

# SV 85

## General Purpose Vibration Accelerometer



INSTRUMENTATION FOR SOUND & VIBRATION MEASUREMENTS

The SV 85 is a IEPE based **TRIAxIAL ACCELEROMETER** designed for general purpose vibration measurements with the SVAN 958A four-channel analyser.

The **HERMETIC SEALED** tri-axial industrial piezoelectric accelerometer is suitable to monitor the vibration in harsh industrial environment.

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



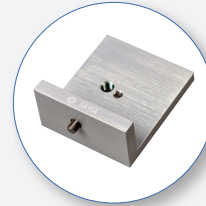
## Optional accessories to SV 85



SV 111  
Vibration Field Calibrator



SV 110  
Hand-held Vibration Calibrator



SA 154  
Calibration Adapter to SV 85



SC 282  
Cable to SV 85 and SVAN 958A

## SV 85 Technical Specifications

### Performance

Number of Axes	3
Sensitivity ( $\pm 10\%$ )	10 mV/(m/s <sup>2</sup> ) ~ 100 mV/g
Measurement Range	0.005 m/s <sup>2</sup> RMS $\div$ 500 m/s <sup>2</sup> Peak
Frequency Response ( $\pm 3$ dB)	0.5 Hz $\div$ 13 000 Hz (Z axis); 0.5 Hz $\div$ 10 000 Hz (X, Y axis)
Resonant Frequency	40 kHz
Residual Noise (1 Hz, 24°C)	300 $\mu$ g RMS
Residual Noise (1 kHz, 24°C)	3000 $\mu$ g RMS

### Electrical

Supply Current (IEPE)	2 mA $\div$ 10 mA
Supply Voltage (IEPE)	22 V $\div$ 28 V
Bias Voltage (IEPE)	+12 $\pm$ 2 VDC
Output Impedance (Nominal)	50 $\Omega$
Charge / Discharge Time Constant (start-up time)	< 1 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	28.5x27x16.5 mm (with connector)
Weight	84 grams
Mounting Thread	M6
Material Housing & Connector	Stainless steel

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