triaxial accelerometers. In particular the models 3333A and 3363A offer miniature size with low noise outputs. Both are IEPE type sensors and available with sensitivities of 10, 50 or 100mV/g, but the 3333A are adhesive mount, whereas the 3363A are stud mount. Both sensors have a 4-pin connector, but the 3333A connector is 20% smaller than the standard design. This small connector and adhesive mounting makes the 3333A series very small (approx. 9mm cube) and very lightweight at around 2.3 grams. The laser welded titanium housing contains the shear design ceramic sensing elements which, coupled with ultra low noise JFET electronics, gives an excellent signal to noise ratio and good low frequency response. The 3363A series comes in a similar 9.1mm square hermetically sealed titanium housing but they are about 12mm high and have an industry standard size 4-pin connector on the side, making it heavier at 4 grams. Mounting can be via a 10-32 stud, but the noise and frequency ranges are the same as the 3333A. Both models are ideal for modal analysis applications but can also be used in general vibration measurements, shaker control, squeak and rattle and NVH measurements, where small size and weight, coupled with a good frequency response, are an important consideration.

These sensors are a useful addition to the Dytran range of miniature triaxial accelerometers and we would be very pleased to discuss any application that you may have for low weight vibration measurements.