

# COLOUR MEASUREMENT

PROFESSIONAL MEASURING



## SAUTER Pictograms



### 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 decentralised 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 of. 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

## SAUTER Models A-Z

281/285	9
283	10
287/289	8
AE 500	43
AFH FAST	45
AFH FD/AFH LD	46
AFI 2.0	47
CB	104
CD	102
CE HSx	96
CE WT	97
CJ	108
CK	102
CO	107
CP	100-101
CR	103
CT	105
CS	106-107
CW	112-114
DA	51
DB	52
DC Y1 · DC Y2	99
FA	11
FC	13
FC 1K-BT	23
FG	22
FH-M	15
FH-S	14
FK	12
FL-M	17
FL-S	16
FS	18-19
FS Set <small>NEW</small>	20-21
HB	72
HD	73
HE (neu)	70
HK-D/-DB	76
HMM/-NP	77
HMO	79
HN-D	78
HO	82-83
JCS <small>NEW</small>	92-93
JCT <small>NEW</small>	58
JIT <small>NEW</small>	90
LB	49
S71	28-29
SD-M	38
SO	85
SP	86
SU	87
SW	88-89
TB	54
TB-US	62
TC	55
TD-US	63
TE	56
TF/TG	57
THM-N	30
TI	74
TI-HE <small>NEW</small>	71
TN-EE	66
TN-GOLD	64
TN-US	67
TO-EE	68
TU-US	67
TVL/-E/-O/XLS	26
TVL-XS	25
TVM-N/-NL/-LB	34-35
TVO	31
TVO-S/-LD	32-33
TVP/-L	27
TVS/-LD	36-37
YKV	95

## SAUTER Customer Consultants

With questions about our products and services, we will be happy to advise you:

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## SAUTER Hotlines

Technical questions about our products?

You will find assistance here quickly: **+49 7433 9933 - ...**



### Service Hotline

→ 199

for general technical questions about your SAUTER product

### SAUTER Measuring Instruments

→ 555

for all technical questions concerning our SAUTER measuring instruments,  
test benches, force measuring accessories (clamps etc.), SAUTER software

### Industrial Scales

→ 333

for all technical questions concerning our basic scales (laboratory & industry),  
pocket balances, school balances, bench scales, price-computing scales,  
platform scales, counting scales, counting systems, floor scales, pallet truck  
scales, crane scales, veterinary scales

### System Solutions Industry 4.0

→ 200

for all technical questions concerning the interlocking of the latest information  
and communication technology with our scales, load cells and measuring devices  
as well as questions about KERN software



### Versatile colour spectrometer for professional use



Determine wavelengths and colour spectra precisely, qualify and compare colours using current standards



Characterise colours comprehensively – taking the gloss into account or not



Developed for quality control of colours in the textile, printing and plastics industry and many other sectors

10



**Features**

- Precise colour spectrometer for determining wavelengths and colour spectra
- Identifies a range of chroma parameters
- You can select the standard observation angle as 2 or 10 degrees, several light source modes, several colour spaces
- Geometric optical D/8 structure, i.e. the angle at which the light is reflected from the sample is recorded is 8 degrees. This structure is suitable for highly diverse materials and surfaces
- Measurement process: the dual optical trail system simultaneously records the SCI and the SCE spectrum of a sample. This combination enables precise, comprehensive characterisation of the colour, both taking the gloss into account and not taking the gloss into account
- With LED light source to support fluorescence measurements
- The integrated white panel for reference is protected against contamination and guarantees the measuring accuracy
- Portable design, robust construction
- Wobble-free, dustproof and shockproof
- Full spectrum with long service life and low power consumption

- **1** Developed for quality control of colours, in the textile, printing, ceramic, food processing and cosmetics industries, for example
- Ideal for use in the laboratory and industry:
  - USB data interface, as standard
  - Rapid, accurate measurement of the SCI and SCE spectrum, simultaneously within a second
  - Colour display with simple touch operation
- Offers the most varied calibration algorithms
- Supports several national and international standards and parameters, including spectral reflectance, WI (ASTM E313, CIE/ISO, AATCC and Hunter), YI (ASTM 01925, ASTM 313), colour spectrum index of Mt, touch colour fastness, colour authenticity, thickness, coverage rate, 555 colour classification as well as Munsell (C2)

**Technical data**

- Displayed accuracy: 0,01 of [Max]
- Standard deviation: 0,08
- Light source: LED, UV
- Overall dimensions WxDxH 188x94x68 mm
- Net weight approx. 0,30 kg

