



# SD202 Skin Measuring Device For Professional Diagnosis

*There is no doubt that the secret of accurate skin condition diagnosis is a combination of a thorough consultation procedure supported by modern electronic skin analysis aids. Just think how more effective your consultations will be with more information about your patient's skin than just visual examination and subjective opinion.*

**Quickly establish your point of reference!**



This popular and easy to use device measures the four most important parameters the contemporary practitioner needs to evaluate skin health & condition.

**Lipid levels:**

The amount of oil secreted to the skins surface & the general health of the skin barrier defense system.

**Epidermal Hydration:**

The amount of free water available in the dermal reservoir.

**Melanin Density:** The density of melanin in the region down to the dermal junction & the rate that Melanogenesis occurs.

**Erythema:**

The level of vascularity and density of the microcirculation system.

**Courier Delivery + 2 Year Warranty included**

## Measuring with the SD202 is this simple....



### Hydration (Free water)

Simply press the hydration probe lightly to the skin surface in the area you wish to test.  
A digital value indicating the amount of moisture present in the skin is displayed instantly.



### Lipid (oil)

Simply press the lipid probe cassette to the skin surface in the area you wish to test for an automatically timed period, then insert the cassette back in to the analyser for reading of the lipid level of the skin.



### Melanin / Erythema

Simply press the melanin probe lightly to the skin surface in the area you wish to test.  
A digital value indicating the ambient eumelanin content (Fitzpatrick type) and haemoglobin (erythema) levels present in the skin is displayed instantly.



**For more information:**

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# Skin Health: How measuring skin properties can assist diagnosis

We depend upon our skin functioning correctly to prevent many things (e.g. chemicals, weather) from causing damage to health.

A skin that is not in good condition may not be able to prevent or resist damage. Because the skin is the largest organ of the human body, maintaining skin in optimum working condition is important in maintaining overall health.

Skin condition measurement by means of simple, safe, non-invasive measurements can identify individuals with sub-clinical damage so that problems can be prevented. They provide quantitative data for better assessment of problems and evaluation of interventions.

**The SD202 can be used to measure four parameters of skin health and it's response to environmental conditions.**

## Hydration

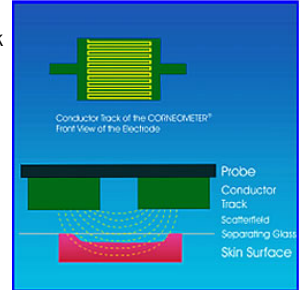
The amount of free water in the epidermis is measured using a Corneometer®.

The relevance of measuring this parameter has applications from general medicine to occupational health & safety risk evaluation.

Since 1980 the Corneometer® has provided a well-established method to determine reproducibly and accurately the hydration level of the skin surface. It is the world's most respected skin hydration measurement device. The accuracy of other hydration measurement instrumentation on the market is always assessed against the standard of the Corneometer®.

Epidermal hydration has always had a "cosmetic overtone" and to the medical practitioner it may not seem to be an important factor in "Skin Health", however by monitoring the percentage of free water in epidermis one is able to ascertain a number of key "Skin Health" indicators.

- Condition of the first 3 lines of skin barrier defence
- Enzymatic action of the epidermis
- Epidermal hydration will reflect patient fluid intake and dispersion of fluid intake



Corneometer operation

Skin lipids require water to remain lipophilic, therefore this reading is often supported by measurements with the Sebumeter®.

## Skin lipid levels

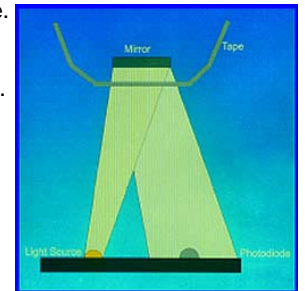
The Sebumeter® determines the amount of sebum being excreted to the skin surface, and the state of the acid mantle. As the acid mantle is the first line of skin barrier defence, the quality of the surface fluid balance is a useful diagnostic tool.

The Sebumeter® is the most widely acknowledged and successful sebum measurement device for skin, hair and scalp. Various in vitro and in vivo tests and comparisons with other measurement techniques are documented in literature and demonstrate its importance in dermatological and cosmetological fields.

When diagnosing skin disorders like Eczema and Allergic Contact Dermatitis, Rosacea type conditions and Essential Fatty Acid Deficiency, the health of the acid mantle should be measured as a point of reference. Without this point of reference there is no starting point and therefore no credible scientific way of proving skin health progress.

Skin lipids contribute to the first three lines of skin barrier defence, and when considering the nutritional needs of skin, measurement of the Acid Mantle will reflect the lack of skin lipids, beginning cell with membrane health and ending with the Acid Mantle.

Eating Disorders and Fat free diets; very often result in Essential Fatty Acid Deficiency (EFAD), and this skin condition is very often a precursor or aggravating factor in many "Dry Skin" Conditions.

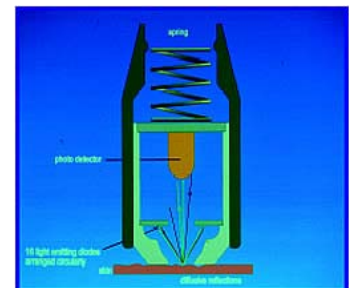


Sebumeter operation

## Melanin & Erythema

Increasingly important is a measurement of the melanin content of the skin and the amount of vascularity. (Erythema) By measuring the melanin content over various sites of the body, we can not only determine what the base Fitzpatrick type is, but accurately assesses the rate of Melanogenesis and MED. (Minimal Erythemic Dose) Measuring vascularity provides more accurate data than subjective opinion, and when referenced measurements are compared over time, more precise condition change can be determined.

The technology used to measure these parameters is called a Mexameter®, and is a very easy, quick and economical tool to measure the two components mainly responsible for the colour of the skin: melanin and haemoglobin (erythema). Many international scientific studies demonstrate its benefits in all important dermatological and cosmetological applications.



Mexameter operation

There are many medical skin conditions that can be related back to the melanin content of skin, from Lentiginos through to Vitiligo. Establishing the Fitzpatrick value of a skin is performed by measuring melanin density with the Mexameter®. This will result in understanding a particular skin's MED and subsequently establish the "Burn time". Choosing sun protection products with the correct SPF is consequently no longer a guessing game. With regard to vascular skin conditions such as Rosacea, the density of the vascular mat can be measured; and this will provide the practitioner two indicators to skin health.

- The density of the supporting connective tissue of the Dermis.
- The density of the vascular mat will indicate the predisposition to permanent diffused redness and flushing.

Both are key conditions to the Rosacea type skin conditions, as is an Impaired Acid Mantle. The link between the Impaired Acid Mantle and Rosacea is that one is an aggravating factor to the other.

Mexameter® readings will provide the Practitioner an important as a point of reference, and therefore a valuable tool to enable the monitoring of treatment progress for either pigmented lesions or vascular anomalies.



### Device specifications:

Resolution: 0-99, Accuracy +/- 1.5%  
Probe array: 1 X hydration, 1 X dual action Melanin/Erythema, 1 X lipid cartridge  
Display: 13mm monochrome LCD  
Power Supply: battery operated (9 V), socket for optional DC plug pack  
Dimensions: 13 x 14 x 4.5 cm; Weight: 0.3 kg  
Warranty: Two year parts & labour, return to base  
Accessories: Usage manual & analysis procedure guide.

