

CORNEOMETER® CM 825

Courage & Khazaka

Corneometer® CM 825

BENEFITS

- Reproducible and accurate measurement of skin hydration since 1980
- Quick measurement time
- Constant pressure for exact reproducible measurements not influencing the skin
- Easy measurements on all skin sites
- Individual and continuous measurements possible
- Does not require frequent, complicated and time consuming recalibration
- Calibration data stored in the probe
- Check calibration to ensure accuracy of measurements
- Small measurement depth

The moisture content of the stratum corneum influences a number of skin characteristics including mechanical properties and barrier function. This has made hydration measurement one of the most important and commonly used measurements. The Corneometer® is the world's best selling hydration measurement device to which other hydration instrumentation is always assessed and compared.

The high quality electronics in the probe provide not only temperature stability but also exclude interference in the measurement from fluctuations in the base capacity and power supply. The probe head contains a spring to ensure constant pressure on the skin enabling exact and reproducible results. The low weight of the probe and small measurement area (49mm2) allow for easy measurements on all body sites.

MEASUREMENT PRINCIPLE

The Corneometer® measurement is based on capacitance measurement of a dielectric medium in this case skin. It uses fringing field capacitance sensors to measure the dielectric constant of the skin. The dielectric constant of skin will change with water content. This allows for any changes in skin hydration to be measured by the precision measuring capacitor. These

changes in water content of the stratum Corneum are converted into arbitrary units of hydration. On the probe head there is a fine piece of glass to ensure that only the capacitance changes due to water content are identified. Even small changes in water can be detected. The measurement time is short at only 1 second minimising occlusion effects. The depth of the measurement is 10-20µm, the stratum Corneum, ensuring that deeper skin layers do not influence the measurement.

FIELDS OF APPLICATION

- Ideally suited for product development, claim support and efficacy testing
- Can be used for objective clinical assessment
- Can be used for monitoring therapies
- Provides information on the course of treatments
- Suitable for medical surveys
- Assessing hydration in a range of research applications

AVAILABLE FORMATS

MULTIPROBE ADAPTER SYSTEM

The Corneometer® CM 825 probe can be plugged in to all of the computer driven MPA devices (MPA 2, MPA 6, MPA 10 & Cutometer® dual MPA 580)

MULTI DISPLAY DEVICE MDD 4

The Corneometer® CM 825 is available as a stand alone device through the MDD 4. Supplied with a room condition sensor it is possible to add a further two measurements. In addition to the colour screen for displaying results the MDD 4 can be connected to a computer and measurements recorded using the MPA software.

WIRELESS PROBE

Measurements are transmitted via radio to a small receiver unit RR 200 which is connected to the computer at the USB port. The values can be transmitted from a distance of 5-10 m. The values are collected using special MPA Wireless software. The probes are battery operated.

TECHNICAL INFORMATION

Length: 11 cm, Weight: approx 41g, Measuring surface: 49mm2,

Measuring principle: capacitance, Measurement frequency: 0.9-1.2 MHz, Accuracy: ±3%

Technical changes may be made without prior notice