

UV-T Power Integrator 614

special LED versions available

- + UV-intensity mW/cm^2
- + UV-dose mJ/cm^2
- + Permanent or triggered recording*
- + LCD display
- + temperature $^{\circ}C/^{\circ}F$
- + SD Memory Card (option)
- + graphical and numerical display on a PC (option)
- + re-chargeable accu cell
- + further spectral ranges upon request
- + available up to $20W/cm^2$
- + available with high speed sampling rate 0.0007s(1400/s)



The UV-T Power Integrator 614 is a small, self-contained, high quality UV measuring instrument. It is designed to measure and display peak UV intensity in mW/cm^2 , UV dosage in mJ/cm^2 and temperature in the UV curing process.

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 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-T 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.

An extra sensor is measuring temperatures from 32 to 230° F / 0 to 115° C.

The sensors are 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 .

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

(Please state upon order)

- Item 40.3.1 UV-T Power Integrator 614, Type 1 UV-V 350 – 460 nm + Temp
- Item 40.3.2 UV-T Power Integrator 614, Type 2 UV-A 315 – 410 nm + Temp
- Item 40.3.3 UV-T Power Integrator 614, Type 3 UV 230 – 410 nm + Temp
- Item 40.3.4 UV-T Power Integrator 614, Type 4 UV-B 280 – 315 nm + Temp
- Item 40.3.5 UV-T Power Integrator 614, Type 5 UV-C 230 – 280 nm + Temp
- Item 40.3.6 UV-T Power Integrator 614, Type 6 UV-V 395 – 445 nm + Temp

***also available in other spectral ranges upon request**

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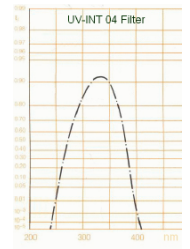
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UV-T Power Integrator 614

Technical Data:

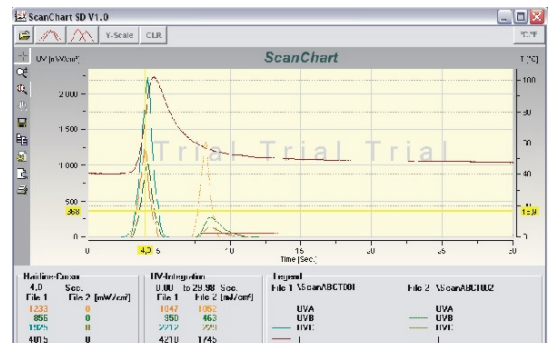
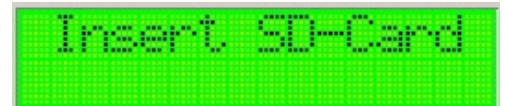
Spectral range:	UV 230 – 410 nm (Standard)
Max. Power Input*:	0 to 2,000 mW/cm ²
Display:	LCD, 2x16 digits
Display range:	0 to 36,000 mJ/cm ²
Measuring range:	0 to 2,000 mW/cm ²
Measuring temperature:	32 to 230° F / 0 to 115° C
Sampling rate:	0.01 sec (100/sec)
Recording cycle:	90 sec.
Readiness phase:	120 sec.
Power source:	3.7 V LION Accu
Power consumption:	20 µA
Battery service life:	approx. 1,000 measurements
Dimensions:	140 x 65 x 13 mm (5.5 x 2.4 x 0.55")
Weight:	approx. 8 ounce (250 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.



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-T 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. Ongoing, PTB traceable calibration with certificate

***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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