

## Laboratory Grade UV Radiometer



### UVLOG - Laboratory Grade UV Radiometer

The **UVLOG** together with its probe **UVSENS** is a laboratory grade UV radiometer / UV dosimeter. The UVLOG meets all common standards and comes with **NIST traceable calibration**. These features and a broad variety of functions encourage implementation of **Good Laboratory Practices (GLP)** and eases interfacing to **Laboratory Information Management Systems (LIMS)**.

The fields of application cover almost the whole range of technology and science. To give examples, the UV radiometer is used for pharmaceutical and biological research or to control UV irradiation intensities and doses of UV disinfection or lacquer treatment lamps. Other areas are the scientific sun UV analysis, hospital disinfection control as well as material research (sun aging) or UV artwork protection in museums. The UVLOG well combines a large range of functions, readings and settings with an easy and intuitive handling. A clearly arranged menu structure will make you familiar with the radiometer. A high robustness of the unit also allows field tests under harsh conditions.

### The UV Probe UVSENS

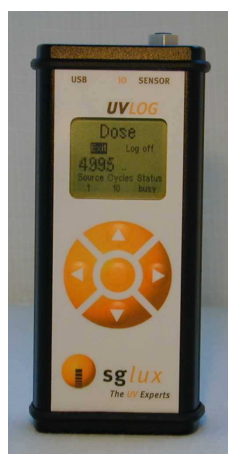
The rugged UV probe **UVSENS** is the core of the UVLOG. The probe works with **SiC UV photodetectors** which guarantee a very low noise, a large dynamic range of five orders of magnitude and minimized aging effects. The **NIST traceable calibration** and the date of calibration are stored inside the probe.



After the connection of the probe **UVSENS** to the UVLOG, the calibration values stored inside the probe transfer to the UVLOG. No further setting is needed. The probes work with a highly efficient temperature compensation. To ensure the GLP standard the probe temperature will be stored together with each measurement value. By default we ship the probe with a UVA-UVB-UVC broadband photodetector which is **NIST traceably** calibrated with a Xenon high pressure lamp (Newport 6251). Other NIST calibrated probes such as sun Erythema or UVC disinfection probes are available on request. Please contact us for further assistance.

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| Specifications of the probe <i>UVSENS</i> |   |                   |   |
|---|---|-------------------|---|
| Detector:                                 | SiC photodiode, A=0,22 mm <sup>2</sup>                        | Stored values:    | Calibration curve and date              |
| Spectral Sensitivity:                     | S <sub>max</sub> = 280nm, others are available                | Conditions:       | 0..40°C, <80% rel. humidity, n.c.       |
| Spectral range                            | R = 0,1xS <sub>max</sub> = 220 nm .... 360 nm                 | Dimensions:       | D x H = 30 x 33 mm                      |
|   | others are available  | Weight:           | 40 g                                    |
| Visible Blindness:                        | S <sub>280nm</sub> / S <sub>&gt;400nm</sub> > 10 <sup>4</sup> | Protection class: | IP62, IP76 on request                   |
| Other Values:                             | Temperature   | met standards:    | EN 55022, EN 61000, EN 61010, DIN 17025 |



### The Handheld UVLOG

The UVLOG with its powerful features easily fits into the palm of your hand. A large illuminated graphic display allows perfect read out of all important information visible at a glance. The built-in strong battery allows field testing of about 90 hours without charging. Charging can also be done with the USB port of a computer. Up to 4000 data records (intensity, time, date and temperature) can be stored in the internal non-volatile memory. The storage can be triggered manually or automatically in a user-set interval (0,5 ms to 6s). Uniform record structure for all detectors simplifies data management. A trigger function allows remote start and stop the measurement as well as to control other instruments of machines via the I/O port of the UVLOG.

| Specifications of the handeld UVLOG |  |                   |   |
|-------------------------------------|--|-------------------|---|
| Measurement:                        | UV intensity, UV dosis                           | Data transfer:    | via USB or I/O interface                |
| Other Values                        | Temperature of probe and handheld, time and date | calibration data: | non volatile, stored in the probe       |
| AC/DC lamps:                        | autodetect                                       | Battery lifetime: | 90 hours                                |
| Dynamic range:                      | >5 decades                                       | Integration time: | 0,5 ms .... 6 s                         |
| Sampling rate:                      | max. 2 kHz                                       | Conditions:       | 0..40°C, <80% rel. humidity, n.c.       |
| Graphic display:                    | 102 x 80 pixels, illuminated                     | Dimensions:       | B x H x T = 50 x 130 x 32 mm            |
| Power supply:                       | internal battery or USB cable                    | Weight:           | 240 g                                   |
| Data storage                        | internal, max. = 4000                            | Protection class: | IP62                                    |
|                                     |  | met Standards:    | EN 55022, EN 61000, EN 61010, DIN 17025 |

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### Accessories and PC software

The UVLOG comes with a carrying case and a broad range of accessories such as a charger with international plug set and connection cables. Additionally user scientific friendly PC software is included. Besides standard analysis such as Intensity and Dose, a broad variety of scientific analysis is offered. Alternatively third party software such as Excel, LabView, Origin etc. can be used while communicating via a hyperterminal.