

spectral radiometer UVpad E



**New:
software control**

UVpad E with external sensor

The UVpad E combines the benefits of the spectral measuring technology with a handheld and easy to operate radiometer. The UVpad E is technically based on our successful radiometer UVpad. With the external sensor and an optimized programming, it is even more precise and easier to operate.

Use the spectroradiometer UVpad E for an accurate measurement of the UV irradiance and for comparisons of different UV lamps and UV LEDs. 512 photodiodes measure the spectrum in the wavelength range of 240 – 480 nm. The categorization in UVA, UVB and UVC is taken according to international standards and traceable. The calibration to only one light source is omitted.

During the measurement, the spectrum is shown on the graphic display. The irradiances for UVA, UVB, UVC and VIS are available by the click of a button. In the background, the spectrum is already recorded. While measuring, the dose and the chronological irradiance sequence can additionally be documented. Spectra and measurement data can be exported and evaluated with the provided software. In addition, the UVpad E can be used as a classical PC controlled spectrometer.

Of course, UVpad E is factory-calibrated upon delivery, long-term stable and precise. Optionally, we offer an accredited DAKKS calibration and testing according to ISO 17025.

With our radiometers RM-12, RM-22 and the spectroradiometer UVpad E, we cover the entire range of the UV measuring technology. We would be pleased to assist you selecting a suitable UV measuring device.

Applications:

- Measurement of UV-LEDs and ultraviolet lamps
- UV dose measurements
- Universal irradiance measurement
- GMP and IQ/OQ documentation

HIGHLIGHTS

- Spectral radiometric measurements without a PC
- Additional use on PC as spectrometer
- Designed for UV measurements
- Internal memory for 50 measurements with irradiance profile
- 240 - 480 nm (total UV spectral range)
- Spectral resolution 2 nm
- 0.5 nm pixel distance & 512 photo diodes

TECHNICAL DATA UVPAD E

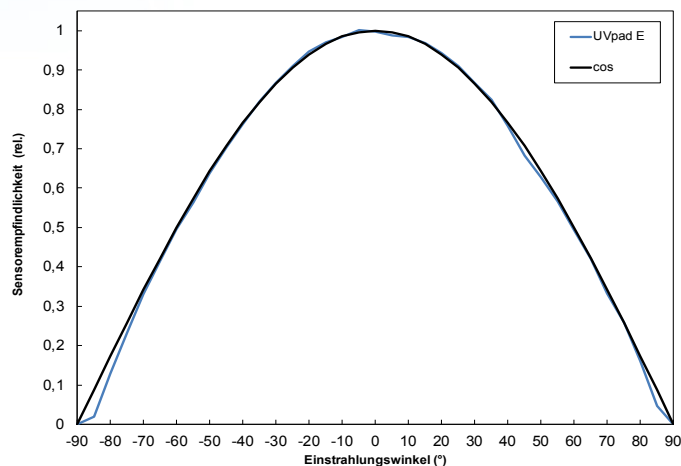
Spectral range	240 - 480 nm \pm 5 nm
Spectral bandwidth	2 nm
Pixel distance	~0,5 nm
Irradiance meas. range (typ.)	2 - 5000 mW/cm ²
High Power version	25 - 20000 mW/cm ²
High sensitive version	1 - 1000 mW/cm ²
Resolution	0,01 mW
Dose measurement range	0,01 mJ/cm ² - 600 J/cm ²
Data storage rate	100 Hz to 1 Hz, adjustable
Measurement time	5 s to 8 min, depending on data storage rate
Memory	50 measurements
Sampling rate	10 ms - 10 s
Display	graphical, 128 x 64 px
Dimensions	160 x 100 x 14,4 mm ³
Weight	~ 500 g
Operation temperature	0 to 60 °C
Storage temperature	-10 to 60 °C
Humidity	< 80% non-condensing
Batteries	3 x CR2032
Interface	USB
System requirements	Windows 10 or 7, 300 MB HDD, 1 GB RAM
Calibration	traceable to PTB/NIST
Cosine correction	yes

SENSOR HEAD FOR IRRADIANCE

Dimensions, type 1	Ø 40 mm, h 35 mm
Dimensions, type 2	Ø 40 mm, h 25 mm
Dimensions, type 3	Ø 40 mm, h 10 mm
Weight	~120 g
Optical fibre, length	1,5 m
Optical fibre, type	UV enhanced silica with metal shielding
Optical fibre, connector	SMA
Operation temperature	0 to 70 °C
Humidity	< 80% non-condensing

DID YOU KNOW?

In spectral radiometers, the actual measuring range depends on the spectrum and can be exceeded or reduced by it.



