

## UV Rigid Probe Integrator 30x4 (USB ComPort) (also available for LED measurement up to 20 W/cm<sup>2</sup>)

- + UV-intensity mW/cm<sup>2</sup>
- + UV-peak intensity mW/cm<sup>2</sup>
- + UV-dose mJ/cm<sup>2</sup>
- + 10" (250mm) rigid measuring probe
- + 1 1/8" x 1/6"(30 mm x 4 mm) measuring probe
- + USB ComPort (Option)
- + graphic chart on computer (Option)
- + re-chargeable accu and charger



The UV Rigid Probe Integrator is a self-contained, high quality UV measuring instrument. It is designed to measure and display UV energy in mW/cm<sup>2</sup>. An additional function is the scan of the peak value of UV-intensity in mW/cm<sup>2</sup> and to measure the UV dose in mJ/cm<sup>2</sup> within a pre-set period of 30/60 seconds.

In the standard version it is equipped with one UV sensor for the measuring of e.g.

### UV spectral area 250 - 410 nm

Due to its UV sensor and the integrated microprocessor the UV Rigid Probe Integrator can measure and display the peak UV-intensity of the full UV spectrum (mW/cm<sup>2</sup>).

Additionally, this UV-Probe Integrator is calculating the UV-dosage (mJ/cm<sup>2</sup>) 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.

The removable, probe-type sensor with a rigid rod is connected to the base unit by a cable of approx. 1 meter (40") length. In the function "Direct" the actual UV-energy in mW/cm<sup>2</sup> supplied to the sensor is measured. The function "Scan" will start a 30/60 second measuring cycle of both, UV-intensity and UV-dose. After completion of the measuring cycle the measuring results can be scrolled through on the built in 2 x 16 digit LCD 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 microprocessor integrator 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 and numeric charts (mW/cm<sup>2</sup>) and (mJ/cm<sup>2</sup>)

As a standard, the UV Probe Integrator is available in different types:

(Please state upon order)

Item 85.5.1. UV Rigid Probe Integrator Type 1 DIAZO	350 – 460 nm
Item 85.5.2. UV Rigid Probe Integrator Type 2 UV-A	315 – 400 nm
Item 85.5.3. UV Rigid Probe Integrator Type 3 UV-B	280 – 315 nm
Item 85.5.4. UV Rigid Probe Integrator Type 4 UV-C	230 – 280 nm
Item 85.5.5. UV Rigid Probe Integrator Type 5 UV	250 – 410 nm
Item 85.5.6. UV Rigid Probe Integrator Type 6 UV-V	395 – 445 nm
Item 85.6.1 UV Rigid ComPort Probe Integrator, Type 1 Diazo	350 – 460 nm
Item 85.6.2 UV Rigid ComPort Probe Integrator, Type 2 UV-A	315 – 400 nm
Item 85.6.21 UV Rigid ComPort Probe Integrator, Type 21 UV	380 – 420 nm
Item 85.6.3 UV Rigid ComPort Probe Integrator, Type 3 UV	250 – 410 nm
Item 85.6.4 UV Rigid ComPort Probe Integrator, Type 4 UV-B	280 – 315 nm
Item 85.6.5 UV Rigid ComPort Probe Integrator, Type 5 UV-C	230 – 280 nm
Item 85.6.6 UV Rigid ComPort Probe Integrator, Type 1 UV-V	395 – 445 nm

\*further spectral ranges available upon request

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# UV Rigid Probe Integrator 30x4 (USB ComPort)

### Technical Data:

Spectral range:	UV 250 – 410 nm (Standard) or other			
Max. Power Input*	0 to 1,999 mW/cm <sup>2</sup>			
Display:	LCD, 2x16 digits	In the standard version it is measuring an integral in the spectral range from 250-410 nm, with a peak at the area of 330 nm.		UV-INT 04 Filter
Display range:	0 to 60,000 mJ/cm <sup>2</sup>			
Measuring range:	0 to 1,999 mW/cm <sup>2</sup>			
Sampling rate:	0.005 sec (200/sec)			00 00 00 00 00 00 00 00 00 00
Recording cycle:	30/60 sec.			
Power source:	3.7 V LiPO Accu	Option: USB ComPort		
Power consumption:	20 µA			
Accu service life:	approx. 1,000 charging cycles			
Dimensions:	5.5" (120 mm) x 3" (75 mm) x 0.4"(10 mm)			
Weight:	approx. 6 ounce (150 g)			
Dimensions of probe:	Ø 1.1/8" (30 mm) x 1/6" (4 mm)			
Dimensions of rigid rod:	Ø 1/8" (3 mm) x 10" (250 mm)			
Length of probe:	handle: approx. 180 (7") overall: approx. 430 (17")			
Operating temperature:	0 to 158° F / 0 to 70° C			
Base Accuracy:	± 5 %			

While measuring, the UV Rigid Probe Integrator 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. Recalibration will also be necessary after change of battery. PTB traceable calibration with certificate

Warranty: 2 years from the date of purchase

\*also available up to 20 W/cm<sup>2</sup>, display resolution in relation to maximum power input \*also available with high-speed sampling rate 0.0007 (1400/sec)

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