# UVQUADRULOG

4-Channel UV Datalogger for Science and Production Monitoring





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



The UV*QUADRULOG* 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  $nW/cm^2$  area for very low UV intensities (e.g. in museums) until some  $W/cm^2$  radiation which occurs e.g. in the UV curing industry.

#### different TOCON\_probe sensors

# **Optional Sensors**

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The UVQUADRULOG can be equipped with four further sensors:

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

#### Specifications

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	Measure	Working Range	Accuracy	
	Temperature	-10℃ to +58℃	±0,1 ℃ (5 ℃ to 45 ℃) ±0,2 ℃ (-10 ℃ to +58 ℃)	
	Relative Humidity	0-100% rel. Hum.( -20℃ to +65℃)	±2% rel. hum. (10-85% rel. hum., 0 to 40 ℃) ±4% rel. hum. (85-95% rel. hum., 0 ℃ to 40 ℃)	
	Pressure	0-2000 mbar abs.	±2,5 mbar (750-1100 mbar absolute)	
	Acceleration	±15 G	±0,15 g (25 °C)	

Rev. 1.1

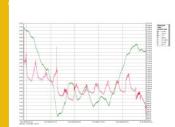
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### **UV***QUADRULOG* 4-Channel UV Datalogger for Science and Production Monitoring



#### 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

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RH, TPHI OF T	Linits active Shock exciten
T (0) 2 E	
A1.A4	Stat immediately     Stat at
Prediction	C Start at 16.09.2008 ± 16.33 □ Stop at 16.09.2008 ± 16.33
Options during record	C Stat and stop by push-button
🗭 blas LED flacher: with 11	C Stat and stop by control input
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- 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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# **UVQUADRULOG**

4-Channel UV Datalogger for Science and Production Monitoring



# 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 50	/day /second
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	°C
Storage temperature	-20 +70	S
Capacity lithium-polymer battery	2300	mAh
Data storage	>2.000.000	parameters

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