

# AMS MEMS SEISMIC ACCELEROMETER

AMS MEMS seismic accelerometer with high sensitivity (>110dB) 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

Solgeo - Via Pastrengo, 9 – 24068 Seriate (BG , Italy )

## AMS MEMS SEISMIC ACCELEROMETER

#### **ELECTRONIC FEATURES**

Full scale accelerometrers

±2Go±5G

(input range)

Output voltage ± 4 Volt

Sensitivity  $2000 \text{ mV/g} - 800 \text{ mV/g} \text{ (type } \pm 5g)$ 

Frequency response 0 - 400 Hz (nominal, -3dB)

Operating voltage Da +6 a +18 Vdc, 8 mA (for single axis)

Output impedance 90 Ohm

Dynamic range > 100 dB

Sensitive axes alignment Da -250 a 250 ppm/C° max (da -55 a 125°C)

Compensated by internal temperature sensor

Test sensor External test input, gravity force non balanced

Cross axes sensitivity <2% - Excluding of Sensitive Axis

Alignment

Output noise <70 µV RMS from 0 to 50 Hz

Non-linearity <0.1%

#### **ENVIRONMENTAL CHARACTERISTICS**

Temperature operating -40 to +90 Deg C

Temperature storage -50 to +90 Deg C

Shock survival 2000 g, 0,1 mSec

Ambient pressure 0 to 5 bar

Humidity 100% Contenitore IP67

### PHYSICAL CHARACTERISTICS

Weight 800 g

Dimension 60 mm L x 60 mm W x 50 mm H

Case material Anodized Aluminium

Electrical interface 10 terminal pins / cable

Exit cable IP66 with connector or IP68 with cable gland

Fastening Three different fixing methods

Case Single, biaxial or triaxial accelerometer

settings within the same case

