SV 81

General Purpose Vibration Accelerometer



INSTRUMENTATION FOR SOUND & VIBRATION MEASUREMENTS

The SV81 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 81



SV 110 Hand-held Vibration Calibrator



SA 27 Mounting Magnet



SC 27 TNC/TNC coil cable

SV81 Technical Specifications

Performance

Number of Axes Sensitivity (± 5 %) Measurement Range Frequency Response (by design guideline, ± 3 dB) Resonant Frequency Residual Noise (1 Hz, 24°C) Residual Noise (1 Hz to 25 kHz, 24°C)

Electrical

Supply Current (IEPE)
Supply Voltage (IEPE)
Bias Voltage (IEPE)
Output Impedance (Nominal)
Charge / Discharge Time Constant (start-up time)

Environmental Conditions

Maximum Vibration (shock survival) Thermal Sensitivity Coefficient Operating Temperature Range (recommended) Humidity / Enclosure

Physical

Connector Weight Mounting Thread 1 $50~mV/(m/s^2) \sim 500~mV/g$ $0.002~m/s^2~RMS \div 100~m/s^2~Peak$ $0.2~Hz \div 3700~Hz$ 16~kHz $2.4~\mu g~RMS$ $25~\mu g~RMS$

2 mA \div 10 mA 22 V \div 28 V +12 VDC 50 Ω < 10 sec. typ.

50 000 m/s 2 Peak 0.07 %/ $^\circ$ C F.S. from -10 $^\circ$ C to +50 $^\circ$ C IP 67, epoxy sealed

TNC socket, top radially mounted 40 grams 10-32 UNF 2B