

## AMS-PLUS SEISMIC ACCELEROMETER

AMS-PLUS 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 O-500Hz.

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

AMS-PLUS offer low noise and higher dynamic range respect to standard AMS.

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. It is available in single, biaxial or triaxial configuration.

#### **APPLICATIONS**

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

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

# AMS-PLUS SEISMIC ACCELEROMETER

#### **ELECTRONIC FEATURES**

Number of axis 1, 2, 3 orthogonally oriented

Full scale acceleration

(available ranges)

± 2g or ± 5g

Output voltage ± 4 Volt differential

Sensitivity 1500 mV/g (3 g model) - 900 mV/g (5 g model)

Frequency response 0 - 500 Hz nominal, -3dB (3g model), 0-1100Hz

(5g model)

Operating voltage +6 to +15 Vdc, 20 mA (for triaxial model )

Output impedance 90 Ohm

Dynamic range 120 dB typ (0-10Hz); 108.5dB (0-100Hz)

Noise density  $7 \mu g/\sqrt{Hz}$  typical for 2g model

Non-linearity <0.3%

Offset drift  $\pm 0,3$ mg/°C (3g model),  $\pm 0,5$ mg/°C (5g model)

Full scale drift 120 ppm/C°

Sensor test External test input, +/-0,25g 19Hz output

### **ENVIRONMENTAL CHARACTERISTICS**

Temperature operating -20 to +60 Deg C

Temperature storage -40 to +90 Deg C

Shock survival 1500

Ambient pressure 0 to 5 bar
Humidity 100%

#### PHYSICAL CHARACTERISTICS

Weight 800 g

Dimension LxWxH 60 x 60 x 60 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

