

# SV 81

## General Purpose Vibration Accelerometer

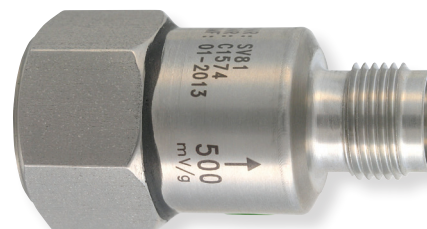


INSTRUMENTATION FOR SOUND & VIBRATION MEASUREMENTS

The SV 81 is an industry standard IEPE accelerometer offered to Svantek's Vibration Level Meters (974, 977A, 979, 958A).

The accelerometer's **HIGH SENSITIVITY** and **LOW ELECTRONIC NOISE** enable measurements of very low vibration amplitudes over the typical machines' frequency operating ranges.

The accelerometer is mounted on a vibrating surfaces with the mounting magnet.



## Optional accessories to SV 80



SV 110  
Hand-held  
Vibration Calibrator



SA 27  
Mounting Magnet



SC 27  
TNC/TNC coil cable

## SV 81 Technical Specifications

### Performance

Number of Axes	1
Sensitivity ( $\pm 5\%$ )	50 mV/(m/s <sup>2</sup> ) ~ 500 mV/g
Measurement Range	0.002 m/s <sup>2</sup> RMS $\div$ 100 m/s <sup>2</sup> Peak
Frequency Response (by design guideline, $\pm 3$ dB)	0.2 Hz $\div$ 3700 Hz
Resonant Frequency	16 kHz
Residual Noise (1 Hz, 24°C)	2.4 $\mu$ g RMS
Residual Noise (1 Hz to 25 kHz, 24°C)	25 $\mu$ g RMS

### Electrical

Supply Current (IEPE)	2 mA $\div$ 10 mA
Supply Voltage (IEPE)	22 V $\div$ 28 V
Bias Voltage (IEPE)	+12 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	0.07 %/°C F.S.
Operating Temperature Range (recommended)	from -10 °C to +50 °C
Humidity / Enclosure	IP 67, epoxy sealed

### Physical

Connector	TNC socket, top radially mounted
Weight	40 grams
Mounting Thread	10-32 UNF 2B

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