

100

VISIBLE LIGHT BLUE TO RED

UV-1010 Colour Radiometer + Dosimeter

- + UV-intensity mW/cm²
- + UV-dose mJ/cm²
- + temperature measuring °C/°F
- + big colour graphic display
- + numerical and graphical display
- + permanent or "triggered" measuring mode*



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The **UV-1010 Colour Radiometer + Dosimeter** is a self-contained, high quality UV measuring instrument. It is designed to measure and record UV intensity, UV dosage and temperature in the UV curing process. Measuring results are indicated both, graphically and numerically on a big colour display

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

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

Due to its UV sensor and the integrated microprocessor the *UV-1010 Colour Radiometer + Dosimeter* can measure, record and display the peak UV-intensity of the total UV spectrum (mW/cm²). Additionally, this instrument is calculating the UV-dosage (mJ/cm²) 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.

With an extra sensor for measuring temperatures from 32 to 230° F / 0 to 110° C.

*This instrument 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/cm².

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 are instantly displayed numerically and graphically auto-scaled on the built in 45 x 34 mm (1.75" x 1.3") TFT colour 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 instrument is available 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/cm²) and (mJ/cm²)

The UV-1010 Colour Radiometer + Dosimeter is available in five different measuring ranges:

(Please state upon order)

Item 62.3.1 UV-1011 Colour Radiometer + Dosimeter Diazo	350 – 460 nm
Item 62.3.2 UV-1012 Colour Radiometer + Dosimeter UV-A	315 – 400 nm
Item 62.3.3 UV-1013 Colour Radiometer + Dosimeter UV	230 – 410 nm
Item 62.3.4 UV-1014 Colour Radiometer + Dosimeter UV-B	280 – 315 nm
Item 62.3.5 UV-1015 Colour Radiometer + Dosimeter UV-C	230 – 280 nm

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UV-1010 Colour Radiometer + Dosimeter

380

Technical Data:

280

Spectral range:	UV 230 – 410 nm (Standard)		
Max. Power Input	0 to 5,000 mW/cm ²		
Display:	TFT Colour Display, 45 x 34 mm (1.75" x 1.3")		
Display range:	0 to 36,000 mJ/cm ²		500
Measuring range:	0 to 2,000 mW/cm ²	In the standard version	UV-INT 04 Filter
Sampling rate:	0.005 sec (200/sec)	it is measuring an integral in the spectral range	
Recording cycle:	30 sec.	from 230-410 nm, with a peak	
Readiness phase:	120 sec.	at the area of 330 nm.	200 300 400 nm
Power source:	2 x long life 3.6 V Lithium Batt	ery	
Power consumption:	20 µA		
Battery service life:	2,000 measuring cycles		
Dimensions:	Ø 5.5" (140 mm), height ½" (13 mm)		
Weight:	approx. 17,5 ounce (500 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-1010 Colour Radiometer + Dosimeter 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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