

Force Balance Accelerometers Data Sheet

The 147A-01/03 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.



147A-01/03 accelerometer. Image Courtesy of RefTek, a Trimble brand.

The advanced features of the 147A-01/03 accelerometer include high sensitivity, large linear range, high resolution, and high dynamic range make it suitable for free field applications such as microzonation, site response, earthquake monitoring. The 147A-01/03 accelerometer has DC response. The 147A-01/03 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-01/03 model best suited for free field applications such as micro zonation, site response, earthquake monitoring, and more. The 147A-01/03 housing is sealed to meet IP67 standards for watertight integrity. Mounting is accomplished with a single bolt, and 3 point leveling.

Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	12.5cm x 13.5cm x 9.8cm	2kg

Technical Specifications

Full-scale Range:	±4g
Full-scale Output:	±10V differential; 20 VPP.
Type:	Force-balance Triaxial or uniaxial
Sensitivity:	2.5V/g
Dynamic Range:	>155 dB (DC to 10 Hz)
Self Noise:	