What does it measure?

The Colorimeter CL 400 measures specifically the colour of the skin. Measuring values are expressed as xyz values and are calculated in L*a*b* and RGB as index values.

The Measuring Principle

The probe sends out white LED light, arranged circularly to uniformly illuminate the skin.
The emitted light is scattered in all directions, some parts travel through the layers and some is scattered by the skin.
The light reflected from the skin is measured in the probe. The raw data of the probe are corrected with a special colour matrix to adapt them closely to standard values and are expressed accordingly.

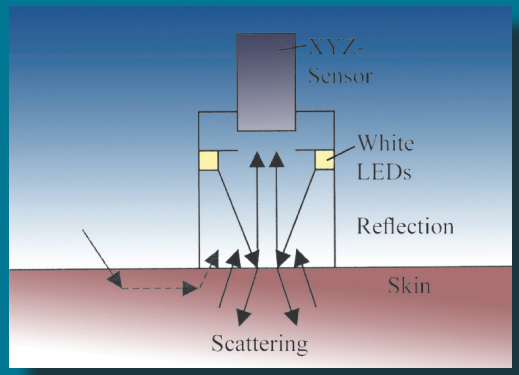
Fields of Application

The probe has been developed especially for the needs of measuring changes in the skin color.

- Cosmetic and pharmaceutical efficacy tests, like for sun screen products, self tanners, make-ups, whitening products, decorative cosmetics and carotene food supplements
- In many dermatological uses e.g. aging spots, sun damage, treatment of skin diseases etc.

Advantages

- Very reproducible results on the skin surface, ideal tool for comparison measurements.
- Specially designed for skin colour measurement, as the absorption and reflection behaviour of skin differs very much from other materials.
- Economic, extremely easy to handle and short measuring time
- Large illumination area, so that sufficient light reaches the skin surface for the measurement but small enough measuring area.
- Light, constant pressure of the probe on the skin surface with minimized effect on the surface (pressure on the skin leads to changes in microcirculation and thus in skin colour).
- Easy check calibration function
- Available for C+K MPA-System, as stand-alone device and wireless probe.



Technical Data
Length: 126 mm, Illumination: Ø 24 mm, Measuring area: Ø 8 mm, Weight: 85 g, Illuminated area approx. 17 mm Ø,
*Units: xyz, RGB, L*a*b* index values (due to the unique structure of the skin and the special light source the values do not fully correspond to ISO standards and are therefore expressed as index values).*
Light: 8 white LEDs arranged circularly, range of emitted wavelengths: 440-670 nm
Calibration to skin colours with a special correction matrix. Accuracy: ± 5%
Technical changes may be made without prior notice.

Courage+Khazaka electronic GmbH since 1986
Mathias-Brüggen-Str. 91 · 50829 Köln · GERMANY
phone +49 (0)221. 9 56 49 90 · fax +49 (0)221. 9 56 49 91
info@courage-khazaka.de · www.courage-khazaka.de

CK electronic