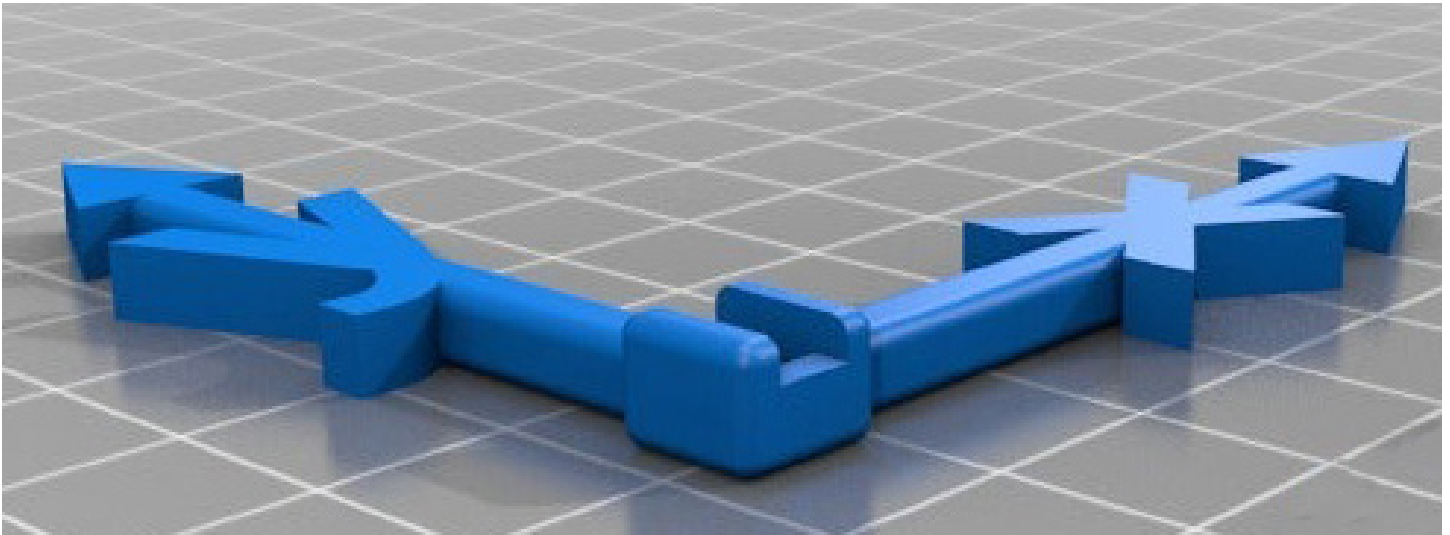


Biaxial Accelerometers: BENEFITS AND APPLICATIONS



**WHEN RELIABILITY MATTERS
CONNECT TO CONFIDENCE**

Measuring vibration in two axes simultaneously can help analysts pinpoint possible failure modes in many different applications. While triaxial accelerometers have become very popular for machinery analysis due to the increasing use of multi-channel data collectors and the improved speed they provide in capturing data for route collection, biaxial accelerometers also have a place as a lower cost option to triaxial sensors for applications where all three axes are not required.



Biaxial accelerometers are primarily used in applications where 2 axes must be monitored simultaneously. By proper choice of the mounting position the installer can choose which two axes the sensor will be taking data from. Mounting a sensor on the top of the bearing will give X/Y readings while mounting on the face of the bearing will give either X/Z or Y/Z readings, depending on the orientation of the sensor.



AC119-1D

Biaxial sensors are also indicated for use when taking readings on what might be termed “linear” applications such as railroad tracks and bridge supports, where the expected vibrations will primarily be in only two planes.



Bridge monitoring is probably best accomplished using both biaxial sensor (in the anchoring locations such as suspension towers and at the land connections) and triaxial sensors along the suspended portions of the bridge.