

## UV-2C Integrator DVD

for CD / DVD Production Line

- + choice of a combination of two different spectral ranges:
- + UV-A intensity  $mW/cm^2$  + UV-A dose  $mJ/cm^2$
- + UV-V intensity  $mW/cm^2$  + UV-V dose  $mJ/cm^2$
- + UV-B intensity  $mW/cm^2$  + UV-V dose  $mJ/cm^2$
- + UV-C intensity  $mW/cm^2$  + UV-V dose  $mJ/cm^2$
- + permanent or „triggered“ measuring mode\*
- + special design 4.7“ / 120 mm with center hole



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

With two different UV-bands, many of the measuring requirements of UV curing applications in CD and DVD production can be covered.

Due to its three different UV sensors and the integrated microprocessor the UV-3C Integrator DVD can measure, record and display the peak of the UV intensity ( $mW/cm^2$ ) for each UV-band individually plus the peak 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 for each UV-band (UV-A, UV-B and UV-C) individually and as total Integral of UV-dosage over all three UV-bands.

This allows to determine not only the total energy, but also how that energy is delivered, i.e., what intensity and dose at what UV-band.

Optionally it is available with an extra sensor for measuring 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  $mW/cm^2$ .

The three 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.

Optionally, this microprocessor integrator is additionally equipped with an USB ComPort 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 ( $mW/cm^2$ ) and ( $mJ/cm^2$ )

The following versions are available as a standard:

Item 42.5.1. UV-2C Integrator DVD	UV-A + UV-V (Diazo)
Item 42.5.2. UV-2C Integrator DVD	UV-A + UV-B
Item 42.5.3. UV-2C Integrator DVD	UV + UV-A
Item 42.5.4. UV-2C Integrator DVD	UV + UV-B
Item 42.5.5. UV-2C Integrator DVD	UV + UV-V
Item 42.5.6. UV-2C Integrator DVD	UV-B + UV-V
Item 42.5.7. UV-2C Integrator DVD	UV-C + UV-V

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## UV-2C Integrator DVD

### Technical Data:

Spectral ranges:	UV-A 315 – 410 nm UV-B 280 – 315 nm UV-C 230 – 280 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.
Display range:	0 to 36,000 mJ/cm <sup>2</sup>
Display:	LCD, 2 x 16 digits
Power source:	2 x long life 3.6 V Lithium Battery
Power consumption:	20 µA
Battery service life:	2,000 hrs
Dimensions:	Ø 4.7" (120 mm), height 1/4" (6,5 mm)
Weight:	approx. 10.5 ounce (290 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-2C Integrator DVD 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

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