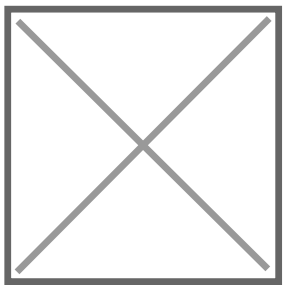

MOISTUREMAP MM 100

Courage & Khazaka

MOISTUREMAP MM 100

BENEFITS

- Reproducible and accurate measurement of skin hydration distribution
- Quick measurement time
- Easy measurements on all skin sites
- Addition of Corneometer® and Tewameter® probes for complete picture of skin hydration properties
- Does not require frequent, complicated and time consuming recalibration
- Information about texture properties
- Simple calibration procedure
- Live stream of the image
- Images in standard .jpg format
- Measurement can be triggered by footswitch
- Can be used for in-vivo and in-vitro applications
- Comparison of up to six images

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 . It has been possible for many years to measure hydration of the skin with the Corneometer® and transepidermal water loss of the with the Tewameter® . It is now possible, however, to add to gain a greater understanding of the moisture properties of the skin by investigating the hydration distribution of the skin.

The MoistureMap MM1 has a capacitance based sensor that has been used for a while to record fingerprints. Used on tissue (skin, plants etc.), the images of the sensor give graphical information on the near surface hydration distribution and the micro-topography of the tissue.

It is possible to plug in both Corneometer® and Tewameter® probes (optional extras) to measure the hydration content and transepidermal water loss creating a complete "skin water measurement center".

TECHNICAL INFORMATION

Dimensions: 13 x 14.6 x 5 cm, Weight: approx 1kg, Measuring surface: 18 x 12.8 mm, Port: USB

Sensor size: 256x360 pixel, Sensor resolution: 508 DPI 8Bit/pixel, Measuring principle: relative permittivity, Power supply: external 100-240, 47-63 Hz, DC 12V/4A

Technical changes may be made without prior notice

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
- Investigating skin photo aging
- Illustration of skin lesions and scars
- Assessing hydration in a range of research applications

MEASUREMENT PRINCIPLE

The MoistureMap MM100 measures the penetration of the electromagnetic field. Conductive material will reflect the signal making the resulting pixel darker while non-conductive material will make the signal go farther inside and on a scale of 255 grey levels the resulting pixel will be lighter. Moisture increases conductivity producing darker pixels. Dryer skin is less conductive producing lighter pixels. The results are not absolute moisture figures but indicate the distribution of hydration on a given surface. On the 1.8 x 1.28 mm silicon chip of the sensor, over 90,000 capacitors are located every 50 µm an is covered with a silicon oxide layer for protection. Special image analysis software can evaluate the image in different ways.