MEASURING TECHNOLOGY & TEST SERVICE 2024

Occupational safety/ Environment

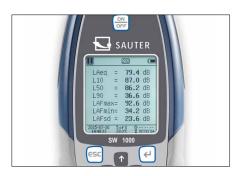


Sound Level Meter SAUTER SW





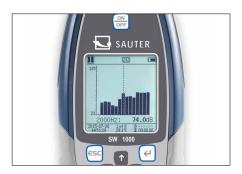
First-class professional Class I, Class II sound level meter



Data logging function with date and time in the device....



...and data transfer using MicroSD (4G) memory card (included in delivery), RS-232 or USB



Different sound pressure levels can be selected, such as, Laeq, LcPeak, LaF, LaFMax, LaFMin, SD, SEL, E

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Sound Level Meter SAUTER SW



Features

- Ideal for measurements for workplaces outdoor,
 e.g. at airports, on building sites, in road traffic
 etc. with wide frequency access
- Modern microcontroller architecture for increased stability and accuracy
- A specially-developed algorithm permits a compliant dynamic range of more than 120 dB! (SW 1000: > 123 dB; SW 2000: > 122 dB)
- Three profiles and 14 user-defined measurements can be calculated in parallel with different frequency and time weighting
- LN statistics and display of the graph showing the progression of time
- User-defined integral interval measurement up to a maximum of 24 hours is possible
- Frequency weighting (filter) A, B, C, Z
- Time interval during measurement: F (fast),
 S (slow), I (pulse)
- Freely-definable limits for the output of an optical alarm signal
- Peak Hold function to capture peak value
- Octave function for targeted sound analysis, can be expanded to 1/3 octave through the purchase of a licence
- TRACK function with graphic display of a measurement
- Calibration mode (with optional calibrator)
- Trigger mode: external start/stop of measurement via 3.5 mm connector
- Automatic measurement for timer function
- is possible
- Operating languages: EN, DE, FR, ES, PT
- 2 Option of fitting a stand on the rear of the housing, 1/4" thread
- • Delivery in robust transport case



Technical data

- · Applicable standards:
- IEC61672-1:2014-07
- GB/T3785.1-2010
- 1/1 Octave in accordance with IEC 61260:2014
- 1/2" microphone
- Output (direct or alternating current) AC (max 5 VRMS), DC (10 mV/DB)
- · Mains adapter external, standard
- Battery operation possible, 4×1.5 V AA not included, operating time up to 10 h
- Overall dimensions W×D×H 200×85×40 mm
- Permissible ambient temperature -10 $^{\circ}\text{C}/50~^{\circ}\text{C}$
- Net weight approx. 0,40 kg



Accessories

- Plug-In for data transfer of measuring data from the measuring instrument and transfer to a PC, e.g. in Microsoft Excel®, SAUTER AFI-2.0, see internet
- **2** Stand, W×D×H 430×90×90 mm, SAUTER SW-A05
- SD-memory card, storage capacity 4 GB, SAUTER SW-A04
- Foam protective cover, SAUTER SW-A03
- S Calibrator for regular adjustment of the sound level meter, class 1, as well as testing the linearity of sound level meters
- Applicable standards: IEC60942:2003 Class 1, ANSI S1.40-1984, GB/T 15173-1994.
- Output frequency 1 kHz (+/- 0,5 %)
- Output of acoustic pressure, can be selected at 94 dB or 114 dB (\pm 0.3 dB)
- Distortion factor < 2 %
- Stabilisation time < 10 s
- Permissible ambient temperature range
- -10 °C/50 °C
- The calibrator is designed for ½" as well as ¼" microphones (adapter included in the delivery) in accordance with the IEC 61094-4 standard
- Battery operation, 2×1.5 V AA, not standard, operating time up to 40 hours
- Dimensions W×D×H 70×70×48 mm
- Net weight approx. 137 g, SAUTER BSWA-01
- Factory calibration certificate, for calibrator, SAUTER 961-291
- DAkkS calibration certificate, for calibrator, SAUTER 963-291
- Expansion of the octave band to 1/3 octave, SAUTER SW-A10

























