

# Colorimeter PCE-CSM 1



## Colorimeter PCE-CSM 1

**PC software included / Li-ion battery / 3 different color spaces / Determines reference values to compare to samples / White and black calibration**

The handheld portable digital colorimeter PCE-CSM 1 was developed for quality control and offers a high accuracy. When using the colorimeter, you can choose between different color 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 color 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 20,000 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
- ▶ Determines reference values to compare to samples
- ▶ Rechargeable Li-ion battery
- ▶ measuring of different colors
- ▶ Suitable for many different surfaces
- ▶ 8°/d geometry diffused illumination integrating sphere system illuminates sample from 8-degree angle
- ▶ Easy to use
- ▶ Incl. PC software
- ▶ 6 mm sample aperture

# Specifications

Geometry	8°/d
Aperture	Ø 6 mm
Sensor	Silicon photoelectric diode
Color spaces	CIE L*a*b*C*h, CIE L*a*b, CIE XYZ
Color difference formula	$\Delta E^*ab$ , $\Delta L^*ab$ , $\Delta E^*C^*H$
Observation Angle	CIE 10°
Light source	D65
Light source device	LED blue light
Errors between each equipment	$\leq 0.80 \Delta E^*ab$
Storage	100 reference values, 20,000 samples
Repeatability	Standard deviation within $\Delta E^*ab$ 0.08 Average of 30 measurements of standard white plate
Power supply	Rechargeable lithium-ion battery 3.7 V @ 3200-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 / 32 ... 104°F Air humidity: 0 ... 85% RH, non-condensing
Dimensions	205 x 67 x 80 mm / 8.07 x 2.63 x 3.14 in
Weight	500 g / 17.6 in

# More information

Manual



Video



Video Quick Start



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