

# OCCUPATIONAL SAFETY, ENVIRONMENT

Prevention of accidents as well as modern health care have got the same operational starting point in many countries. With industrialisation and the formation of conurbations, transport infrastructures and large companies, regular preventive medical examinations were introduced for wide sections of the population.

In addition to preventive medical examinations, monitoring of working conditions with defined limits was also introduced. To date, the regular checking of these limits as part of safety and accident prevention measures is domiciled as a business responsibility up till now.

For this purpose, SAUTER provides a targeted selection of the most commonly-used instruments in general measuring technology. They can be used to measure environmental influences such as noise (acoustic pressure) or light.

For regular calibration, our pick-up and return service can be used, which will save you a lot of efforts and expenses.

### Quick-Finder

Readout	Measuring range	Model	Page
[d]	[Max]	SAUTER	
	420 °C	JIT 100	78
-	1100 °C	JIT 200	78
0,1 dB	130 dB	SU 130	75
0,1 dB	134 dB	SW 1000	76
0,1 dB	136 dB	SW 2000	76
0,1   1   10   100 lx	200   2000   20000   200000 lx	SO 200K	73
0,1   1   10   100 lx	200   2000   20000   200000 lx	SP 200K	74











# Photometer for precise light measurement up to 200,000 Lux

### Features

- Helps to determine if workplace lighting meets standard requirements, e.g. DIN EN 12464-1 "Lighting of workplaces indoors"
- Photo sensor: silicon diode
- Cosine correction for angular incident light
- Track function for continuous recording of changing environmental conditions
- · Peak Hold function to capture peak value
- Selectable measuring units: fc (foot-candle), lux
- Sturdy protective cover for the photo sensor
- Increased service life: Impact protection by means of a protective casing
- • Delivery in a robust box

### Technical data

- Measuring frequency: 2 Hz
- · Cable length (Photo sensor) approx. 1 m
- Battery operation, batteries standard (9 V block), AUTO-OFF function to preserve the battery
- Overall dimensions W×D×H 160×72×40 mm
- Net weight approx. 0,25 kg



OPTION	
ISO	
+10 DAYS	

Model	Measuring range	Readout	Option  Factory calibration certificate
SAUTER	[Max] Ix	[d] Ix	KERN
	200	0,1	
SO 200K	2000	1	— — 961-190
	20000	10	901-190
	200000	100	











### Compact photometer, optimised for accurate light measurement, including LED light measurement

### **Features**

- · For measuring illumination of office workstations, production workstations, etc.
- Photo sensor: silicon diode, filtered
- · Cosine correction for angular incident light
- Data-hold function, to freeze the current measurement
- 11 Rotatable sensor unit (+90 and -180°) for optimum alignment to the light source
- Track function for continuous recording of changing environmental conditions
- By pressing the key, the current measured value can be frozen until the key is pressed
- Selectable measuring units: fc (foot-candle), lux
- Easy to toggle between units at the press of a button
- · Option of fitting a stand on the rear of the housing, 1/4" thread
- Sturdy protective cover for the photo sensor
- 2 Increased service life: Impact protection through delivery in a soft box with light protection

### **Technical data**

- Measurement precision up to 20.000 Lux: ± 4 % of the result + 10 scale intervals
- Measurement precision from 20.000 Lux:  $\pm$  5 % of the result + 10 scale intervals
- Repeatability: ± 2 % of [Max]
- Temperature error: ± 0,1 % von [Max]/°C
- · Measuring frequency: 2 Hz
- · Ready for use: Batteries included, 9 V block, operating time up to 200 h
- Overall dimensions W×D×H 185×68×38 mm
- · Net weight approx. 0,15 kg







Model	Measuring range	Readout	Option  Factory calibration certificate	
SAUTER	[Max] Ix	[d] Ix	KERN	
SP 200K	200	0,1		
	2000	1	961-190	
	20000	10	901-190	
	200000	100		









