



Colorimeter PCE-CSM 7



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Automatic black and white calibration / Rechargeable battery / PC software included

PCE-CSM 7 is a portable colorimeter used to measure different spectral parameters. This user-friendly, ergonomically designed colorimeter automatically performs a white and black calibration when powered on. Suitable for manufacturing quality control and assurance as well as product research and development, the colorimeter offers impressive measuring accuracy and comes manufacturer calibrated. An optional ISO calibration certificate can be acquired as an accessory for an additional fee. Useful for determining color difference, chromaticity index, color sample database management, and color difference cumulative analysis. Integrated camera/illumination locating for small samples.

When using the color meter, different color spaces can be selected (CIEL*a*b*C*h*, CIEL*a*b*, CIEXYZ, CIERGB, CIEL*u*v*, CIEL*C*h + Yellowness + Whiteness + Color Fastness). The color meter also offers two different measuring apertures (Ø 4 mm and Ø 8 mm) for different applications. In addition to the individual color space coordinates, deviations between readings are displayed. For example, after taking a measurement with the PCE-CSM 7, a reading can be saved and used as a standard reference value against which other readings can be compared. Up to 100 reference values and up to 20,000 samples can be stored to the internal memory of the colorimeter. The measured data can be transferred to a PC via USB and analyzed using the included PC-compatible software.

- ▶ Rechargeable Lithium-Ion battery
- ▶ Automatic white and black calibration
- ▶ Determines degree of whiteness and yellowness
- ▶ Different measurement modes for different colors
- ▶ Includes PC-compatible software for detailed color analysis
- ▶ Offers two different measuring apertures (Ø 4 mm and Ø 8 mm)
- ▶ Yellowness and Whiteness color fastness
- ▶ CIE 1976 and 1994 Delta options
- ▶ 3 light source options
- ▶ 8 mm extended aperture option for concave surfaces
- ▶ Camera/illumination locating for small samples

Subject to change

Specifications

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| Illuminating / Viewing Geometry | 8/d |
| Measuring Aperture | Ø 4 mm / Ø 8 mm |
| Detector | Siliconphotoelectric diode CIEL*a*b*C*h CIEL a* b* CIEXYZ |
| Color Space | CIERGB CIEL u* v* CIEL*C*h° Yellowness & Whiteness Color Fastness |
| Color Difference Formula | ΔE^*ab ; ΔL^*ab ; ΔE^*C^*H ; $\Delta ECIE94$; $\Delta EHunter$ |
| Light Source | D65, D50, A |
| Light Source Device | LED light excitation |
| ErrorsBetween Devices | $\leq 0.40 \Delta E^*ab$ |
| Storage | 100 pcs. standards, 20,000 pcs. samples Standard deviation within ΔE^*ab 0.06 |
| Repeatability | Average of 30 measurements of standard white plate |
| Weight | 500 g / 1.11 lbs |
| Dimensions | 205 x 70 x 100 mm / 8 x 2.7 x 3.9" |
| Power Source | RechargeableLithium-Ion battery 3.7 V |
| ChargingTime | 2 hours |
| Measuring Times Before Recharging | More than 3000 times |
| LampLife | 5 years or more than 1.6 million measurements |
| Operating Temperature / Humidity Range | -10... +40 °C / 14 ... 104 °F; 0 ... 85% relative humidity, non condensation |
| DataInterface | USB |

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