Model	Accuracy class	Measuring range linear [Min]-[Max]	Readout [d]	Frequency range [Min]-[Max]	Sensitivity	Option Factory calibration certificate
SAUTER		dB	dB	kHz	mv/Pa	KERN
SW 1000	1	20 - 134	0,1	0,01 - 20	50	961-281
SW 2000	2	25 - 136	0,1	0,02 - 12,5	40	961-281



MEASURING TECHNOLOGY & TEST SERVICE 2024

SAUTER Pictograms



Conformity assessment

Models with type approval

DAkkS calibration

The time required for

DAkkS calibration is shown

Factory calibration (ISO)

The time required for factory

calibration is specified in

Package shipment

The time required for

internal shipping prepara-

tions is shown in days in

the pictogram

the pictogram

the pictogram

Pallet shipment

The time required for

internal shipping prepara-

tions is shown in days in

in days in the pictogram

for construction of verifiable

M

DAkkS

+3 DAYS

ISO

1 DAY

systems

possible



Adjusting program (CAL) For quick setting of the

instrument's accuracy. External adjusting weight required



Calibration block

Standard for adjusting or correcting the measuring



Peak hold function Capturing a peak value within a measuring process



Scan mode

Continuous capture and display of measurements



Push and Pull

The measuring device can capture tension and compression forces



Length measurement

Captures the geometric dimensions of a test object or the movement during a test process



Focus function

Increases the measuring accuracy of a device within a defined measuring range



Internal memory

To save measurements in the device memory



Data interface RS-232

Bidirectional, for connection of printer and PC



Profibus

For transmitting data, e.g. between scales, measuring cells, controllers and peripheral devices over long distances. Suitable for safe, fast, fault-tolerant data transmission. Less susceptible to magnetic interference



Profinet

Enables efficient data exchange between de-centralised peripheral devices (balances, measuring cells, measuring instruments etc.) and a control unit (controller). Especially advantageous when exchanging complex measured values, device, diagnostic and process information. Savings potential through shorter commissioning times and device integration possible



Data interface USB

To connect the measuring instrument to a printer, PC or other peripheral devices



Bluetooth* data interface

To transfer data from the balance/measuring instrument to a printer, PC or other peripherals



WIFI data interface

To transfer data from the balance/measuring instrument to a printer, PC or other peripherals



Data interface infrared

To transfer data from the measuring instrument to a printer, PC or other peripheral devices



Control outputs (optocoupler, digital I/O)
To connect relays, signal

lamps, valves, etc.



Analogue interface

To connect a suitable peripheral device for analogue processing of the measurements



Analogue output

For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)



Statistics

Using the saved values, the device calculates statistical data, such as average value, standard deviation etc.



PC Software

To transfer the measurement data from the device to a PC



Printer

A printer can be connected to the device to print out the measurement data



Network interface

For connecting the scale/ measuring instrument to an Ethernet network



KERN Communication Protocol (KCP)

It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems



GLP/ISO record keeping

of measurement data with date, time and serial number. Only with SAUTER printers



Measuring units

Weighing units can be switched to e.g. non-metric. Please refer to website for more details



Measuring with tolerance range (limit-setting function)

Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model



Protection against dust and water splashes IPxx

The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989 +A1:1999+A2:2013



ZERO

Resets the display to "0"



Battery operation Ready for battery operation. The battery type is specified for each device



Rechargeable battery pack

Rechargeable set



Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or US version available



Integrated power supply unit

Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or US on request



Motorised drive

The mechanical movement is carried out by a electric motor



Motorised drive

The mechanical movement is carried out by a synchronous motor (stepper)



Fast-Move

The total length of travel can be covered by a single lever movement

