

THE WIDE RANGE OF UV - IR TECHNOLOGY



UV-Power Integrator 06

- + UV intensity mW/cm^2
- + UV dose mJ/cm^2
- + selectable "triggered mode"*
- + temperature (option UV-T)
- + 2 line LCD display
- + extra flat only 6 mm / .25 inch



The UV-Power Integrator 06 is a small, only 6 mm flat, self-contained, pass-through UV-Microprocessor Integrator. It is specially designed to measure, record and display peak UV intensity, UV dosage, and optionally (UV-T) temperature, in the UV curing process of narrow web presses and in some applications of the flexo print.

It is equipped with one UV sensor and optionally with one additional temperature sensor for the individual measuring of

UV 230 – 400 nm
Temp: 0 to 230° F / 0 to 110° C (option UV-T)

With this full band UV measuring and an extra temperature measuring, most of the measuring requirements of UV curing in extreme narrow applications can be covered. It measures only 4.5" x 2.5" x 0.25" (117 x 64 x 6 mm)

Due to its integrated microprocessor the UV-Power Integrator 06 can measure, record and display the peak of the UV-intensity (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 a total Integral of UV-dosage over the full UV spectral area 230 – 410 nm.

This allows to determine a profile of how that energy is delivered at which intensity.

Optionally, an extra sensor measures temperatures from 0 to 230° F / 0 to 110° C (option UV-T)

*This 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 sensor is 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.

The measuring period is 30 seconds at a sampling rate of 200/sec.

The following versions are available

Item 46.1.1 UV-Power Integrator 06, Type 1 Diazo	350 – 460 nm
Item 46.1.2 UV-Power Integrator 06, Type 2 UV-A	315 – 400 nm
Item 46.1.3 UV-Power Integrator 06, Type 3 UV	230 – 400 nm
Item 46.1.6 UV-Power Integrator 06, Type 6 UV-V	395 – 445 nm

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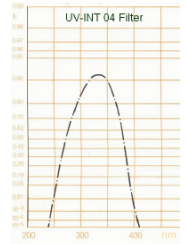


UV-Power Integrator 06

Technical Data:

Spectral range:	UV 230 – 410 nm
Temperature range:	0 to 230° F / 0 to 110° C (UV-T Power Integrator)
Max. Power Input	0 to 5,000 mW/cm ²
Measuring range:	0 to 2,000 mW/cm ² or 2,000 to 5,000 mW/cm ²
Recording cycle:	30 sec.
Readiness phase:	120 sec.
Sampling rate:	0.005 sec (200/sec)
Display:	LCD, 2 lines x 16 digits
Power source:	2 x long life 3.0 V Lithium Battery
Power consumption:	20 µA
Battery service life:	2,000 measuring cycles
Dimensions:	4.5" x 2.5" x 0.25" (117 x 64 x 6 mm)
Weight:	approx. 3 ounce (85 g)
Heat protection:	Heat shield on back plate
Operating temperature:	32° to 113° F / 0 to 45° C
Base Accuracy:	± 5 %

In the standard version it is measuring an integral in the spectral range from 230-400 nm, with a peak at the area of 330 nm.



While on the conveyer belt, the UV-Power Integrator 06 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

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