## **UVQUADRULOG**

## 4-Channel UV Datalogger for Science and Production Monitoring



#### The Device



The **UVQUADRULOG** is designed for 4-channel irradiation logging. **Applications** are dose monitoring at UV sensible goods or intensity monitoring in UV hardening or purification systems. The unit can be DIN rail mounted and driven by battery or power supply.

#### The UV Sensors



TOCON\_probe with attached cable



different TOCON\_probe sensors

The UVQUADRULOG is operable with up to four pre-amplified TOCON detectors. The detectors are available with different spectral sensitivities like UVA, UVB, UVC, UV-broadband and UV-Erythema. It is recommended to use the TOCONs integrated into the M12x1 thread housing called TOCON\_probe including cable connection for easy mountability.

Different available sensors allow to adjust the UV-sensibility of the UV*QUADRULOG* 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.

## **Optional Sensors**

		935,22	
	_	935,21	MSR302441
		935,21	sglux
1	1 1	935,20	(original data)
-		935.20	
	- 0 - 0	935.19	▼ — T(p),*C
10	10 0	935.19	☐ — ACC ×,g
	11 11	935.18	ACC y,g
	11 (1	935.18	
	-11 - 11	935.17	✓ — RH,%
11.1	$11 \cdot 11$	935.17	✓ T(RH),*C
		935.16	✓ T,*C
	1111	935.16	A1,cnts
$\rightarrow$	$\cdots$	935.15	A2,cnts
	$0.1 \cdot 0.1$	935,15	□ - BAT,V
1.71		935,14	
		935,14	
	$\cdots$	935,13	

The UVQUADRULOG can be equipped with four further sensors:

- Temperature
- Relative Humidity
- Pressure
- Accelleration (3-Axis) incl. fast-peak shock logging

#### **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	0-2000 mbar abs.	±2,5 mbar (750-1100 mbar absolute)
Acceleration	±15 G	±0,15 g (25 °C)

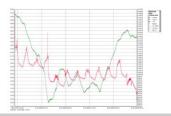
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#### The Software



With the **free software** *Setup* the user customizes the properties of the UV*QUADRULOG*. 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. If a signal is exceeding a limit the red LED is flashing.
- Measurements can be started via a connected computer (date and time for the start can be chosen) or manually by a push-button
- The 4-row backlit display is individually configurable
- A blue LED shows the logging state and a yellow LED shows the connection state of the power supply
- For each of the possible six 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 accelleration 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.

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# Specifications of the UVQUADRULOG

Parameter	Value	Unit
Sensors and Output		
Number of UV detectors	12	-
Specifiaction of the UV Sensor	different SiC based detectors available please contact us with your specification	-
Storage rates		
min. storage rate UV Intensity	2	/day
max. storage rate UV Intensity	1	/second
min. storage rate Temperature	2	/day
max. storage rate Temperature	1	/second
min. storage rate rel. humidity	2	/day
max. storage rate rel. humidity	1	/second
min. storage rate pressure	2	/day
max. storage rate pressure	10	/second
min. storage rate accelleration	2	/day
max. storage rate accelleration	50	/second
Interface	USB	
Standard Parameters of the housing (varies with needed features)		
Dimensions (BxHXD)	78 x62x 38	mm³
Weight	222	g
Additional technical data		
Operating temperature	-15+65	${\mathfrak C}$
Storage temperature	-20 +70	${\mathfrak C}$
Capacity lithium-polymer battery	2300	mAh
Data storage	>2.000.000	parameters

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