Seismic accelerometers

731A and 731-207

Ultra-high sensitivity

Wilcoxon’s seismic sensors are all characterized by good low-frequency response, high output sensitivity and a low noise floor. Our seismic sensors offer unmatched performance in measuring low-level vibration. There is no need for vibration alarms—our accelerometers will measure the lowest level of movement.

Easily powered

Seismic accelerometers have internal amplifiers similar to industrial accelerometers. They are powered using the same method, a constant-current diode to provide power to the accelerometer. The seismic accelerometer amplifier output has a characteristic bias output voltage (BOV) and the vibration is superimposed upon this DC voltage level.

The accelerometer circuit is isolated from the case, making installation and mounting simple, while the 2-wire powering and signal method simplifies the wiring.

Seismic monitoring applications

- Seismic - earthquakes, tremors, geophysical measurements
- Structural integrity
- Construction zones
- Machine tool monitoring
- Surveillance

Seismic sensor and power amplifier system

731A ultra-quiet seismic accelerometer
- Measures vibration levels down to the sub micro-g range
- Ultra low noise internal amplifier
- High sensitivity inertial sensing element
- No moving parts
- Not sensitive to magnetic fields
- Relatively low mass

P31 amplifier
- Provides special low noise signal amplification and conditioning
- Powers the sensor’s internal amplifier with 2.4 mA constant current

731-207
- Compact housing for tight monitoring locations