

## UV Microlog SD

- + UV intensity  $mW/cm^2$
- + Full UV dose  $mJ/cm^2$
- + Permanent or triggered recording\*
- + Temperature  $^{\circ}C/^{\circ}F$  (option)
- + SD Memory Card
- + graphical and numerical display on a PC
- + re-chargeable accu-pack with charging unit



The **UV Microlog SD with SD Memory card** is a self-contained, high quality UV measuring instrument. It is designed to measure, record and display peak UV intensity and UV dosage in the UV curing process.

In the standard version it is equipped with one UV sensor for the measuring of

**UV - 230 – 410 nm**

With this basic configuration most of the measuring requirements of UV curing applications can be covered.

Due to its UV sensor and the integrated microprocessor the **UV Microlog SD with SD Memory card** can measure, record and display the peak of the UV-intensity ( $mW/cm^2$ ) of total UV-intensity. Additionally, this UV-Integrator is calculating the UV-dosage ( $mJ/cm^2$ ) of the UV energy supplied during the time of exposure of one measuring cycle. The UV-dosage is calculated as the total Integral of the UV-dosage.

This allows to determine not only the total energy, but also how that energy is delivered.

An optional sensor measures temperatures from 0 to 230° F / 0 to 110° C

\*The **UV Microlog SD with SD Memory card** features a selectable „triggered mode“, i.e. the recording of the measuring starts first if the incident UV-intensity exceeds 2  $mW/cm^2$ .

The four sensors are on the back of the unit which also serves as a heat shield. After completion of the measuring cycle all measuring results can be scrolled through on the built in 2 x 16 digit LCD display. A special AUTO-OFF feature that turns off the unit automatically after one minute serves as energy saving and extension of the battery service life.

This microprocessor integrator is additionally equipped with a Card Slot for the use of SD-Memory Cards. All measuring data of a measuring cycle are stored to the SD-Memory card with an identifying file name. The number of storable measuring files depends on the capacity of SD-Memory Card. Data can be loaded to a PC for further editing. The special evaluation software allows to show, edit and store a history of the measuring results of the entire measuring cycle as graphic charts ( $mW/cm^2$ ) and ( $mJ/cm^2$ )

The UV Microlog SD is available in six different measuring ranges

<b>18.1.1 UV MICROLOG SD, Type 1 Diazo</b>	<b>350 – 460 nm</b>
<b>18.1.2 UV MICROLOG SD, Type 2 UV-A</b>	<b>315 – 400 nm</b>
<b>18.1.3 UV MICROLOG SD, Type 3 UV</b>	<b>250 – 410 nm</b>
<b>18.1.4 UV MICROLOG SD, Type 4 UV-B</b>	<b>280 – 315 nm</b>
<b>18.1.5 UV MICROLOG SD, Type 5 UV-C</b>	<b>230 – 280 nm</b>
<b>18.1.6 UV MICROLOG SD, Type 6 UV-V</b>	<b>395 – 445 nm</b>

## UV Microlog SD

### Technical Data:

Spectral ranges available*	UV-A 315 – 410 nm UV-B 280 – 315 nm UV-C 230 – 280 nm UV-V 395 – 445 nm UV 230 – 410 nm
Max. Power Input	0 to 5,000 mW/cm <sup>2</sup>
Measuring range:	0 to 2,000 mW/cm <sup>2</sup>
Sampling rate:	0.005 sec (200/sec)
Recording cycle:	30 sec.
Readiness phase:	120 sec.
Display range:	0 to 36,000 mJ/cm <sup>2</sup>
Display:	LCD, 2 x 16 digits
Power source:	2 x 3.7 V LiPO Accu Cells
Power consumption:	20 µA
Battery service life:	1,000 re-charging cycles
Dimensions:	115 x 65 x 13 mm (4.5 x 2.4 x 0.55")
Weight:	approx. 7 ounce (200 g)
Operating temperature:	32° to 113° F / 0 to 45° C
Heat protection:	Heat shield on back plate
Base Accuracy:	± 5 %

While on the conveyer belt, the UV Microlog SD can withstand max. 230° F / 110° C for up to 10 seconds. The temperature of the housing should not exceed 113° F / 45° C.

Because of uneven radiation distribution of the UV light source and different type of construction of the measuring devices by different manufacturers, different readings may appear under the same measurement conditions.

### Calibration:

In order to keep its full function and precision it is recommended to have re-calibration done once per year. Re-calibration will also be necessary after change of battery. PTB traceable calibration acc. to DIN EN ISO / IEC 17025 with certificate

### Graphic Chart:

With SD Card slot.  
Stores data to an SD-Memory card  
For transmission to a computer

