



## UV-Power Integrator 612

- + UV-intensity  $mW/cm^2$
- + UV-dose  $mJ/cm^2$
- + selectable "triggered mode"\*
- + LCD display



The UV-power Integrator 612 is a small, self-contained, high quality UV measuring instrument. It is designed to measure and display peak UV intensity in  $mW/cm^2$  and UV dosage in  $mJ/cm^2$  in the UV curing process.

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

### Full UV 230 – 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-Power Integrator can measure and display the peak UV-intensity of the total UV spectrum ( $mW/cm^2$ ). Additionally, this UV-measuring instrument 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 can be scrolled through on the built in 2 x 16 digit LCD display.

\*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  $2 mW/cm^2$ .

An optional temperature sensor (UV-T Power Integrator) measures the peak temperature during the exposure cycle.

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 UV-Power Integrator 612 is available in six different measuring ranges:

(Please state upon order)

Item 40.1.1 UV-Power Integrator 612, Type 1 Diazo	350 – 460 nm
Item 40.1.2 UV-Power Integrator 612, Type 2 UV-A	315 – 410 nm
Item 40.1.3 UV-Power Integrator 612, Type 3 UV	230 – 410 nm
Item 40.1.4 UV-Power Integrator 612, Type 4 UV-B	280 – 315 nm
Item 40.1.5 UV-Power Integrator 612, Type 5 UV-C	230 – 280 nm
Item 40.1.5 UV-Power Integrator 612, Type 6 UV-V	395 – 445 nm

# THE WIDE RANGE OF UV - IR TECHNOLOGY

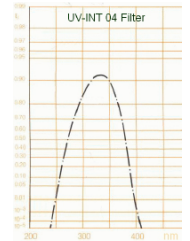


## UV-Power Integrator 612

### Technical Data:

Spectral range:	UV 230 – 410 nm (Standard)
Max. Power Input	0 to 5,000 mW/cm <sup>2</sup>
Display:	LCD, 2x16 digits
Display range:	0 to 36,000 mJ/cm <sup>2</sup>
Measuring range:	0 to 2,000 mW/cm <sup>2</sup>
Measuring temperature:	32 to 230° F / 0 to 115° C
Sampling rate:	0.005 sec (200/sec)
Recording cycle:	30 sec.
Readiness phase:	120 sec.
Power source:	2 x long life 3.6 V Lithium Battery
Power consumption:	20 µA
Battery service life:	2,000 measuring cycles
Dimensions:	115 x 60 x 14 mm (4.5 x 2.4 x 0.55")
Weight:	approx. 7 ounce (200 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-power 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. PTB traceable calibration acc. to DIN EN ISO / IEC 17025 with certificate

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