

COLORIMETER

PCE-CSM 25



- » D/8° measuring geometry with SCI
- » Measuring aperture Ø 8 mm
- » 3.5 inch IPS touchscreen
- » 15 color spaces - CIE Lab, Luv, LCh, Yxy and more
- » 7 ΔE color difference formulas
- » Memory for 1000 color values & 1000 standards
- » App and PC software

This colorimeter is a high-precision, portable measuring instrument for determining and comparing colors in various industrial and craft applications. Thanks to the modern D/8° measuring geometry with integrated specular reflection (SCI), the device is ideal for color analysis of glossy, matt or textured surfaces. It is operated via a user-friendly 3.5-inch touch display, which is ergonomically tilted at a 20° angle and enables convenient use without physical buttons.

The color measurement device offers a high repeatability of ΔE^* from ≤ 0.03 and delivers measurement results in less than a second. Numerous color spaces and color difference formulas are supported, including CIE Lab, LCh, RGB, CMYK as well as the white and yellow index - ideal for professional color matching in quality management, production or incoming goods inspection. The integrated memory function allows the storage of up to 1000 color values and 1000 comparison records, making the colorimeter particularly suitable for recurring inspection tasks.

For data evaluation, the measured values can be transferred via USB or wirelessly to software on the PC or to mobile devices. The app and software also allow measurements to be carried out and saved. The colorimeter is equipped with a long-life lithium-ion battery that enables up to 10,000 measurements per charge.

Specification

General technical data	
Display type	Touch screen
Display size	3,5 Inch
Storage medium	Internal memory
Storage capacity	2000 Data records
Memory information	1000 colours 1000 colour comparisons
Interface	USB-C, Wireless
Standard(s)	JJG 595-2002, GB/T 3978-2008, GB/T 7921-2008, GB/T 11186.1-1989, GB/T 11186.2-1989, GB/T 11186.3-1989
Operating time	10000 Measurements
Automatic power-off from...to	1 ... 30 min.
Repeatability	0,03 ΔE^*ab
Light source	D65
Measurement time	1 s
Colour spaces	CIEL a* b*, CIEL u* v*, CIEL *C*h*, Yxy, CMYK, RGB, HSL, HSV, ITA, Spectra, YI-98, WI-98, WI-Gauz, WI-Hunter, WI-R457
Colour difference	ΔE^*ab , ΔE^*uv , ΔE^*94 , $\Delta E^*cmc(2:1)$, $\Delta E^*cmc(1:1)$, $\Delta E^*cmc(1.4:1)$, ΔE^*00
Measuring aperture	8 mm
Measuring geometry	D/8
Gloss component	SCI (Specular Component Included)
Wavelength range	400 ... 700 Nm
Observer	10°
Calibration	White standard in the cover cap
Menu language	English (GB), English, Chinese
Protection class (device)	IP20
Power supply	5V (USB-C)
(Rechargeable) battery	1 x 3,7 V internal , Lithium-ion battery
Capacity	4000 mAh
Operating conditions	0 ... 45 °C , 0 ... 85 % RH
Storage conditions	-25 ... 55 °C , 0 ... 85 % RH
Dimensions (L x W x H)	90 x 61 x 160 mm
Weight	252 g