

# 147A

## HIGH RESOLUTION ACCELEROMETERS



The 147A High Resolution Accelerometers are a force-balance accelerometer that converts acceleration signals into voltage signals to measure various low frequency and ultra-low frequency motion. The 147A accelerometer is available in both triaxial and uniaxial packages.

The 147A accelerometer uses a state-of-the-art force balance feedback technique to make up for the mechanical characteristic limitations of conventional accelerometers. This overcomes the shortcomings of nonlinear distortion and threshold of sensitivity of elastic measuring parts.

The advanced features of the 147A accelerometer include high sensitivity, large linear range, high resolution, and high dynamic range.

The 147A accelerometer has DC response. The 147A Low Noise model is +/- 4g full scale and provides excellent dynamic range, which is useful when used with 24-bit digitizers like the 130-MC Multi-Channel Recorder and 130S Series Data loggers. High sensitivity, large linear range, high resolution, and high dynamic range make the 147A model best suited for free field applications such as micro zonation, site response, earthquake monitoring, and more.

The 147A housing is sealed to meet IP67 standards for watertight integrity. For the triaxial package, mounting is accomplished with a single bolt, and 3point leveling.

The following chart is a graphic presentation of the sensor amplitude operating range via the ANSS method.

### KEY FEATURES

- » Low Noise
- » State-of-the-Art Accelerometer
- » Sensitivity & Offset Stable

### APPLICATIONS

- » Free Field Reference
- » Building Arrays
- » Structural Monitoring
- » Site Response
- » Aftershock Studies

