

UV Sensor “UV-Air”

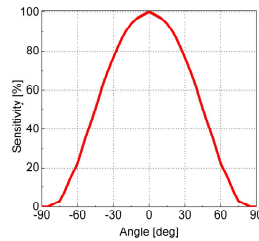
Standard axis oriented in-chamber UV Sensor

The sensor **UV-Air** is a cosine corrected axial looking UV sensor with a male thread (M22x1,5) with many mounting possibilities inside UV radiation chambers. Available calibrated (NIST or PTB traceable) on request.

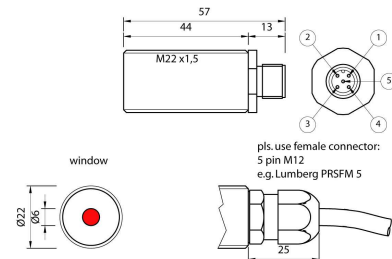
Picture



Field of View



Drawing



UV Sensor “UV-Cosine”

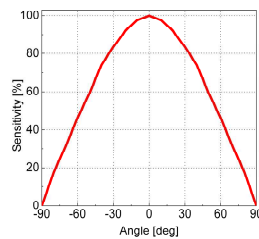
Waterproof UV Sensor for outdoor use

The sensor **UV-Cosine** is an outdoor cosine corrected waterproof sensor (IP68 at window side, IP65 at plug side, or, on request IP68 for submerge applications). The PTFE housing is stain repellent. Available calibrated (NIST or PTB traceable) on request.

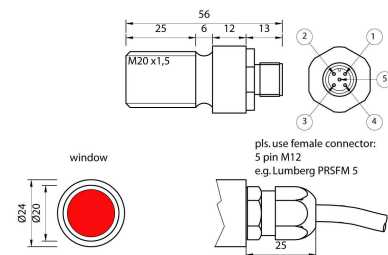
Picture



Field of View



Drawing



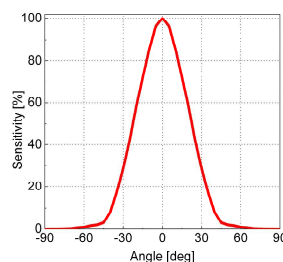
UV Sensor “UV-Water” 10 bar water pressure proof

The sensor **UV-Water** is a water proof (10 bar or 150 psi) UV sensor to be included into pressurized water systems (G1/4” thread). This UV sensor is suited for use in food and beverages machinery. On request it is available in a submersible version. Available calibrated (NIST or PTB traceable) on request.

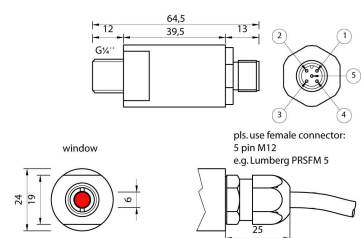
Picture



Field of View



Drawing



UV Sensor “UV-DVGW”

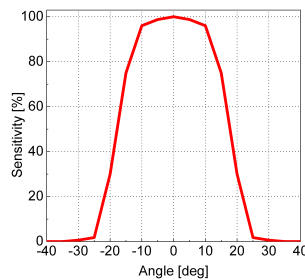
UV Sensor for DVGW certified water purifiers

The sensor **UV-DVGW** is a special type suitable for use with DVGW certified water purifiers. It complies with the standard DVGW W294-3(2006). Always delivered calibrated according to DVGW requirements.

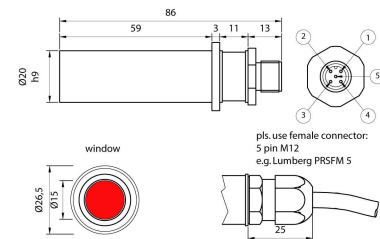
Picture



Field of View



Drawing



UV Sensor “UV-MINILOG”

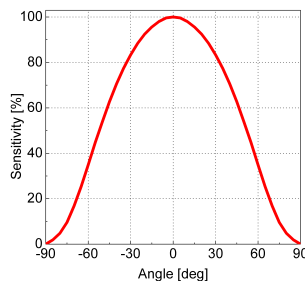
UV Datalogger with PC software

The sensor **UV-MINILOG** is a battery powered UV datalogger with a large internal data storage (2 million readings). It can log data for up to 18 months without recharging. It is IP67 water proof and comes with free PC software. The UV-Minilog can be equipped with all UV sensors to be selected at STEP 2 & STEP 4 of the page 5 configuration guide. NIST/PTB calibration on request.

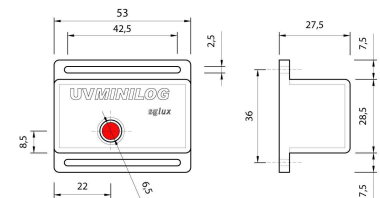
Picture



Field of View



Drawing



UV Sensor “TOCON”

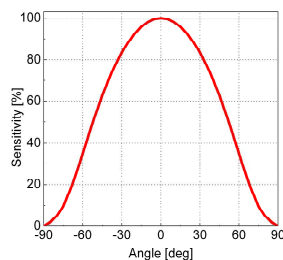
Pre-amplified UV Photodiode

The sensor **TOCON** is a pre-amplified UV Photodiode consisting of SiC chip and hybrid preamp inside a hermetic TO-39 package. The TOCON can be equipped with all specifications to be selected at STEP 2 and STEP 4 of the page 5 configuration guide.