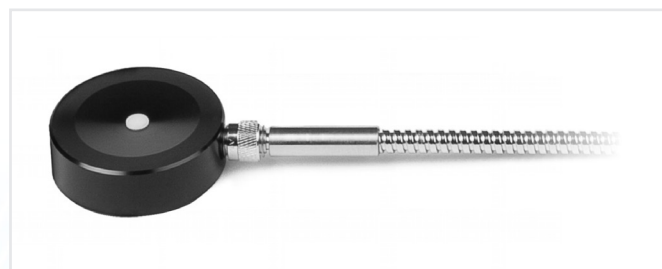
Cosine correction, sensorhead for irradiance



Side view with sensor type 2



Optical fiber and external sensor (type 1 background, type 2 front)

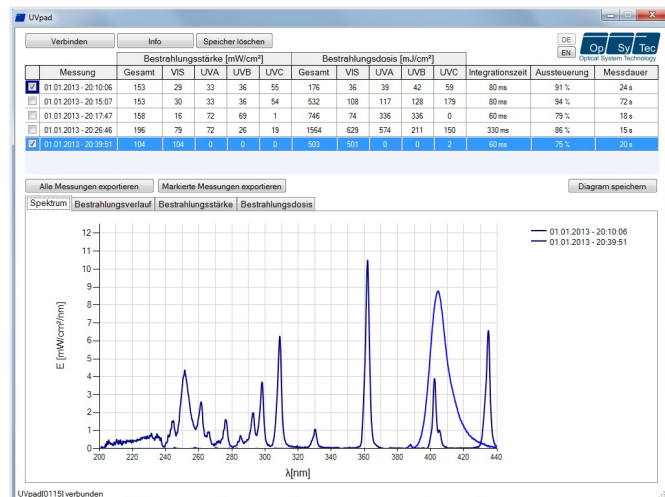


Sensor type 3 (Ø 40 mm, h 10 mm)

We specify that at least 66% of the total irradiance can lie in a spectral range (e.g. UVA).

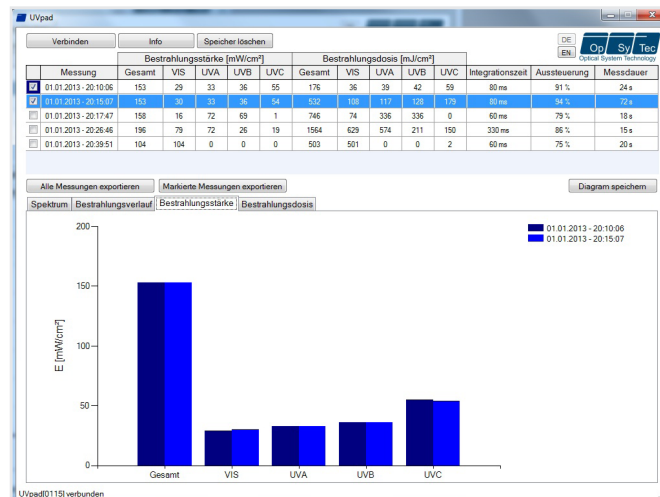
SOFTWARE

Connect the UVpad to the PC in order to indicate, evaluate and save the measurements. Due to the simple comparison of the measurement data, changes in the spectrum, irradiance or dose are possible at the touch of a button.



Software UVpad Viewer

With each measurement, the measurement data and time are saved. With the ability to save comments, you will always maintain an overview, even with various measurements.



Software displays irradiance profiles

UVPAD E FUNCTIONS

Radiometric measurements:

- Spectra at peak irradiance
- Peak irradiance (UVA, UVB, UVC, VIS)
- Irradiance profile (UVA, UVB, UVC, VIS)
- Irradiance dose (UVA, UVB, UVC, VIS)

Settings:

- Sensitivity & measurement mode
- Measurement duration (~5 s to 8 min)
- Averaging (1-32 measurements)

Data export:

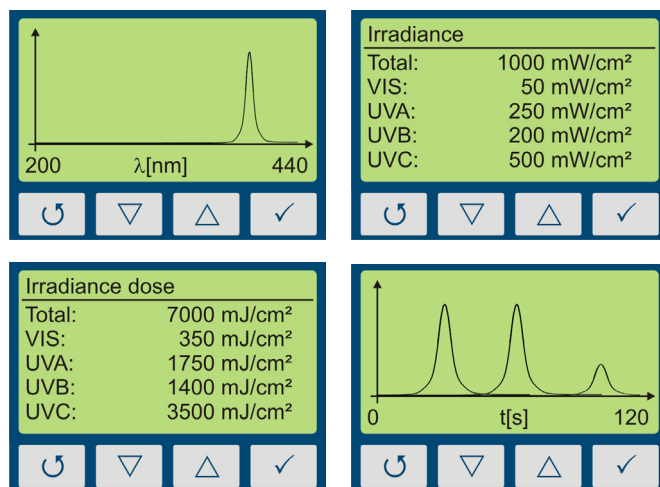
- 50 measurements with irradiance profile for UVA, UVB, UVC, VIS
- Measurement settings as date / time, duration, settings and saturation

Control:

- Stand-alone on the device and via PC

SCOPE OF DELIVERY

UVpad E, optical fibre 1.5 m, external sensor type 1 (if not specified), manufacturers certificate of calibration, software, USB cable and case



For optimum measurement results, we offer the UVpad E in two versions of the UVpad - standard & high power. Please specify for order. Just contact us if you need advice.

PART NUMBERS

UVpad E	670027
UVpad E High Power	670027HP
UVpad E High Sensitive	670027HS
ISO 17025 DAKKS calibration	17025-4
ISO 17025 DAKKS test	17026-1