Product data sheet US5000
US dosimeter II #UV#
Personal dosimetry

This personal protection dosimeter is designed to monitor and protect employees under existing legislation in the UV-exposed areas.

The reduction of the exposure to artificial optical radiation is based on the principles of risk prevention laid down in Directive 89/391 / EEC.

This high tech device

owns one

electronic skin (erythema sensor) and assesses any optical and natural UV radiation according to their endangerment.

All erythema values are recorded continuously in a minute interval.

If the legal limit values are exceeded, the device gives a visual and audible alarm.

The employee must then contact a responsible safety officer immediately.

All measured values can be read out via the supplied software and saved in Excel format on the PC.

The device is charged via the supplied USB cable and the data is read out

Case	ABS plastic white with clip
Weight & Dimensions	20g (20x15x5mm)
Measuring range	0 – 300mW/m² Erythema
Safety class DIN EN 60529	IP54
Number of maximum stored readings	32,836 approx. 22 days with date and time
working temperature	10-40°C
Case temperature	none
Alarm message after 1 MED	Optically by bar graph Led and audible warning tone every 30 seconds.
Battery life time Li Ion	about 22 days
Recommended battery charge and data storage	Once a week
Battery power status	Optically through middle Led
Hazardous state assessment	Press button, 1 green LED workplace safe, 5 red LED very dangerous
Delivery parts	Dosimeter II, USB stick with evaluation software and Microsoft10 driver, USB charging / connection cable 0.5m, calibration protocol, transport box
Optional	Dosimeter II with extended measuring range for outdoor applications with very high UV exposure.

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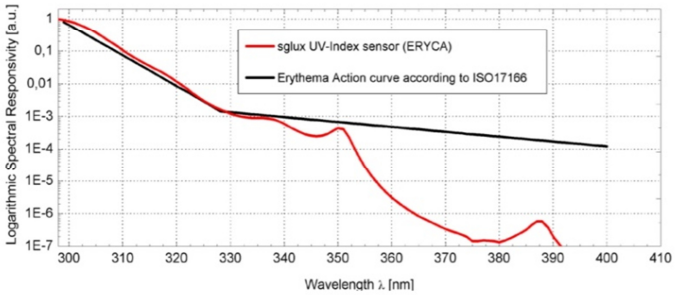
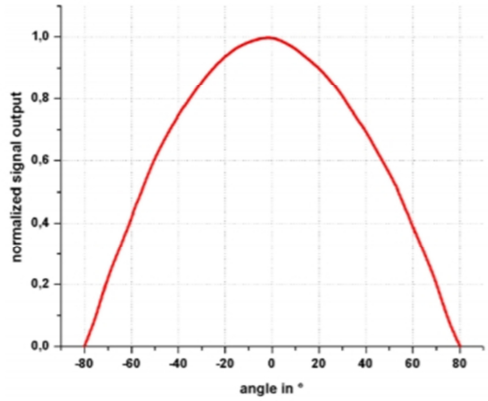
NORMALIZED SPECTRAL RESPONSIVITY & ERYTHEMA ACTION CURVE



FIELD OF VIEW



Calculation 1MED
1 MED equals the lowest irradiation dose which, when read after 24 hours, caused a sharply limited erythema (redness) of the skin. This dose varies greatly even among people with the same skin type. For fair-skinned people of skin type II, 1 MED corresponds to about 250-400 J / m² (25-40 mJ / cm²).

The minimum erythema dose (MED) (also called erythema threshold dose) is a measure of the tolerance of the human skin to ultraviolet radiation, in particular to the shortwave ultraviolet portion of the spectrum at about 300 nm wavelength.

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