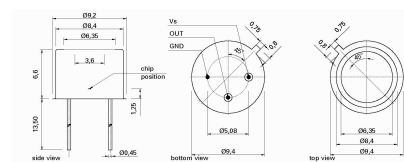
Picture



Field of View



Drawing



Specifications, valid for all UV Sensors

Fixed Specifications

Parameter	Value
Dimensions	pls. refer to the drawing
Temp. Coefficient	0,035%/K
Operating Temp.	-20...+80°C
Storage Temp.	-40...+80°C
Humidity	<80%, non condensing for Air versions; 100% immersed for submerible

Configurable Specifications

Parameter	Value
Absolute Sensitivity	1nW/cm ² ... 10W/cm ²
Spectral Sensitivity	UV-Broadband, UVA, UVB, UVC, UV-Index
Signal Output	0...5V, 4...20mA, USB, impulse count
Connections	2m cable or 2m cable with 5 pin male connector type Lumberg PRSFM5
Please find the configuration guide at page 5 of this catalog	

Monitor Accessories



Please consider our UV monitor and UV controller offer → www.sglux.com/monitor

Calibration



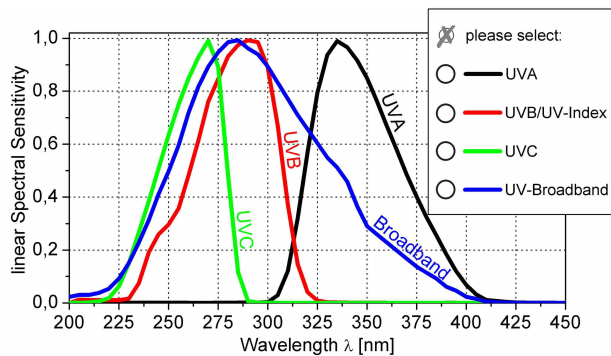
We are pleased to issue an individual quotation for NIST or PTB traceable calibration.

STEP 1 → Selection of probe mechanical design

Please tick your selection. Please find detailed description of the mechanical design above

<input checked="" type="checkbox"/>	Type	Description
<input type="checkbox"/>	UV-Surface	Standard surface-mount 180° FOV UV Sensor
<input type="checkbox"/>	UV-Air	Standard axis oriented in-chamber UV Sensor
<input type="checkbox"/>	UV-Cosine	Waterproof UV Sensor for outdoor use
<input type="checkbox"/>	UV-Water	10 bar water pressure proof
<input type="checkbox"/>	UV-DVGW	UV Sensor for DVGW certified water purifiers
<input type="checkbox"/>	UV-MINILOG	UV Datalogger with PC software
<input type="checkbox"/>	TOCON	Pre-amplified UV Photodiode

STEP 2 → Configuration of the Spectral Sensitivity



Please select one spectral sensitivity curve (shown left). Other spectral responses are available on request.

In the UV, we use SiC photodetectors which makes the probe radiation hard and stable. The visible blindness is better than 10^5 .

STEP 3 → Signal Output

Please tick your selection. The pin configuration is shown in the drawings on previous pages.

<input checked="" type="checkbox"/>	Output Type	Description	<input checked="" type="checkbox"/> Connection = "cable"	<input checked="" type="checkbox"/> Connection = "male plug"
<input type="checkbox"/>	0...5V	0...5V voltage output proportional to radiation input, supply voltage is 7..24VDC, current consumption is <30mA	<input type="checkbox"/> V_0 =brown, V_+ =white, Out=green, Shield=black	<input type="checkbox"/> V_0 =pin1=brown, V_+ =pin2=black, Out=pin3=blue
<input type="checkbox"/>	4...20mA	4...20mA current loop for PLC controllers. The current is proportional to the radiation, supply voltage is 24VDC	<input type="checkbox"/> V_0 =brown, V_+ =white	<input type="checkbox"/> V_0 =pin1=brown, V_+ =pin2=black
<input type="checkbox"/>	USB	The signal is transmitted via USB to a computer. Software is included.	----->	<input type="checkbox"/> Standard USB-A plug, 1,5 m cable
<input type="checkbox"/>	Pulse	UV pulse counting for pulses > 30ns, signal out is 5V when the pulse intensity is above threshold and 0V when below.	<input type="checkbox"/> V_0 =brown, V_+ =white, Out=green, Shield=black	<input type="checkbox"/> V_0 =1, V_+ =2, Out=3

STEP 4 → Sensitivity

We configure your UV sensor for intensities across 10 orders of magnitude from $1\text{nW}/\text{cm}^2$ to $10\text{W}/\text{cm}^2$. For good dynamic behaviour the min and max. intensity at the probe position needs to be known as precisely as possible. Please fill that value, if known, into the box below. If only a rough estimate is possible, please estimate it in the range selection fields. We will contact you for further refinement of the range.

max. radiation in mW/cm^2 or, if not precisely known, range estimation

- $1\text{nW}/\text{cm}^2 \dots 10\mu\text{W}/\text{cm}^2$ $10\mu\text{W}/\text{cm}^2 \dots 100\text{mW}/\text{cm}^2$ $100\text{mW}/\text{cm}^2 \dots 10\text{W}/\text{cm}^2$