

## UV-1050 Colour RE UV-MC SD

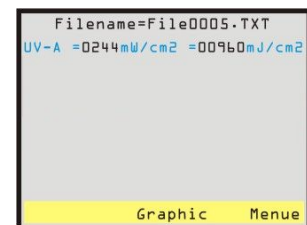
- + Available in the following UV ranges
- + UV-A intensity  $mW/cm^2$  + UV-A dose  $mJ/cm^2$
- + UV-B intensity  $mW/cm^2$  + UV-B dose  $mJ/cm^2$
- + UV-C intensity  $mW/cm^2$  + UV-C dose  $mJ/cm^2$
- + UV-V intensity  $mW/cm^2$  + UV-V dose  $mJ/cm^2$
- + Full UV intensity  $mW/cm^2$  + Full UV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



The **UV-1050 Colour RE Radiometer + Dosimeter SD** 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-1050 Colour RE Radiometer + Dosimeter SD** 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.

Optionally, an extra sensor measures temperature in °C/°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 is 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 ( $mJ/cm^2$ )

65.1.1 UV-1051 Colour RE UV-MC SD, Diazo	350 – 460 nm
65.1.2 UV-1052 Colour RE UV-MC SD, UV-A	315 – 400 nm
65.1.3 UV-1053 Colour RE UV-MC SD, UV	250 – 410 nm (Standard)
65.1.4 UV-1054 Colour RE UV-MC SD, UV-B	280 – 315 nm
65.1.5 UV-1055 Colour RE UV-MC SD, UV-C	230 – 280 nm
65.1.6 UV-1056 Colour RE UV-MC SD, UV-V	395 – 445 nm

\*further spectral ranges available upon request

Subject to change without prior notice © 2014-01

UV-DESIGN (Office)  
Triebstrasse 3  
63636 Brachtal  
GERMANY  
Tel.: +49 (0)6053 619824  
Fax: +49 (0)6053 619820

(Office & Workshop) UV-DESIGN  
Fabrikstrasse 12  
63636 Brachtal  
GERMANY  
Tel.: +49 (0)6053 8095431  
Fax: +49 (0)6053 8095433

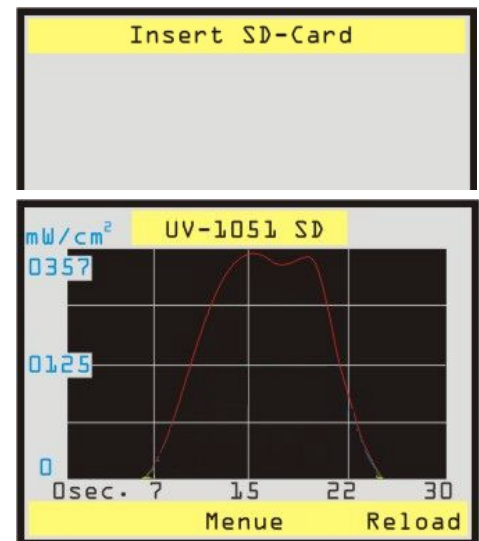
## UV-1050 Colour RE UV-MC SD

### Technical Data:

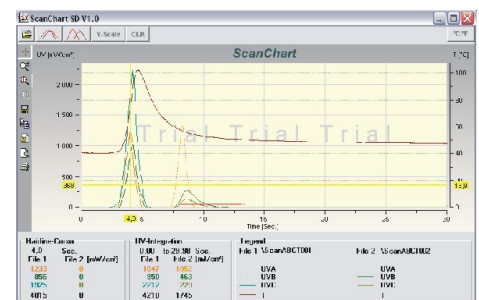
Available spectral ranges:	UV-A	315 – 410 nm
	UV-B	280 – 315 nm
	UV-C	230 – 280 nm
	UV-V	395 – 445 nm
	Full UV	230 – 410 nm
Max. Power Input		0 to 5,000 mW/cm <sup>2</sup>
Measuring range:		0 to 2,000 mW/cm <sup>2</sup>
Sampling rate:		0.02 sec (50/sec)
Recording cycle:		30 sec.
Readiness phase:		120 sec.
Display range:		0 to 36,000 mJ/cm <sup>2</sup>
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 %

### Special Feature:

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



### Graphical display on PC



While on the conveyer belt, the **UV-1050 Colour SD 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