

UV-1210 Colour RE UV-2C-T

+ choice of a combination of two different spectral ranges:

+ UV-A intensity mW/cm^2 + UV-V dose mJ/cm^2

+ UV-B intensity mW/cm^2 + UV-V dose mJ/cm^2

+ UV-C intensity mW/cm^2 + UV-A dose mJ/cm^2

+ UV-V intensity mW/cm^2 + UV-V dose mJ/cm^2

+ temperature measuring $^{\circ}C/^{\circ}F$ (option)

+ 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-1210 Colour RE 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.

Equipped with two different UV sensors for the individual measuring of a combination of:

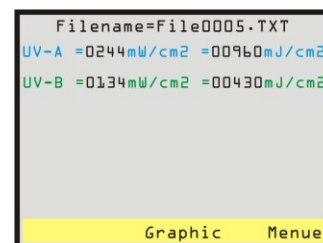
UV-A 315 – 410 nm

UV-B 280 – 315 nm

UV-C 230 – 280 nm

UV-V 395 – 445 nm

UV - 230 – 410 nm



With these two different UV-bands many of the measuring requirements of UV curing applications can be covered.

Due to its two different UV sensors and the integrated microprocessor the **UV-1210 Colour RE Radiometer + Dosimeter** can measure, record and display the peak of the UV-intensity (mW/cm^2) for each UV-band individually 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 for each UV-band (UV-A, UV-B and UV-C or UV-V) individually and as total Integral of UV-dosage over all three UV-bands. 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.

Optionally available with an extra sensor for measuring temperatures from 0 to 230 $^{\circ}$ F / 0 to 110 $^{\circ}$ 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/cm^2 .

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.

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) and ($^{\circ}C/^{\circ}F$)

The following versions are available as a standard :

64.5.1. UV-1211 Colour RE UV-2C-T, UV-A + UV-V

64.5.2. UV-1212 Colour RE UV-2C-T, UV-A + UV-B

64.5.3. UV-1213 Colour RE UV-2C-T, UV + UV-A

64.5.4. UV-1214 Colour RE UV-2C-T, UV + UV-B

64.5.5. UV-1215 Colour RE UV-2C-T, UV + UV-V

64.5.6. UV-1216 Colour RE UV-2C-T, UV-B + UV-V

64.5.7. UV-1217 Colour RE UV-2C-T, UV-C + UV-V

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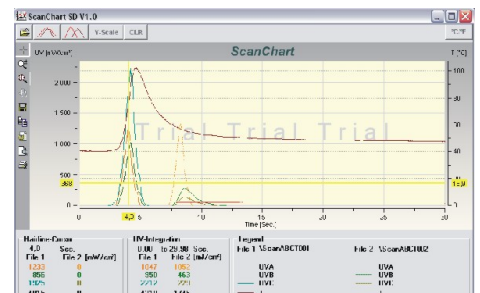
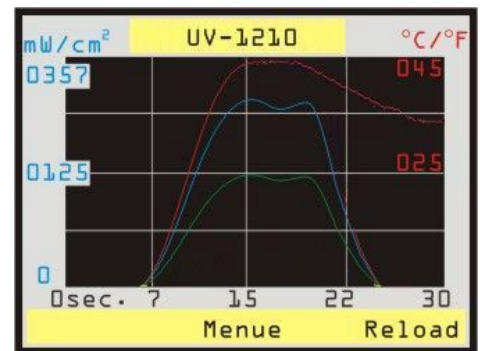
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Technical Data:

| | |
|------------------------|--|
| Spectral ranges: | UV-A 315 – 410 nm |
| Available: | UV-B 280 – 315 nm |
| | UV-C 230 – 280 nm |
| | UV-V 395 – 445 nm* |
| Temperature range: | 32-230° F / 0-110° C |
| Max. Power Input | 0 to 5,000 mW/cm ² |
| Measuring range: | 0 to 2,000 mW/cm ² |
| Sampling rate: | 0.02 sec (50/sec) |
| Recording cycle: | 30 sec. |
| Readiness phase: | 120 sec. |
| Display range: | 0 to 36,000 mJ/cm ² |
| 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 conveyor belt, the **UV-1210 Colour RE 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 with certificate

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