

AMD MEMS SEISMIC ACCELEROMETER

AMD MEMS strong motion seismic accelerometer suitable for any environmental condition and designed for vibration measurement of bridges and viaducts.

Solgeo has developed this triaxial mems accelerometer with performances suitable for monitoring structures such as bridges, viaducts, tunnels in road and rail environment, both for direct measurement of accelerations and displacements but also suitable for modal analysis of structures. It is characterised by high response accuracy, good dynamics especially at low frequencies (those of interest), high robustness to atmospheric agents and shocks, all at a very competitive price for widespread installation. It connects directly to the Dymas24 series acquirers that manage the internal test.

APPLICATIONS

- Vibration measurements on bridges and viaducts
- Suitable for all environmental conditions



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ELECTRONIC CHARACTERISTICS

Full scale acceleration	$\pm 2\text{ G}, \pm 4\text{ G}; \pm 8\text{ G}$ (optional) (Input Range)
Output Voltage	$\pm 4\text{ Volt}$
Sensitivity	2000 mV/g - 1000 mV/g (tipo $\pm 4\text{g}$); 500 mV/g ($\pm 8\text{g}$ type)
Frequency response	0 - 400 Hz (nominal, -3dB); 0 - 1500 Hz (optional)
Operating voltage	Da +5 a +18 Vdc 8 mA
Output Impedance	90 Ohm
Dynamic range	> 80 dB full to 00 dB (different for frequency range)
Scale Factor Temp coefficient	100 ppm/C° Max (-40 to 125°C). Compensated by internal temperature sensor
Test sensor	External test input gravity force not balanced
Output Noise	< 22,5 $\mu\text{g}/\sqrt{\text{Hz}}$
Non-Linearity	< 0,1% (model $\pm 2\text{g}$)

ENVIRONMENTAL CHARACTERISTICS

Temperature, Operating	-40 to +80 Deg C
Temperature, Storage	50 TO +90 Deg C
Shock Survival	2000 G, 0,1 mSec
Ambient Pressure	0 to 5 Bar
Humidity	100% case IP67

PHYSICAL CHARACTERISTICS

Weight	600 g
Size	50 mm L x 50 mm W x 50 mm H
Case Material	Anodized Aluminum
Electrical Interface	10 terminal pins
Optional mating connector	Gland cable



**Contatta adesso il tuo
consulente dedicato:**

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