

# SV 100 Whole-Body Vibration Dosimeter & Analyser

The SV 100 is a digital Human Vibration Meter & Analyser integrated with triaxial Whole-Body accelerometer seat-pad. This dosimeter is one of the first ever made complete HVM integrated with the triaxial "Seat Accelerometer" provided with the driver-presence detection sensor and user interface (display with push-buttons) indicating current instrument state and measurement results.

Instrument meets ISO 8041:2005 standard and it is an ideal choice for the measurements according to the ISO 2631-1, 2 & 5.

The RMS, Peak, Peak-Peak, VDV, MTVV results with all required weighting filters for the Whole-Body vibration measurements are available including weighting filter for motion sickness measurements.

Using computational power of its digital signal processor the SV 100 instrument

can perform real-time 1/1 or 1/3 octave analysis simultaneously to the meter mode. Advanced time-history logging, in non-volatile 64 MB internal memory, completes the very powerful functionality. Measurement results can be easily downloaded to any PC using USB interface and SvanPC+ software. Thanks to multilingual menu, simple and advanced modes of operation, the SV 100 meets requirements of a very wide group of users.

The time-domain signal recording (according to the ISO 2631-5) is also available as an exceptional option.

The USB 1.1 interface (12 MHz) creates very fast link for the data download and remote programming of the SV 100.

Instrument is powered by dedicated battery pack, car "cigarette lighter" socket or the USB interface.

## FEATURES

- Whole-Body Human Vibration measurements meeting ISO 8041:2005 and ISO 2631-1, 2 & 5 including VDV and MTVV
- Motion sickness measurements according to ISO 2631
- Advanced data logger including spectral analysis
- Time-domain signal recording (meeting ISO 2631-5)
- 1/1 and 1/3 octave real-time analysis
- 64 MB non-volatile internal memory
- USB 1.1 Client interface
- Measurement of exposure time
- Integration time programmable up to 24 h
- LED over-dose alarm warning and status indicator
- Simple and advanced menu operation modes
- User interface - two navigation push-buttons and built-in 16 x 104 pixels OLED display
- Driver-presence detection, built-in force sensor (measurement triggered/paused by human body)
- SvanPC+ software for easy remote programming and data download
- Powered by dedicated battery pack, car "cigarette lighter" socket or the USB interface



# TECHNICAL SPECIFICATIONS

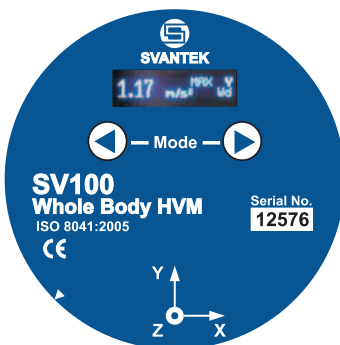
## VIBRATION LEVEL METER / ANALYSER

Standards	ISO 8041:2005; ISO 2631-1, 2 & 5
Meter Mode	RMS, VDV, MTVV or Max, Peak, Peak-Peak, Vector, A(8), Dose, ELV, EAV Simultaneous measurement in three channels with independent set of filters and detector constants
Filters	$W_d, W_k, W_m, W_b$ (ISO 2631) $W_f$ for motion sickness measurements according to ISO 2631 (option)
RMS & RMQ Detectors	Digital True RMS & RMQ detectors with Peak detection, resolution 0.1 dB Time-constants from 100 ms to 10 s
Data Logger*	Time-history data including meter mode results (standard) and spectra (option)
Time-Domain Recording*	Simultaneous x, y, z time-domain signal recording, sampling frequency 312.5 Hz, over 8 hours recording-time (option)
Analyser*	1/1 octave real-time analysis, 10 filters, Type 1: IEC 61260 with centre frequencies from 0.25 Hz to 125 Hz (option) 1/3 octave real-time analysis, 30 filters, Type 1: IEC 61260 with centre frequencies from 0.2 Hz to 160 Hz (option)
Accelerometer	Integrated triaxial accelerometer for Whole-Body measurements
Measurement Range	0.01 ms <sup>-2</sup> RMS ÷ 50 ms <sup>-2</sup> Peak
Frequency Range	0.1 Hz ÷ 180 Hz

\* function parallel to the meter mode

## BASIC DATA

Input	Integrated MEMS accelerometers (axes x, y, z)	
Dynamic Range	80 dB, 3 x 16 bits A/D converters (axes x, y, z)	
Force Detector	0.1 N ÷ 100 N (driver-presence detection, programable threshold)	
Memory	64 MB non-volatile flash type	
Communication Interfaces	USB 1.1 Client	
User Interface	Display	OLED, 16 x 104 pixels
	Navigation	2 x push-buttons
	Menu modes	simple & advanced
	Menu description	multilingual
Power Supply	SA 100 external battery pack (included)	operation time > 16 h
	External power supply	5 V/150 mA DC
	Car "cigarette lighter" adapter (not included)	from 12 V up to 30 V DC
	USB interface	150 mA HUB
Environmental Conditions	Temperature	from -10 °C to 50 °C
	Humidity	up to 90 % RH, non-condensed
Dimensions	235 mm x 12 mm	
Weight	Approx. 540 grams (including cable and rubber cushion)	



Continuous product development and innovation are the policy of our company. Therefore, we reserve the right to change the specifications without prior notice.

DISTRIBUTOR: \_\_\_\_\_



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