### Versatile sound level meter

### **Features**

- Sound level meter with basic functions for measuring noise in areas such as, environment, mechanical applications, car industry and much more
- Measures the sound intensity in the workplace
- Helps in differentiating between normal noise influences, and excessive noise, nuisances e.g. in a production hall
- 11 Data interface RS-232, included
- Multi measuring functions:

Lp: Standard sound level measuring function Leq: Energy equivalent sound level measuring mode (type A)

Ln: Shows the deviation from a pre-defined limit in %

- Selectable methods of evaluation: A: As sensitive as the human ear C: Sensitive for noisier environmental conditions, where there are machines, plant, motors etc.
- F: For areas with constant sound intensity
- Limit value function: programmable value for the maximum level value
- · Track function for continuous recording of
- changing environmental conditions • Peak Hold function to capture peak value
- · Internal memory for 30 measured values, transferable to PC with SAUTER ATC-01
- 2 Delivered in a robust carrying case

### Technical data

- Measuring precision: 3 % of [Max]
- Battery operation, batteries standard (4×1.5 V AAA)
- Overall dimensions W×D×H 223×62×25 mm
- Net weight approx. 0,20 kg

### **Accessories**

- · Data transfer software, interface cable included, SAUTER ATC-01
- · Adjustment device for regular adjustment of the sound level meter, SAUTER ASU-01
- Foam protective cover, SAUTER ASU-02





Model	Туре	Measuring range	Readout	Option
SAUTER		[Min]-[Max] dB	[d] dB	Factory Calibration Certificate  KERN
SU 130	Lp A Leq C Ln F	30 - 130	0,1	961-281



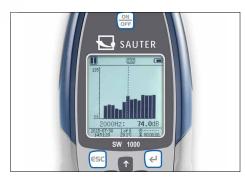
## First-class professional Class I, Class II sound level meter



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







#### **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
- 11 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
- Permissible ambient temperature -10 °C/50 °C
- Overall dimensions W×D×H 200×85×40 mm
- 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**
- 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 1/2" as well as 1/4" 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

































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	Class 1	20 - 134	0,1	0,01 - 20	50	961-281
SW 2000	Class 2	25 - 136	0,1	0,02 - 12,5	40	961-281







### Infrared thermometer for industry, environmental engineering and maintenance work

### **Features**

- Determines the temperature of surfaces precisely
- · Light EBTN colour display for optimum readability under the most varied environmental conditions
- MAX/MIN/AVG/DIF value memory to store the highest, lowest and average measured temperatures in a defined period of time as well as the difference between the highest and lowest value
- · Limit-alarm function with memory for five temperatures or emission values respectively, which trigger an audible and visual signal (three-colour LED) when the value goes below or above these values
- Main application areas: Temperature measurement in industry (e.g. metal processing, machine construction), environmental engineering, agriculture, laboratory and maintenance work (e.g. wind turbines)

### **SAUTER JIT 100**

- Laser (Class 2 < 1 mW) to mark the</li> measurement point
- Locked measurement for processes where the temperature needs to be monitored, i.e. the measured values are locked and protected from external influences
- · With mounting hole for column mount

### **SAUTER JIT 200**

- · Double laser for even better positioning
- · Hold function for measurements
- · Time-based measurement is possible
- · Internal data memory for up to 99 measurements with date and time
- · With mounting thread for column mount

### Technical data

- · Laser class 2
- Tolerance range: +/- 1,5 °C or +/- 1,5 %
- · Battery operation, 9 V block standard, operating time up to 9 h

### STANDARD

















<b>*</b> 30		
OL	BATT	1 DAY

Model	Measuring range	D:S Optic	Overall dimensions W×D×H	Net weight approx.	
SAUTER	°C		mm	kg	
JIT 100	-32 - 420	12:1	162×90×48	0,25	
JIT 200	-32 - 1100	20:1	179×127×53	0,35	