STANDARD

USB	BT	ACCU	230 V	1 DAY
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Model	Measuring aperture	Observation angle	Price excl. of VAT ex works €
<b>SAUTER</b>			
<b>JCS 100</b> <small>NEW</small>	MAV: $\varnothing$ 8 mm / $\varnothing$ 10 mm   SAV: $\varnothing$ 4 mm / $\varnothing$ 5 mm   LAV: 1x3 mm	2°   10°	<b>3300,-</b>
<b>JCS 200</b> <small>NEW</small>	MAV: $\varnothing$ 8 mm / $\varnothing$ 10 mm   SAV: $\varnothing$ 4 mm / $\varnothing$ 5 mm	2°   10°	<b>1950,-</b>
<b>NEW</b> New model			

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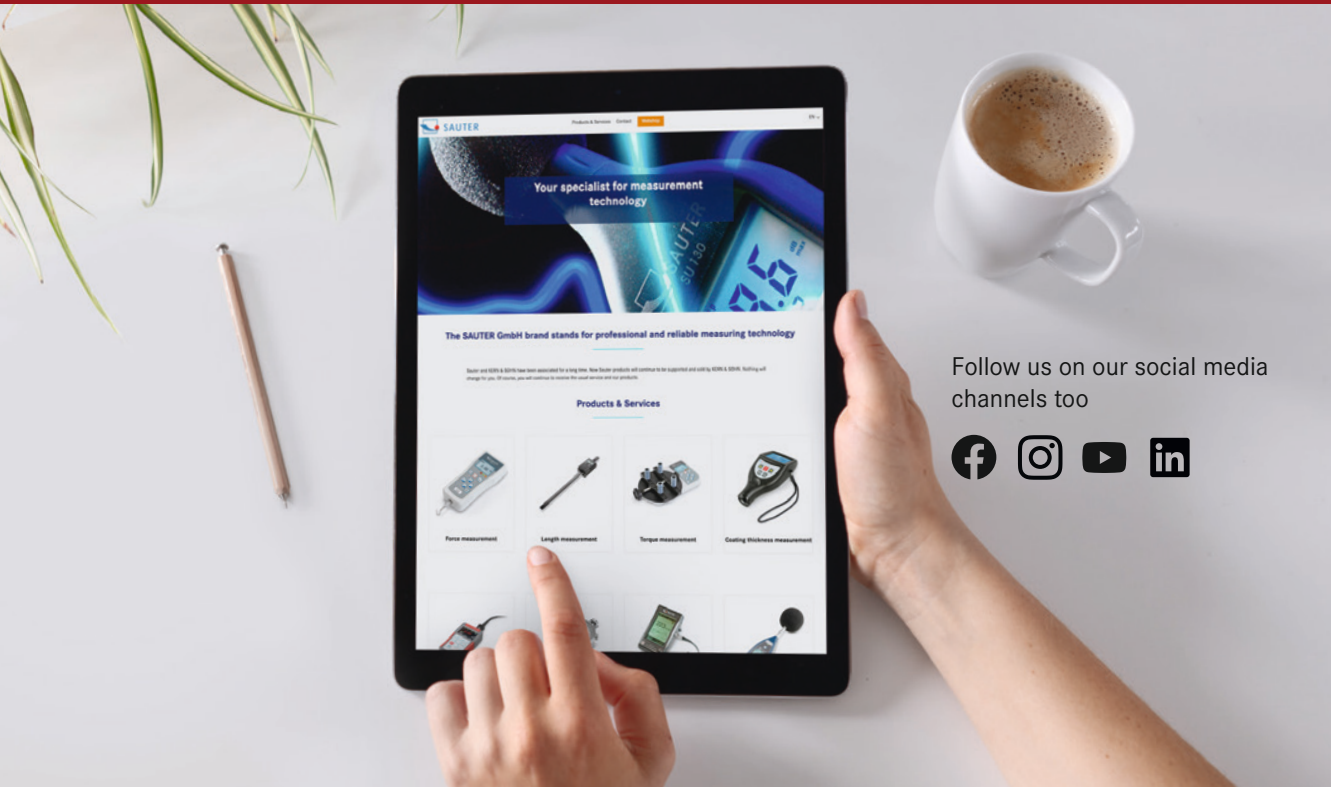
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- Technical Glossary
- KERN Dealer Portal
- Practical Filter and Search Functions



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