

UV-Probe Integrator low intensity (also available for LED measurement up to 20 W/cm²)



- + UV-intensity mW/cm² / μW/cm²
- + UV-peak intensity mW/cm² / μW/cm²
- + UV-dose mJ/cm² / μJ/cm²
- + USB ComPort (Option)
- + graphic chart on computer (Option)
- + 4 x Micro AAA Battery

The UV-Probe Integrator low intensity is a self-contained, high quality UV measuring instrument. It is designed to measure and display UV energy in mW/cm² and μW/cm². An additional function is the scan of the peak value of UV-intensity in mW/cm² and μW/cm² and to measure the UV dose in mJ/cm² and μJ/cm² within a pre-set period of 30/60 seconds.

In the standard version it is equipped with one UV sensor for the measuring of:

Full UV spectral area 250 – 410 nm (Standard)

Due to its UV sensor and the integrated microprocessor the UV-Probe Integrator can measure and display the peak UV-intensity of the full UV spectrum (mW/cm²).

Additionally, this UV-Probe Integrator is calculating the UV-dosage (mJ/cm² and μJ/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.

The removable, probe-type sensor is connected to the base unit by a cable of approx. 2 meter (80") length. In the function "Direct" the actual UV-energy in mW/cm² 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/cm² and μW/cm²) and (mJ/cm² and μJ/cm²)

As a standard, the UV-Probe Microprocessor Integrator is available in various measuring ranges*:
(Please state upon order)

Item 28.1.1.1 UV-Probe Integrator low intensity, Type 11 Diazo	350 – 460 nm
Item 28.1.2.1 UV-Probe Integrator low intensity, Type 21 UV-A	315 – 410 nm
Item 28.1.3.1 UV-Probe Integrator low intensity, Type 31 UV	250 – 410 nm
Item 28.1.4.1 UV-Probe Integrator low intensity, Type 41 UV-B	280 – 315 nm
Item 28.1.5.1 UV-Probe Integrator low intensity, Type 51 UV-C	230 – 280 nm
Item 28.1.6.1 UV-Probe Integrator low intensity, Type 61 UV-V	395 – 445 nm

*further spectral ranges available upon request

Subject to change without prior notice © 2018-09

UV-Probe Integrator low intensity

Technical Data:

Spectral range:	UV 250 – 410 nm (Standard) or other
Max. Power Input*	199.9 mW/cm ² / UV-C 19.99 mW/cm² 199,900 µW/cm ² / UV-C 19,990 µW /cm²
Display:	LCD, 2x16 digits
Display range:	0 to 6,000 mJ/cm ² / UV-C 6,000,000 µJ /cm²
Measuring range:	0 to 199.9 mW/cm ² / UV-C 0 to 19.99 mW/cm² 0 to 199.900 µW/cm ² / UV-C 0 – 19,990 µW /cm²
Sampling rate:	0.005 sec (200/sec)
Recording cycle:	30/60 sec.
Power source:	4 x 1.5 Micro AAA Battery
Power consumption:	20 µA
Accu service life:	approx. 1,000 charging cycles
Dimensions:	6" (130 mm) x 3" (75 mm) x 1 1/8"(25 mm)
Weight:	approx. 6 ounce (150 g)
Dimensions of probe:	Ø 1.5" (43 mm) x 0.4" (10 mm) L: 1.5" (40 mm) x W: .55" (14 mm) x h: .45" (12 mm)
Length of probe cable:	approx. 80" (2 meter)
Operating temperature:	0 to 158° F / 0 to 70° C
Base Accuracy:	± 5 %



While measuring, the UV-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. Re-calibration will also be necessary after change of battery. Ongoing, PTB traceable calibration with certificate

Warranty: 2 years from the date of purchase

***also available up to 20 W/cm², display resolution in relation to maximum power input**

***also available with high-speed sampling rate 0.0007 (1400/sec)**