New DC Accelerometers

Dytran Instruments have just released a new technology of high performance, variable capacitance (VC) accelerometers. The 7600B series is a family of DC response accelerometers that were designed, utilizing a capacitive sensing element and an advanced ASIC, to simulate the operation of a strain gauge bridge in order to directly replace piezoresistive units in new or existing applications.

The 7600B series sensors are tailored for zero to medium frequency instrumentation applications, and contain a hermetically sealed micro-machined capacitive sensing element, a custom integrated circuit amplifier, and differential output stages. It's hermetically sealed titanium case has a M4.5 X 0.35, 4-pin connector, and is easily mounted via two 4-40 screws. On-board regulation is provided to minimize the effects of supply voltage variation, and it is relatively insensitive to temperature changes and thermal gradients. The cable shield is electrically connected to the titanium case, but the power and signal wires are isolated from the case. The unique benefit of the 7600B series is that while they utilize variable capacitance technology, they are powered with the same power supply required for piezoresistive and strain gauge sensors. The 7600B series of accelerometers respond to both DC and AC acceleration, with typical applications being for bump testing, air bag testing, ride quality, flight-testing and seismic monitoring.

Please ask for further details on this new series of DC accelerometers, or for any advice you may need on any suitable applications.