COLORIMETER

PCE-RAL 40



- **LRV contrast measurement**
- **Measuring geometry: 45°/0°**
- **4 RAL color palettes**
- **Color spaces: CIE Lab and RGB**
- **Multi measurement: up to 32 measurements**
- **Min. measurement area: 32 × 20 mm / 1.3 x 0.8 in.**
- **2.3-inch LCD color display**

The colorimeter is used to measure colors and determines the color difference between a measured sample and a color standard. The result shows the three colors closest to the sample, based on a selected color palette or LAB color space values. The compact, vertical design of the colorimeter enables measurements on small areas from a minimum measurement surface of 32 x 20 mm / 1.3 x 0.8 in.

The color sensor system operates with a white LED light and 45°/0° geometry, with the sample illuminated at 45° and the detector mounted perpendicular to the surface. The measurement delivers an analog color difference value between sample and reference. Measurement accuracy is on average 99.5% based on two measurements and around 95% for the first optimal match. The colorimeter has an LCD display with battery status indicator, color palette information, and menu functions. It supports multiple languages and offers functions such as multi measurements, contrast measurement (LRV), and automatic shutoff.

Software and color palettes can be updated via Wi-Fi. Power is supplied either by two AA batteries or via the USB-C interface, so the RAL Colour Meter can also be operated directly from a USB-C power adapter without inserted batteries.

Specification

General technical data	
Display Typ	LCD-Color Display
Display size	2,3 Inch
Interface	USB-C
Automatic shutdown adjustable	3 ... 10 min.
Light source	2 white LEDs
Color spaces	CIEL a* b*, RGB
Measuring geometry	45/0
Farbpalette	RAL D2 Design '23, RAL E3 Effect '21, RAL K5 Classic S-matt '24, RAL K7 Classic Gloss '24
Min. measuring surface	32 × 20 mm / 1.26 × 0.79 in
Menu language	German, English (US), English (GB), French, Dutch
Protection class (device)	IP20
Power supply	batteries
Battery/battery	2 x 1,5 V AA Battery (1,5V) , Alkali-Manganese
Battery capacity	2970 mAh
Performance	4,46 Wh
Operating conditions	10 ... 40 °C , 10 ... 90 %RH
Storage conditions	-30 ... 55 °C , 10 ... 90 %RH
Dimensions (L x W x H)	128 x 79 x 25 mm
Weight	116 g

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