

UV-1010 Colour RE UV-T

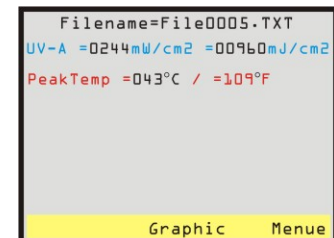
- + Available in the following UV ranges
- + UV-A intensity mW/cm^2 + UV-A dose mJ/cm^2
- + UV-B intensity mW/cm^2 + UV-B dose mJ/cm^2
- + UV-C intensity mW/cm^2 + UV-C dose mJ/cm^2
- + UV-V intensity mW/cm^2 + UV-V dose mJ/cm^2
- + Full UV intensity mW/cm^2 + Full UV dose mJ/cm^2
- + temperature measuring $^{\circ}C/^{\circ}F$
- + big colour graphic display
- + numerical and graphical display
- + permanent or „triggered“ measuring mode*
- + SD Memory Card (Option)
- + real-time clock
- + graphic chart on computer
- + re-chargeable accu cells with charger



The **UV-1010 Colour RE 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.

It is equipped with one UV sensors for the individual measuring of either:

UV-A	315 – 410 nm
UV-B	280 – 315 nm
UV-C	230 – 280 nm
UV-V	395 – 445 nm
Full UV	230 – 410 nm



Due to its UV sensors and the integrated microprocessor the **UV-1010 Colour RE Radiometer + Dosimeter** can measure, record and display the peak of the UV-intensity (mW/cm^2) plus the peak of total UV energy.

Additionally, this 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 total Integral of UV-dosage over the respective UV-range. This allows to determine not only the total energy, but also how that energy is delivered, i.e., what intensity and dose at what UV-band.

An extra sensor measures temperature in $^{\circ}C/^{\circ}F$

*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 $2 mW/cm^2$.

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 (2 1/2") 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.

This Radiometer + Dosimeter can optionally be equipped with an SD-Memory Card Slot 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/cm^2) and (mJ/cm^2)

64.3.1 UV-1011 Colour RE UV-T, Diazo	350 – 460 nm
64.3.2 UV-1012 Colour RE UV-T, UV-A	315 – 400 nm
64.3.3 UV-1013 Colour RE UV-T, UV	250 – 410 nm (Standard)
64.3.4 UV-1014 Colour RE UV-T, UV-B	280 – 315 nm
64.3.5 UV-1015 Colour RE UV-T, UV-C	230 – 280 nm
64.3.6 UV-1016 Colour RE UV-T, UV-V	395 – 445 nm

Subject to change without prior notice © 2014-01

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UV-1010 Colour RE UV-T

Technical Data:

Available spectral ranges:	UV-A	315 – 410 nm
	UV-B	280 – 315 nm
	UV-C	230 – 280 nm
	UV-V	395 – 445 nm
	Full UV	230 – 410 nm

Max. Power Input 0 to 5,000 mW/cm²

Measuring range: 0 to 2,000 mW/cm²

Sampling rate: 0.02 sec (50/sec)

Recording cycle: 30 sec.

Readiness phase: 120 sec.

Display range: 0 to 36,000 mJ/cm²

Display: TFT Colour Display, 45 x 34 mm (2 1/2")

Power source: 3.7 V LiPO Accu

Power consumption: 80 µA

Accu service life: 1,000 re-charging cycles

Dimensions: approx. 4" x 6.5" (105 x 165 mm),
height .55" (14 mm)

Weight: approx. 17.5 ounce (500 g)

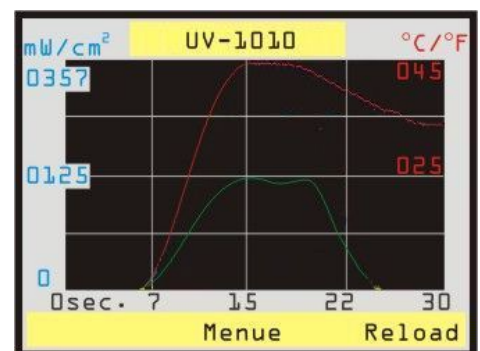
Operating temperature: 32° to 113° F / 0 to 45° Celsius

Heat protection: Heat shield on back plate

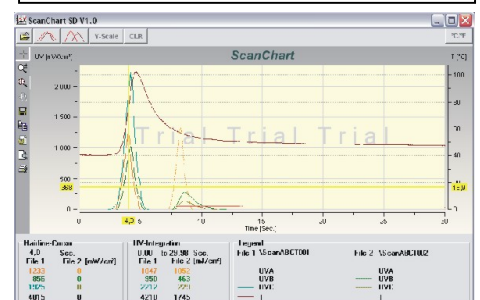
Base Accuracy: ± 5 %

Optional Feature:

Stores data on SD-Memory Card for the download of data to a Computer



Option: Graphical display on PC



While on the conveyer belt, the **UV-1160 Colour Radiometer + Dosimeter RE** 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 with certificate