

UV-2C Microprocessor Integrator (also available for LED measurement up to 20 W/cm²)

- + choice of a combination of two different spectral ranges:
- + UV-A intensity mW/cm² + UV-V dose mJ/cm²
- + UV-B intensity mW/cm² + UV-V dose mJ/cm²
- + UV-C intensity mW/cm² + UV-A dose mJ/cm²
- + UV-V intensity mW/cm² + UV-V dose mJ/cm²
- + Permanent or triggered recording*
- + temperature measuring (option)
- + SD Memory Card (option)
- + graphical and numerical display on a PC (option)
- + re-chargeable accu cell
- + further spectral ranges upon request
- + available up to 20W/cm²
- + available with high speed sampling rate 0.0007s(1400/s)



The UV-2C Microprocessor Integrator is an economical, 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.

It is equipped with two different UV sensors for the individual measuring of a combination of either:

UV-C 230 – 280 nm
UV-B 280 – 315 nm
UV-A 315 – 400 nm
UV-V 395 – 445 nm
UV 250 – 410 nm

With two different UV-bands, many of the measuring requirements of UV curing applications can be covered. Due to its two different UV sensors and the integrated microprocessor the UV-2C Microprocessor Integrator can measure, record and display the peak of the UV-intensity (mW/cm²) for each UV-band individually. Additionally, this UV-Integrator is calculating the UV-dosage (mJ/cm²) of the UV energy supplied during the time of exposure of one measuring cycle. The UV-dosage is calculated for each UV-band (UV-A, UV-B, UV-C or UV-V) individually. This allows to determine not only the UV-energy, but also how that energy is delivered, i.e., what intensity and dose at what UV-band.

Optionally, an extra sensor measures temperatures from 32 to 230° F / 0 to 110° C.

*This Microprocessor Integrator 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/cm².

The two 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.

As a further option this microprocessor integrator is available with an SD-Memory Card Slot and an evaluation software for downloading the data to a computer to show, edit and store a history of the measuring results of the entire measuring cycle as graphic charts (mW/cm²) and (mJ cm²) and (°F – option -)

The following versions are available as a standard:

- | | | |
|--|------|--------|
| 2.5.1. UV-2C Microprocessor Integrator | UV-A | + UV-V |
| 2.5.2. UV-2C Microprocessor Integrator | UV-A | + UV-B |
| 2.5.3. UV-2C Microprocessor Integrator | UV | + UV-A |
| 2.5.4. UV-2C Microprocessor Integrator | UV | + UV-B |
| 2.5.5. UV-2C Microprocessor Integrator | UV | + UV-V |
| 2.5.6. UV-2C Microprocessor Integrator | UV-B | + UV-V |
| 2.5.7. UV-2C Microprocessor Integrator | UV-C | + UV-V |
| 2.5.8. UV-2C Microprocessor Integrator | UV-C | + UV-A |

*also available in other spectral range combinations upon request

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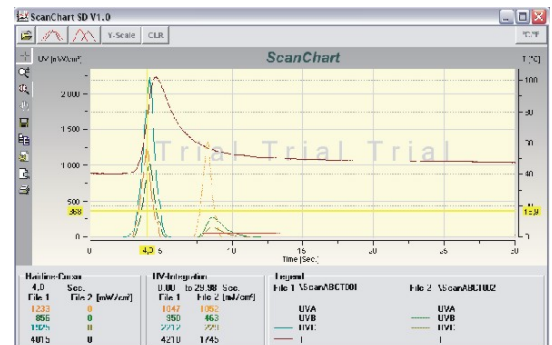
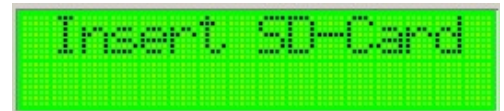
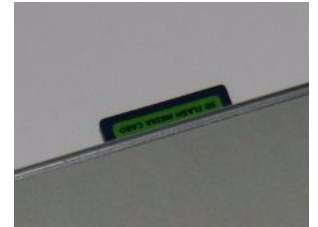
UV-2C Microprocessor Integrator

2. Technical Data

Spectral ranges:	UV-A 315 – 410 nm UV-B 280 – 315 nm UV-C 230 – 280 nm UV-V 395 – 445 nm
Max. Power Input*:	0 to 2 ,000 mW/cm ²
Measuring range:	0 to 2,000 mW/cm ²
Display range:	0 to 60,000 mJ/cm ²
Sampling rate:	0.01 sec (100/sec)
Recording cycle:	90 sec.
Readiness phase:	120 sec.
Display:	LCD, 2 x 16 digits
Power source:	2 x 3.7 V LiPO Accu
Power consumption:	20 µA
Accu service life:	1,000 re-charging cycles
Dimensions:	Ø 5.5" (140 mm), height ½" (13 mm)
Weight:	approx. 17.5 ounce (500 g)
Operating temperature:	32° to 113° F / 0 to 45° C
Heat protection:	Heat shield on back plate
Base Accuracy:	± 5 %

OPTION: SD-Memory Card

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



While on the conveyer belt, the UV-2C Microprocessor Integrator 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. Ongoing, PTB traceable calibration with certificate

Warranty: 2 years from the date of purchase

***also available up to 20W/cm², display resolution in relation to maximum wattage**

***also available with high speed sampling rate 0.0007s(1400/s)**

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