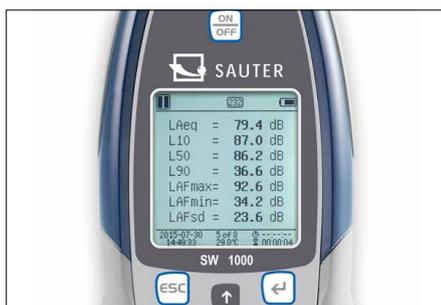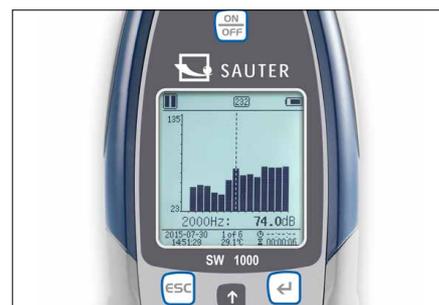Sound Level Meter SAUTER SW

PREMIUM
★★★

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

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, ¼" thread
- **1** 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
- ½" 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 °C/50 °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
- **3** 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 (± 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

STANDARD

PEAK | MEMORY | RS 232 | USB | ANALOG | STATISTIC | TOL | BATT | 230 V | 1 DAY

OPTION

SOFTWARE | ISO +10 DAYS | DAkkS +10 DAYS

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

Adjusting program (CAL)
For quick setting of the instrument's accuracy. External adjusting weight required

Calibration block
Standard for adjusting or correcting the measuring device

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

Conformity assessment
Models with type approval for construction of verifiable systems

DAkkS calibration possible
The time required for DAkkS calibration is shown in days in the pictogram

Factory calibration (ISO)
The time required for factory calibration is specified in the pictogram

Package shipment
The time required for internal shipping preparations is shown in days in the pictogram

Pallet shipment
The time required for internal shipping preparations is shown in days in the pictogram

180 YEARS since 1844 KERN & SOHN