

Colour Spectrometer SAUTER JCS



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

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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 W×D×H 188×94×68 mm
- Net weight approx. 0,30 kg

STANDARD



Model

Measuring aperture

Observation angle

SAUTER

JCS 100	NEW	MAV: \varnothing 8 mm / \varnothing 10 mm SAV: \varnothing 4 mm / \varnothing 5 mm LAV: 1×3 mm	2° 10°
JCS 200	NEW	MAV: \varnothing 8 mm / \varnothing 10 mm SAV: \varnothing 4 mm / \varnothing 5 mm	2° 10°

NEW New model

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

CAL BLOCK
Calibration block
 Standard for adjusting or correcting the measuring device

PEAK
Peak hold function
 Capturing a peak value within a measuring process

SCAN
Scan mode
 Continuous capture and display of measurements

PUSH/PULL
Push and Pull
 The measuring device can capture tension and compression forces

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

FOCUS
Focus function
 Increases the measuring accuracy of a device within a defined measuring range

MEMORY
Internal memory
 To save measurements in the device memory

RS 232
Data interface RS-232
 Bidirectional, for connection of printer and PC

PROFIBUS
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
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

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

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

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

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

SWITCH
Control outputs (optocoupler, digital I/O)
 To connect relays, signal lamps, valves, etc.

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

DUAL
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)

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

SOFTWARE
PC Software
 To transfer the measurement data from the device to a PC

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

LAN
Network interface
 For connecting the scale/measuring instrument to an Ethernet network

KCP PROTOCOL
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 PRINTER
GLP/ISO record keeping
 of measurement data with date, time and serial number. Only with SAUTER printers

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

TOL
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

IP
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
ZERO
 Resets the display to "0"

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

ACCU
Rechargeable battery pack
 Rechargeable set

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

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

ELECTRO
Motorised drive
 The mechanical movement is carried out by an electric motor

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

FAST-MOVE
Fast-Move
 The total length of travel can be covered by a single lever movement

M
Conformity assessment
 Models with type approval for construction of verifiable systems

DAkkS +3 DAYS
DAkkS calibration possible
 The time required for DAkkS calibration is shown in days in the pictogram

ISO +4 DAYS
Factory calibration (ISO)
 The time required for factory calibration is specified in the pictogram

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

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

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