

SA12 is a low cost MEMS based seismic grade accelerometer suitable for both strong motion monitoring and modal analysis.

The sensor compact, light and inexpensive. This model is in operation by several years and it is featured by high robustness to shocks resistance.

Having analogue output, true differential, it can be used even with relatively long cable lines to any type of data acquisition system. It is available with cable output and connector output.

## Applications

- \* Peak Ground Acceleration monitoring
- \* Structure health monitoring
- \* Operational Modal Analysis
- \* High-rise building, bridges and viaducts monitoring

## Main features

- \* Triaxial
- \* Dynamic range up to 90dB
- \* Available in +/-2g, +/-4g, +/-8g (da definire all'ordine)
- \* Bandwidth from DC to 500Hz
- \* Borehole version available
- \* Wall, floor, ceiling mount available upon request
- \* Very Low power consumption
- \* Response files are available through IRIS NRL library
- \* Made in EU (Italy)





### Specifications

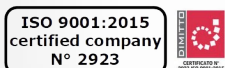
Number of axes: 3 in X, Y, Z (can be used even gathering signal by only one or two channels)  
Bandwidth: standard DC-500Hz (ask to us for other options)  
Standard sensitivity: 2 V/g (for 2g version)  
Output impedance: 100 ohm  
Full scale: +/- 2 g (standard, 4g or 8g upon request)  
Output: +/- 4V fully differential unipolar  
Dynamic range: 90dB (for the 2g full scale version and in the range 0.1Hz to 20Hz)  
Offset drift: 0.0001 g/°C  
Nonlinearity: <= 0.1%  
Cross axis sensitivity: <= 1.2 %  
Noise floor: < 22.5 µg √Hz  
Power supply: 5-18Vdc (current 8mA)  
Function test: via externally driven test pulse

Levelling: manual, with adjusting knobs  
Casing: solid block of aluminum CNC milled and treated against corrosion

Dimensions: 50x50x50mm (except connectors and basement)  
Weight: about 0.6 kg  
Connector: MIL-C-26842 10 pin connectors or cable gland  
Standard cable lenght: 3 meters, customizable at order

Protection grade: IP68  
Tolerated humidity: 0-100%  
Temp. operative range: -20 to +70°C  
Regulation compliance: CE

*specification may variate depending on customization*



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