

UV-T Integrator DVD for CD / DVD Production Line

- + UV-intensity mW/cm^2
- + UV-dose mJ/cm^2
- + Temperature measuring $^{\circ}C/^{\circ}F$
- + permanent or „triggered“ measuring mode*
- + special design 4.7“ / 120 mm with center hole



The UV-T Integrator DVD is a self-contained, high quality UV measuring instrument. It is specially designed to measure, record and display peak UV intensity, UV dosage and temperature in the UV curing process of CD and DVD production.

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

**Full UV 230 – 410 nm
Temp 32° to 230° F / 0° to 110° C**

With this total UV band measuring, extra temperature measuring and its special size and design it is particularly suitable to cover the measuring requirements of UV curing applications in CD and DVD production.

Due to its UV sensor and the integrated microprocessor the UV-T Integrator DVD can measure, record and display the peak UV-intensity of the total UV spectrum (mW/cm^2).

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 UV-dosage over the full UV spectral bands.

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/cm^2 .

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 an option, 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) and ($^{\circ}C/^{\circ}F$)

The UV-T Integrator DVD is available in six different measuring ranges:
(Please state upon order)

Item 42.3.1 UV-T Integrator DVD, Type 1 UV-V (Diazo)	350 – 460 nm
Item 42.3.2 UV-T Integrator DVD, Type 2 UV-A	315 – 410 nm
Item 42.3.3 UV-T Integrator DVD, Type 3 UV	230 – 410 nm (Standard)
Item 42.3.4 UV-T Integrator DVD, Type 4 UV-B	280 – 315 nm
Item 42.3.5 UV-T Integrator DVD, Type 5 UV-C	230 – 280 nm
Item 42.3.6 UV-T Integrator DVD, Type 6 UV-V	395 – 445 nm

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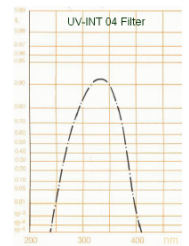
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UV-T Integrator DVD

Technical Data:

Spectral range:	UV 230 – 410 nm (Standard)
Max. Power Input	0 to 5,000 mW/cm ²
Measuring range:	0 to 230° F / 0 to 110° C
Display:	LCD, 2x16 digits
Display range:	0 to 36,000 mJ/cm ²
Measuring range:	0 to 2,000 mW/cm ²
Sampling rate:	0.005 sec (200/sec)
Recording cycle:	30 sec.
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 %

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.



While on the conveyer belt, the UV-T 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. Ongoing, PTB traceable calibration with certificate

Warranty: 2 years from the date of purchase

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