

# THE WIDE RANGE OF UV - IR TECHNOLOGY



## UV-Microlog

- + UV intensity  $mW/cm^2$
- + UV dose  $mJ/cm^2$
- + permanent or „triggered“ measuring mode\*
- + USB ComPort
- + graphic chart on PC



The UV-Microlog is a small, self-contained, high quality UV measuring instrument without on-board display. It is designed to measure and record peak UV intensity and UV dosage in the UV curing process. Measuring results are downloaded via USB ComPort and displayed on a computer.

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

### Full UV 250 – 410 nm

With this total UV band peak energy and dose measuring, most of the measuring requirements of UV curing applications can be covered.

Due to its UV sensor and the integrated microprocessor the UV-Microlog can measure and record the peak UV-intensity of the total UV spectrum ( $mW/cm^2$ ).

Additionally, it 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 UV-dosage over the full UV spectral bands.

The sensor is on the back of the unit which also serves as a heat shield. After completion of the measuring cycle the measuring results are stored internally.

To read-out the measuring results it is connected via USB ComPort to a computer for downloading.

The special evaluation software allows to show, edit and store a history of the measuring results of the entire measuring cycle as graphic charts and numerically ( $mW/cm^2$ ) and ( $mJ/cm^2$ )

\*This Microlog features a selectable „triggered mode“, i.e. the 30 sec recording cycle starts within a 120 second readiness phase not before the incident UV-intensity exceeds  $2 mW/cm^2$ .

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.

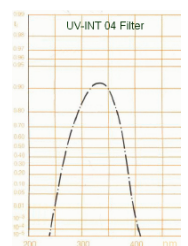
Optionally it is available with an extra sensor for measuring temperatures from 32 to 230° F / 0 to 110° C.

The UV-Microlog is available in six different measuring ranges:

(Please state upon order)

Item 19.1.1 UV-Microlog Type 1 Diazo	350 – 460 nm
Item 19.1.2 UV-Microlog Type 2 UV-A	315 – 410 nm
Item 19.1.3 UV-Microlog Type 3 UV	230 – 410 nm
Item 19.1.4 UV-Microlog Type 4 UV-B	280 – 315 nm
Item 19.1.5 UV-Microlog Type 5 UV-C	230 – 280 nm
Item 19.1.6 UV-Microlog Type 6 UV-V	395 – 445 nm

In the standard version it is measuring an integral in the spectral range from 230-410 nm, with a peak at the area of 330 nm.



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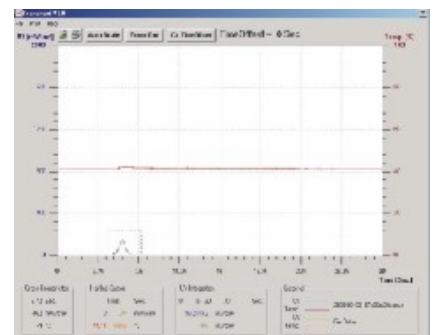
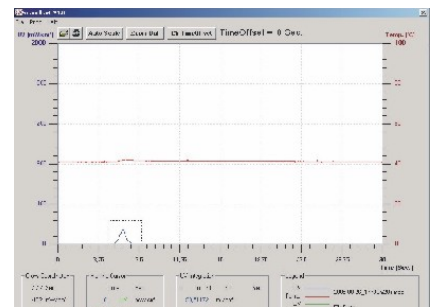
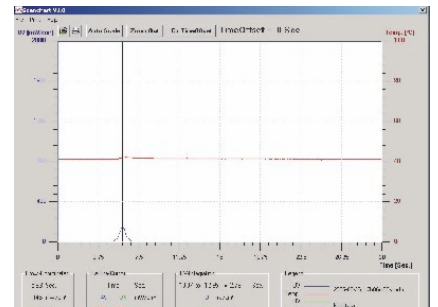
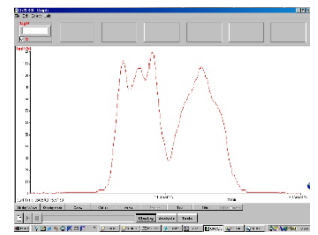
## UV-Microlog

### Technical Data:

Spectral range:	UV 250 – 410 nm (Standard)
Max. Power Input	0 to 5,000 mW/cm <sup>2</sup>
Display:	via computer
Display range:	0 to 36,000 mJ/cm <sup>2</sup>
Measuring range:	0 to 2,000 mW/cm <sup>2</sup>
Sampling rate:	0.005 sec (200/sec)
Recording cycle:	30/60 sec.
Readiness phase:	120 sec.
Power source:	2 x long life 3 V NiMH Battery
Power consumption:	20 $\mu$ A
Battery service life:	2,000 measuring cycles
Dimensions:	$\varnothing$ 2.75" (70 mm), height 1/2" (13 mm)
Weight:	approx. 5 ounce (130 g)
Operating temperature:	32 to 113° F / 0 to 45° Celsius
Heat protection:	Heat shield on back plate
Base Accuracy:	$\pm$ 5 %

### Special Feature:

ComPort  
for the download  
of data  
to a Computer



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