

# SV 84

## Building Vibration Accelerometer



INSTRUMENTATION FOR SOUND & VIBRATION MEASUREMENTS

SV 84 is a **LOW-NOISE**, hermetically sealed **TRIAxIAL** piezoelectric accelerometer designed to monitor building and ground vibrations with SVAN 958A analyser.

A hermetically sealed glass connector protects the SV 84 from harmful dust and moisture enabling the **OUTDOOR** use without additional enclosures.

Signal ground is **ISOLATED** from the mounting surface and outer case to prevent ground loops.



## Optional accessories to SV 84



SV 111  
Vibration Field Calibrator



SA 207B  
Building Vibration Kit



SC 282  
Cable to SV 84 and SVAN 958A

## SV 84 Technical Specifications

### Performance

Number of Axes	3
Sensitivity ( $\pm 10\%$ )	100 mV/(m/s <sup>2</sup> ) ~ 1000 mV/g
Measurement Range	0.0005 m/s <sup>2</sup> RMS $\div$ 50 m/s <sup>2</sup> Peak
Frequency Response ( $\pm 3$ dB)	0.2 Hz $\div$ 3 700 Hz
Resonant Frequency	16 kHz
Residual Noise (1 Hz, 24°C)	2.0 $\mu$ g RMS
Residual Noise (1 kHz, 24°C)	6.3 $\mu$ g RMS

### Electrical

Supply Current (IEPE)	2 mA $\div$ 10 mA
Supply Voltage (IEPE)	22 V $\div$ 28 V
Bias Voltage (IEPE)	+10 VDC
Output Impedance (Nominal)	50 $\Omega$
Charge / Discharge Time Constant (start-up time)	< 10 sec. typ.

### Environmental Conditions

Maximum Vibration (shock survival)	50 000 m/s <sup>2</sup> Peak
Thermal Sensitivity Coefficient	0.1 %/°C F.S.
Operating Temperature Range (recommended)	from -10 °C to +50 °C
Humidity / Enclosure	Not affected, hermetically sealed

### Physical

Connector	M12 glass seal
Dimensions	41x42x23 mm (with connector)
Weight	275 grams
Mounting Thread	M6
Material Housing & Connector	Stainless steel

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