COLORIMETER

PCE-RAL 40



- **Contrast LRV measurement**
- **Measurement geometry: 45°/0°**
- **4 RAL colour palettes**
- **Colour spaces: CIE Lab and RGB**
- **Multiple measurement: up to 32 measurements**
- **Min. measuring area: 32 × 20 mm**
- **LC colour display, 2.3 inches**

The colorimeter is used for measuring colours and enables the colour difference between a measured sample and a colour standard to be determined. The result shows the three colours closest to the sample, based on a selected colour palette or LAB colour space values. The compact, vertical design of the colorimeter allows measurements on small areas from a minimum measuring area of 32 x 20 mm.

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

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

Specification

General technical data	
Display type	LC colour display
Display size	2,3 Inch
Interface	USB-C
Automatic power-off from...to	3 ... 10 min.
Light source	2 white LEDs
Colour spaces	CIEL a* b*, RGB
Measuring geometry	45/0
Colour palette	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
Menu language	German, English, English (GB), French, Dutch
Protection class (device)	IP20
Power supply	batteries
(Rechargeable) battery	2 x 1,5 V AA battery , Alkali-manganese
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