

UVMICROLOG

Miniature UV Datalogger for Science and Production Monitoring

The Device



The **UVMICROLOG** is designed for logging of ultraviolet radiation. Sophisticated microcontroller technology and low noise SiC based UV detectors allow up to 3 months of permanent measurement and logging without battery charging. **Applications** are dose monitoring of UV sensible goods such as artworks or compound materials. Other fields are dose monitoring of UV hardening systems or sun UV (e.g. Erythema or UVA + UVB) monitoring of persons, animals or plants. The unit can be mounted with a belt or screws.

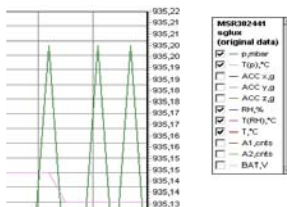
The UV Sensors



As a broad variety of industrial and scientific fields of UV logging exists the **UVMICROLOG** is available with different detectors (one or two) measuring e.g. UVA, UVB or UVC only, UV-broadband, UV-Erythema or UV-ICNIRP

Different available sensors allow to adjust the UV-sensibility of the **UVMICROLOG** from the nW/cm² area for very low UV intensities (e.g. in museums) until some W/cm² radiation which occurs e.g. in the UV curing industry. A NIST traceable calibration is included in the price.

Optional Sensors



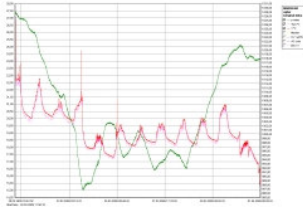
The **UVMICROLOG** can be equipped with four further sensors:

- Temperature
- Relative Humidity
- Pressure
- Acceleration (3-Axis)

Specifications

Measure	Working Range	Accuracy
Temperature	-10°C to +58°C	±0,1°C (5°C to 45°C) ±0,2°C (-10°C to +58°C)
Relative Humidity	0-100% rel. Hum. (-20°C to +65°C)	±2% rel. hum. (10-85% rel. hum., 0 to 40°C) ±4% rel. hum. (85-95% rel. hum., 0 °C to 40°C)
Pressure	0-2500 mbar abs.	±2,5 mbar (750-1100 mbar absolute)
Acceleration	±10 G / ±2 G sel.	±0,15 g (25 °C)

The Software



With the **free software Setup** the user customizes the properties of the UVMICROLOG. With the software Reader the USB data transfer is started. The Viewer is used for graphical displaying. The data can be exported as a csv file for analyzing in standard softwares like Excel or Origin. The software Online is displaying online measurements.

Logging Features



- Record limits can be set for all used sensors.
- Measurements can be started via a connected computer (date and time for the start can be chosen)
- For each of the possible sensors a measurement rate between 1s and 12h can be chosen.
- Prediction feature calculates memory and battery capacity for the chosen measurement rates.
- For monitoring of sensitive transport goods a shock measurement can be activated (if acceleration sensor is equipped). Therefore a threshold can be chosen. Every acceleration above this threshold is recorded. The mixing gravitational acceleration is not taken into account.

Specifications of the UVMICROLOG

Parameter	Value	Unit
Sensors and Output		
Number of UV detectors	1	-
<i>Specifiaction of the UV Sensor</i>	different SiC based detectors available please contact us with your specification	-
Storage rates		
<i>min. storage rate UV Intensity</i>	2	/day
<i>max. storage rate UV Intensity</i>	50	/second
<i>min. storage rate Temperature</i>	2	/day
<i>max. storage rate Temperature</i>	1	/second
<i>min. storage rate rel. humidity</i>	2	/day
<i>max. storage rate rel. humidity</i>	1	/second
<i>min. storage rate pressure</i>	2	/day
<i>max. storage rate pressure</i>	10	/second
<i>min. storage rate acceleration</i>	2	/day
<i>max. storage rate acceleration</i>	50	/second
Interface	USB	
Standard Parameters of the housing (varies with needed features)		
Dimensions (BxHxD)	59x22(33)x24	mm ³
Weight	40	g
Additional technical data		
Operating temperature	-15....+65	°C
Storage temperature	-20... +70	°C
Capacity lithium-polymer battery	170	mAh
Data storage	>2.000.000	parameters