

Principles of a single inertial mass 6-DOF accelerometer

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Abstract:

ION has been involved in geophysical instrumentation used primarily for oil and gas exploration for nearly 50 years. During that time our Sensor division developed, manufactured and sold millions of geophones. We also pioneered the use of MEMS for seismic accelerometers with what became known as the Vectorseis sensor. In the recent past we conceived and are currently in the process of developing our next generation 6-DOF accelerometer that is in advanced prototype stage. In this talk we will describe the principles of the sensor and certain elements of its observed and expected performance.