

UV Spectro

UV spectral radiometer

The UV Spectro combines two functions in one device: First, it is a spectrometer for measurements in the UV range from 200 to 440 nm, in addition, it is a UV-integrator for measuring the intensity profile when passing under a medium-pressure UV lamp or UV LED. Also, the dose can be measured.



The UV Spectro is, due to its flat design, the world's slimmest UV spectral radiometer, being only 14 mm high, it is therefore a versatile instrument. During the measuring process, the individual wavelengths by means of a specially-developed collation of rays with a combined diode array continuously record and store the results in the internal memory. The stored results can be compared at a later time. The measured values and the measured curves can be viewed on the built-in display. The UV Spectro works as a fully autonomous device.

Due to the fact that the UV Spectro measures selective wavelengths it is possible to measure optionally with sensitivity curves of filtered radiometers or to measure with effect-related curves (e.g. the sensitivity curve of a photo-initiator).

The UV Spectro versions with USB interface, the stored measurements can be read on a PC (software included). The measured values of the intensity and the dose are shown as numbers, and the spectrum is represented as a curve. Bar graphs illustrating the irradiation intensity and the dose. In the version with USB interface 50 measurements in the device will be stored.

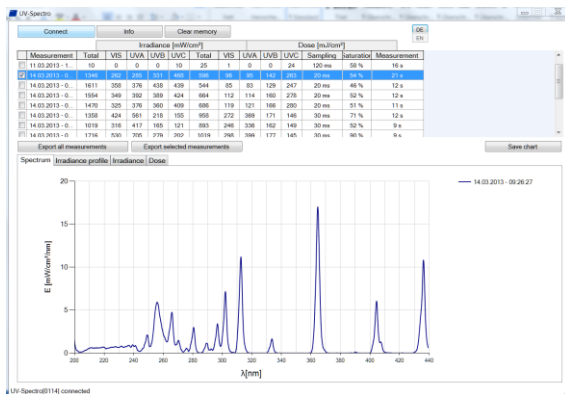
Technical data

UV Spectro		
Art. No.	A003650: UV Spectro A004452: UV Spectro USB (incl. USB interface and software)	A003667: UV Spectro A004453: UV Spectro USB (incl. USB interface and software)
Spectral range	200 – 440 nm	
Spectral bandwidth	2 nm	
Irradiance range	2 – 5,000 mW/cm ²	25 – 35,000 mW/cm ²
Irradiance dose range	1 mJ/cm ² – 600 J/cm ²	25 mJ/cm ² – 4,200 J/m ²
Measurement time	0 to 120 s	
Sensitivity	automatic or manual possible	
Sampling Rate	10 ms – 1.000 ms depending from the internal sensitivity	
Cosinus correction	yes	
Display	LCD, 128 x 64 px	
Power source	3 x CR 2032, > 300 measurements, > 2 years of storage	
Operating temperature	70 °C	
Dimensions	160 x 100 x 14,4 mm	
Weight	approx. 375 g	
Calibration	Calibration conforms to DIN EN ISO/IEC 17025 and can be traced back to PTB (Physikalisch Technische Bundesanstalt) or NIST (National Institute of Standards and Technology).	
Delivery	UV Spectro, plastic case, 3 x coin cell CR 2032, manual, calibration certificate	
Options:	In the UV Spectro one or more effect related sensitivity curves (i.e. photo initiator curves or sensitivity curves of broadband radiometers) can be stored on customers demand.	

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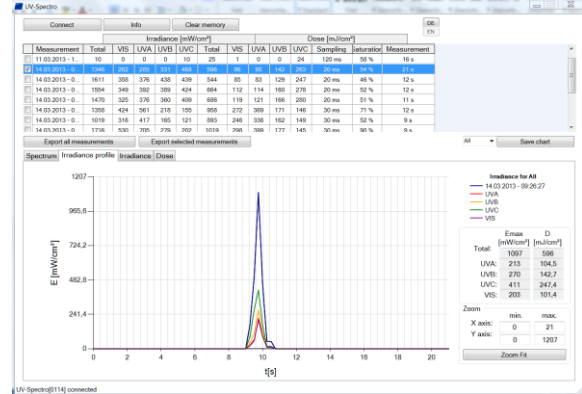
Screen shots software UV Spectro USB:

i) Spectrum:

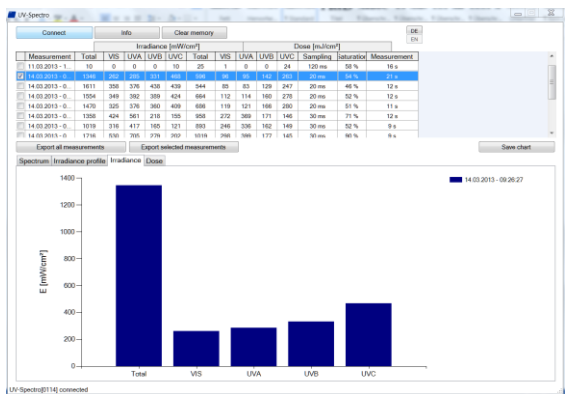


ii)

Irradiance profile:



iii) Irradiances of the uv ranges as bar charts:



iv) Doses of the uv ranges as bar charts:

