

COLORIMETER

PCE-XXM 40



- » **MIN, MAX, AVG measurement functions**
- » **45°/0° measurement geometry**
- » **6 color spaces**
- » **6 color difference formulas**
- » **Color tolerance test (PASS/WARN/FAIL)**
- » **Measurement aperture approx. Ø 10 mm - Internal memory 99 data sets**

The colorimeter enables precise and objective color measurement and reliable determination of color deviations. Our colorimeter measures color values in the Lab, XYZ, xyY and R s/G s/B s color spaces and also displays important color indices such as whiteness (WI), yellowing index (YI) and color temperature (Tw). The integrated ΔE_{ab} calculation allows the color difference to be determined directly. An adjustable tolerance function (PASS/WARN/FAIL) immediately indicates whether the measured color is within the specified limits. The device measures directly on the sample, can store multiple measurements and target values, and covers a brightness range of 5 to 100. Power is supplied by three AA batteries, making the colorimeter particularly mobile and flexible - ideal for measurements directly on site. Thanks to its versatile applications, the device is ideal for quality control in the production of textiles, paints, plastics, leather or paper, as well as for laboratories and color testing. By displaying different color spaces and automatically calculating color differences, it helps users to evaluate colors objectively and comprehensibly. The colorimeter delivers precise and reproducible results without the need for visual assessments, making it an indispensable tool for standardized color analysis and professional color control.

Specification

General technical data	
Measuring functions	AVG, MIN, MAX
Display type	LCD
Display size	2,8 Inch
Storage medium	Internal memory
Storage capacity	99 Data records
Memory information	only viewable on the device
Measuring surface minimum	10 mm
Automatic power-off	3 min
Repeatability	0,5 ΔE^*ab
Light source	LED
Colour spaces	CIEL a* b*, CIE XYZ, WI (whiteness), YI (yellowness), Yxy, sRGB
Colour difference	$\Delta(L^*, a^*, b^*)$ $\Delta(E^*ab, C^*ab, H^*ab)$ $\Delta(Y, x, y)$ $\Delta(X, Y, Z)$ $\Delta(Rs, Gs, Bs)$ $\Delta(WI, YI, Tw)$
Measuring aperture	ca. \varnothing 10 mm
Measuring geometry	45/0
Observer	2°
Dimensions	Sensor: 43 x 53 mm Cable: 120 cm
Measuring interval	2 s
Menu language	English, English (GB)
Protection class (device)	IP20
(Rechargeable) battery	3 x 1,5 V AA battery , Alkali-manganese
Capacity	2970 mAh
Operating conditions	0 ... 40 °C , 0 ... 85 % RH
Storage conditions	-10 ... 40 °C , 0 ... 70 % RH
Dimensions (L x W x H)	175 x 90 x 31 mm
Weight	228 g