

# Seismic accelerometers

## Ultra-high sensitivity, easily powered

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.

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

- Earthquake detection systems, tremors, geophysics measurements
- Structural integrity monitoring
- Construction zone observation
- Isolation tables
- Machine tool monitoring
- Surveillance

## Product options

Wilcoxon's seismic accelerometers are widely recognized as setting the standard for measuring low-level vibration in a variety of applications.



## Seismic sensor and power amplifier system

### 731A ultra-quiet seismic accelerometer

- Measures vibration levels down to the sub  $\mu\text{g}$  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



## Ultra low frequency sensor

### 731-207 accelerometer

- Compact housing for tight monitoring locations

## Dual output seismic sensor

### 735T dual output accelerometer

- Built-in temperature sensor
- Measures vibration levels down to the sub  $\mu\text{g}$  range
- Ultra low electrical noise

