

Technical Colorimeter PCE-CSM 5

Colour meter PCE-CSM 5 for quality control

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

The colour meter PCE-CSM 5 was developed for quality control and offers a high accuracy. When using the colour meter, you can choose between different colour spaces (CIE LAB, XYZ, LCh, RGB, LUV). In addition, the colour meter PCE-CSM 5 comes with two different measuring apertures (Ø4 mm and Ø8 mm). After a measurement with the colour meter, 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 colour meter, 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 LAB, XYZ, LCh, RGB, LUV
- white calibration
- determination of reference values and samples
- exchangeable measuring apertures
- rechargeable lithium-ion battery
- suitable for many different surfaces
- easy to use
- incl. PC software

Technical specifications

Measuring geometry	8°/d
Measuring aperture	Ø 4 mm, Ø 8 mm (exchangeable)
Sensor	Silicon photoelectric diode
Colour spaces	CIE LAB, XYZ, LCh, RGB, LUV
Colour difference formular	ΔE^*_{ab} , $\Delta E^*(h)$, ΔE^*_{uv} , ΔE^*_{94} , $\Delta E^*_{cmc}(2:1)$, $\Delta E^*_{cmc}(1:1)$, ΔE^*_{00}
Other colour parameters	WI (E313, CIE, AATCC, Hunter), YI (D1925, 313), Color Fastness, Staining Fastness, J PC79, BFD(1.5:1), FMCII
Observation angle	CIE 10°
Light source	D65, A, C, D50, F2, F6, F7, F8, F10, F11, F12
Data on display	colorimetric value colour difference (value/graph)

	PASS/FAIL result
	colour offset
Measurement time	0.4 s
Repeatability	ΔE^* ab 0. 03
Storage	100 reference values, 20,000 samples
Interface	USB / RS-232
Display	TFT 2.8" (16:9)
Power supply	Rechargeable lithium-ion battery
	3.7 V @ 3,200 mAh
Battery life	approx. 5,000 measurements
Lamp life	5 years, more than 1.6 million measurements
Operating temperature	0 ... +40 °C
Storing temperature	-20 ... +50 °C
Dimensions	205 x 67 x 80 mm
Weight	500 g

Delivery content

1 x colour meter PCE-CSM 5, 1 x aluminium carrying case, 1 x lithium-ion battery, 1 x mains adapter, 1 x calibration plate (white), 1 x PC software, 1 x instruction manual