

Technical Specification Colour Meter PCE-CSM 1

Colorimeter PCE-CSM 1 for quality control

PC software included / Li-ion battery / different colour spaces / determination of reference values and samples / white and black calibration

The colorimeter PCE-CSM 1 was developed for quality control and offers a high accuracy. When using the colorimeter, you can choose between different colour spaces (CIE L*a*b*C*h, CIE L*a*b* and CIE XYZ). After a measurement with the colorimeter, the reading can be used as a reference value while other readings can be recorded as a sample and later be compared to the reference value easily. In addition to the individual colour space coordinates, the deviation between the reading is also displayed. When using the colorimeter, it is possible to store up to 100 reference values and up to 20000 samples on the device. The measured data can also be transferred to a PC via the USB interface. A special PC software is included in the package.

- CIE L*a*b*C*h, L*a*b* and XYZ
- automatic white and black calibration
- determination of reference values and samples
- rechargeable Li-ion battery
- measuring of different colours
- suitable for many different surfaces
- easy to use
- incl. PC software

Technical specifications

Measuring geometry	8°/d
Measuring aperture	Ø 4 mm
Sensor	Silicon photoelectric diode
Colour spaces	CIE L*a*b*C*h, CIE L*a*b, CIE XYZ
Colour difference formular	ΔE^*_{ab} , ΔL^*_{ab} , $\Delta E^*_{C^*H}$
Light source	D65
Light source device	LED blue light
Errors between each equipment	$\leq 0.50 \Delta E^*_{ab}$
Storage	100 reference values, 20,000 samples
Repeatability	Standard deviation within ΔE^*_{ab} 0.08 Measurement conditions: average of 30 measurements of standard white plate
Power supply	Rechargeable lithium-ion battery

	3.7 V @ 3,200 mAh
Charging time	8 hours
Battery life	approx. 5,000 measurements
Lamp life	5 years, more than 1.6 million measurements
Storage conditions	Air temperature: 0 ... +40 °C Air humidity: 0 ... 85 % RH, non-condensing
Dimensions	205 x 67 x 80 mm
Weight	500 g

Delivery content

1 x colorimeter PCE-CSM 1, 1 x USB cable, 1 x aluminium carrying case, 1 x lithium-ion battery, 1 x mains adaptor, 1 x wrist band, 1 x calibration plate (white), 1 x PC software, 1 x instruction manual