What Does It Measure?

The MoistureMap MM 100 is a device, featuring a capacitance based sensor comparable to the renowned L'Oreal SkinChip^{®*}. The sensor gives graphical information on the near surface hydration distribution and the micro-topography of skin and other tissues (textiles, plants, etc.).

The Measuring Principle

The sensor measures the penetration of the electromagnetic field. Conductive material e.g. water will reflect the signal making the resulting pixel darker while non-conductive material will make the signal go farther inside and the resulting pixel will be lighter on a scale of 255 grey levels. Rather than absolute moisture figures the MoistureMap indicates the distribution of hydration on the skin surface. On the 18.0 x 12.8 mm silicon chip of the sensor, over 90,000 capacitors are located. With a special image analysis software the image can be evaluated in different ways.

Fields of Application

Wherever skin moisture distribution plays a role • the MoistureMap MM 100 is a very impressive • imaging addition to the pure quantitative measurements. •

- Efficacy testing of cosmetics & pharmaceuticals & surfactants
- Sun damage and illustration of skin lesions and scars.
- To map the hair moisture level

Advantages

- Perfect addition to the quantitative measurement, as it shows the distribution of the water on the skin surface.
- Easy and quick to handle
- Live stream visible in the software
- · Captured image in standard jpg-file
- Evenness of the hydration is displayed in 5 different colours and a histogram.

- Video possible (.avi)
- Spring loaded sensor
- Automatic saving of the images under study name
- Optionally footswitch to trigger measurement
- In-vivo skin measurement and also in-vitro application can be performed.
- Additionally topographic measurements (profile, corner density, anisotropy index) give interesting aging parameters.
- Easy calibration possibility for the user
- All results are saved in an Excel®-file
- Up to six images together with their complete results can be compared in one overview.
- The only instrument working side by side with the established Corneometer[®] and Tewameter[®].

*The MoistureMap MM 100 is licenced worldwide under the L'Oréal patent for the Skin Chip[®] (EP 1 438 922 B1). A variety of articles on the measurement principle of the Skin Chip[®] (same as MoistureMap) has been published.



Technical Data

Device: Dimensions: 13 x 14.6 x 5 cm, Weight: approx. 1.5 kg, Power supply: external 100-240 VAC, 47-63 Hz, DC 12V/4A, Port: USB 2.0, type B connector

Probe: Dimensions: length: 16.6 cm, measurement head: 4.3 x 3 cm, Weight: approx. 90 g, Active measurement area: 18,0 x 12.8 mm, Sensor size: 256 x 360 pixel, Sensor resolution: 508 DPI 8Bit/pixel, Measurement principle: relative permittivity; MoistureMap in-vitro Adapter: Dimensions: 23 cm (H) x 8 cm x 8 cm, Weight: 220 g Technical changes may be made without prior notice.

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