

DELFIN

Delfin VapoMeter®

Reliable TEWL, Evaporation and
Permeability Measurements



Delfin VapoMeter®

Reliable TEWL, evaporation and permeability measurements

VapoMeter instrumentation

The VapoMeter measures transepidermal water loss (TEWL) and evaporation rate as $\text{g/m}^2\text{h}$. It may be used either as a stand alone device or measurement data may be collected wirelessly to the DMC software.

The VapoMeter is battery-operated and portable. This offers great freedom of movement and the possibility of measuring difficult areas at any angle. Changeable and re-usable adapters are available for different in-vivo and in-vitro user applications.

PRODUCT BENEFITS

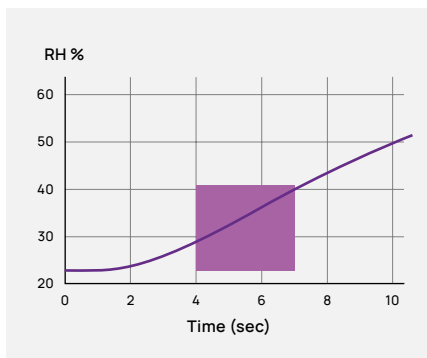
- Short measuring time, typically 10 seconds
- No horizontally positioned measurement surface needed
- Wide measurement range, accurate up to $200 \text{ g/m}^2\text{h}$
- Immediately ready to use, no daily calibration procedure required
- Non-sensitive to ambient airflows
- Does not change skin's natural behavior – no artificially created climate change, no de-icing

Closed chamber principle – no daily calibrations

The core of the VapoMeter is a sensitive humidity sensor that is inside a cylindrical measurement chamber. This chamber is closed by the skin or other measurement surface during the measurement period and is unaffected by ambient airflows. The sensor monitors the increase of relative humidity (RH) inside the chamber during the measurement. The evaporation rate value ($\text{g}/\text{m}^2\text{h}$) is automatically calculated from the RH increase. The chamber is passively ventilated between measurements, and the ventilation time is automatically controlled.



Delfin VapoMeter®. Reliable TEWL, evaporation and permeability measurements.



Measurement principle. TEWL is calculated from the RH increase in the closed chamber.

APPLICATION AREAS

- TEWL, skin barrier function and penetration studies; Effect of skin care, treatment, and nutrition; Skin irritation
- Wound healing; Sympathetic skin response, hyperhidrosis
- Water loss through nails, scalp, lips; Skin surface water loss
- Material permeability, in-vitro studies; Animal health and zoology



Delfin Technologies Ltd.

Head Quarters

P.O. Box 1199

70211 Kuopio

FINLAND

Phone +358 50 911 1199

info@delfintech.com

delfintech.com

store.delfintech.com

US & CANADA DISTRIBUTOR

Skinlabs LLC

755 NE 164th Terrace

Miami, FL 33162

USA

Phone: +1 (786) 288-0740

info@skinlabsusa.com

www.skinlabsusa.com