

AMS MEMS SEISMIC ACCELEROMETER

AMS MEMS seismic accelerometer with high sensitivity suitable for any environmental condition and designed for the measurement and study of low intensity accelerations in the range 0-400Hz.

AMS models are high-sensitivity sensors designed for seismic purposes and for low-intensity, low-frequency motion studies.

Accelerometers provide a high level, low impedance output. In most applications, no signal conditioning is required. These sensors use low-noise MEMS to provide low-frequency measurements in the micro-G range.

APPLICATIONS

- Temporary or quick vibration measurements
- Disturbance to the person
- Though environmental conditions

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ELECTRONIC CHARACTERISTICS

Number of axis 1, 2, 3 orthogonally oriented

Full scale acceleration (available ranges)

± 2g or ± 5g

Output voltage

± 4 Volt differential

Sensitivity

 $2000 \, \text{mV/g} (2 \, \text{g model}) - 800 \, \text{mV/g} (5 \, \text{g model})$

Frequency response

0 - 700 Hz nominal, -3dB (2g model), 0-1100Hz

(5g model)

Operating voltage

+6 to +18 Vdc, 20 mA (for triaxial model)

Output impedance

90 Ohm

Dynamic range

> 100 dB (0-10Hz)

Noise density

7 μg/√Hz typical for 2g model

Non-linearity

< 0.1%

Offset drift

 \pm 0,2mg/°C (2g model), \pm 0,5mg/°C (5g model)

Full scale drift

120 ppm/C°

Sensor test

External test input, +/-1g 24Hz output

ENVIRONMENTAL CHARACTERISTICS

Temperature operating -20 to

-20 to +80 Deg C

Temperature storage

-40 to +90 Deg C

Shock survival

2000 q, 0,1 mSec

Ambient pressure

0 to 5 bar

Humidity

100%

PHYSICAL CHARACTERISTICS

Weight

800 g

Dimension LxWxH

 $60 \text{mm} \, x \, 60 \, \text{mm} \, x \, 60 \, \text{mm}$ (without connectors)

Cabinet material

Anodized Aluminium

Protection rating

IP65 with connector or IP68 with cable gland

Electrical interface

10 terminal pins CONNECTOR / cable gland $\,$

SolGeo Contact now your dedicated consultant: sales@solgeo.it +39 035 4520075

