SV 104A
Noise Dosimeter

The SV 104A is the first noise dosimeter on the market with a life-time warranty for the MEMS microphone. It is resistant to accidental mechanical shocks and even drops. The SV 104A Bluetooth® interface enables current results to be previewed on a smart-phone or tablet using our Assistant application. The smart-phone application also signals an alarm when pre-selected noise limits are exceeded. The dosimeter is suitable for noise exposure measure-ments in accordance with the following standards: ISO 9612, OSHA, MSHA and ACGIH.

SV 104A

Noise Dosimeter

MEMS Microphone

Life-time warranty on microphone

Our patented MEMS microphone is resistant to accidental mechanical shocks and even drops. The excellent stability of measurement parameters over years of use is confirmed by its lifetime warranty.

Smart & Automatic

Noise sources recognition

The octave analysis can be used for quick verification of noise sources in the time history. Simultaneously, the audio events recording can be logged so it can be played back in the PC software. It can be activated at any time, by ordering an activation code.

Mobile applications

Remote connection via Bluetooth

The SV 104A Bluetooth interface enables current results to be previewed on a smartphone or tablet using our Assistant application. The smartphone application also sounds an alarm when the pre-selected noise limits are exceeded.

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Key Functions

HS
Occupational noise measurements

The dosimeter is suitable for measurements of noise at work in compliance with standards such as: ISO 9612, OSHA, MSHA and ACGIH.

Real-time frequency analysis

The 1/1 octave analysis is often used for the selection of hearing protectors. The 1/3 octave function allows the determination of the influence of high or low frequencies on overall values. Functions are available as firmware options.

Triggered audio recording

Audio recording is synchronized with a noise time-history and it can be opened and played back in PC software enabling noise source recognition. Audio recording can be triggered on threshold or by time. It can be activated at any time by ordering the activation code.

Time-history logging

The time history logging of results such as Leq, Max, Min and Peak with two simultaneous logging steps is saved on a 8 GB memory.
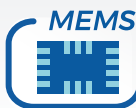
MEMS
Built-in vibration sensor

The inbuilt triaxial VIBRATION SENSOR detects shocks and vibrations that influence noise measurement results and provides the information during the times when dosimeter is not used by the worker.

OLED
OLED display

The colour graphical display is an OLED screen with a high contrast visibility even in full daylight or in low ambient light areas.

USB
USB connector

The USB interface provides fast data download and is used for battery charging.

Software

SUPERVISOR

Supervisor software supports data download, instrument configuration and provides complete set of tools for determination of occupational noise exposure from noise level measurements in accordance to all standards using TWA and DOSE such as OSHA, ACGIH, MSHA, ISO 9612.

ASSISTANT

Assistant is a smartphone application for devices running on Android and iOS platforms enabling current results to be previewed on a smartphone or tablet as well as controlling the measurement Start / Stop and Markers. The Assitant also signals an alarm when set noise limits are exceeded.
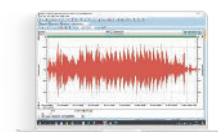
Optional accessories

SA 147
Waterproof Carrying Case for Dosimeter and Docking Station

SV 34 Class 2 Acoustic Calibrator
114 dB at 1 kHz

SF 104_3OCT
License of 1/1 & 1/3 octave

SF 104_WAV
License of audio recording

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Technical Specifications

Standards	IEC 61252 ed1.1 (2002); ANSI S1.25-1991 (R2020) Class 2 IEC 61672-1 ed2.0 (2013)	
Weighting Filters	A, C and Z	
Time Constants	Slow, Fast, Impulse	
Exchange Rates	2, 3, 4, 5, 6	
Microphone	ST 104A MEMS microphone, 1/2" housing, patented	
Linear Operating Range	53 dBA Leq ÷ 141 dBA Peak (in accordance to IEC 61672)	
Dynamic Measurement Range	43 dBA Leq ÷ 141 dBA Peak (typical from noise floor to the maximum level)	
Frequency Range	20 Hz ÷ 10 kHz	
Dynamic Range	98 dB	
Measurement Results	Time, Lpeak, Lmax, Lmin, SPL (L), DOSE, D_8h, PrDOSE, Lav, Leq, SEL (LE), SEL8, E, E_8h, LEPd, PSEL, Ltm3, Ltm5, Leq statistics (Ln), PTC, PTP, ULT, TWA, PrTWA, Lc-a. Measurement time, OVL (OVERLOAD TIME %), No Motion time PTP (PEAK THRESHOLD %), ULT (UPPER LIMIT TIME), TWA, PrTWA, Lc-a	
Measurement Profiles	3 with independent settings of filters (x) and time constants (y)	
Data Logger	Summary results for the measurement time and time-history logging of Leq/Max/Min/Peak with adjustable logger step down to 1 s	
1/1 Octave Analysis (option)	Real-time analysis meeting Class 1 requirements of IEC 61260, centre frequencies from 31.5 Hz to 8 kHz	
1/3 Octave Analysis (option)	Real-time analysis meeting Class 1 requirements of IEC 61260, centre frequencies from 20 Hz to 10 kHz	
Audio Recording (option)	Audio events recording, trigger and continuous mode, 12 kHz sampling rate, wav format	
Voice Comments	Audio records on demand, created before or after measurement, added to measurement file	
Memory	8 GB	
Display	OLED 128 x 64 pixels	
Keyboard	4 push buttons	
Communication Interfaces	USB 2.0, Bluetooth® 4.0 Electrical contacts (SA 104-1 and SA 104-5 docking stations compatible)	
Power Supply	Li-Ion rechargeable cell	operation time 48 hours[1]
Environmental Conditions	Temperature Humidity	from -10 °C to 50 °C (14 °F to 122 °F) up to 95 % RH, non-condensed
Dimensions	88 x 49.5 x 19.2 mm	
Weight	121 grams	

[1]depending on configuration and environmental conditions

The policy of our company is to continually innovate and develop our products. Therefore, we reserve the right to change the specifications without prior notice.

SOUND AND VIBRATION MEASUREMENT SOLUTIONS