UV-1000 Colour Radiometer + Dosimeter

+ UV-intensity mW/cm²
+ UV-dose mJ/cm²
+ big colour graphic display
+ numerical and graphical display
+ permanent or „triggered“ measuring mode*

The ***UV-1000 Colour Radiometer + Dosimeter*** is a self-contained, high quality UV measuring instrument. It is designed to measure and record UV intensity and UV dosage 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

Due to its UV sensor and the integrated microprocessor the ***UV-1000 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.
Optionally it is available 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 sensor is 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-1000 Colour Radiometer + Dosimeter*** is available in five different measuring ranges:

(Please state upon order)

Item 62.1.1 UV-1001 Colour Radiometer + Dosimeter Diazo	**350 – 460 nm**
Item 62.1.2 UV-1002 Colour Radiometer + Dosimeter UV-A	**315 – 400 nm**
Item 62.1.3 UV-1003 Colour Radiometer + Dosimeter UV	**230 – 410 nm**
Item 62.1.4 UV-1004 Colour Radiometer + Dosimeter UV-B	**280 – 315 nm**
Item 62.1.5 UV-1005 Colour Radiometer + Dosimeter UV-C	**230 – 280 nm**

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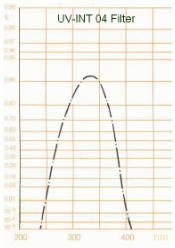
UV-IR TECHNOLOGY
Talstr. 37 * D-63128 Dietzenbach * Germany
Tel. +49(0)6074 483079 Fax +49(0)6074 483078
www.uv-ir-technology.de * mail: info@uv-ir-technology.de

UV-1000 Colour Radiometer + Dosimeter

Technical Data:

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
Measuring range:	0 to 2,000 mW/cm^2
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:	∅ 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 %

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-1000 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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