

UV-Wireless

Wireless cosine-corrected UV sensor with receiver unit



GENERAL FEATURES



The UV-Wireless is a bundle of a wireless cosine-corrected UV sensor and a receiver unit that shows the current irradiance and dose measurement values. The units communicate via low-power 2.4 GHz. The UV-Wireless is used when sensor wiring would cause problems or is even impossible. A typical application of the UV-Wireless is the control of UV radiation emitted to disinfect air and surfaces. The unit will be configured upon individual customers' requirements which are clarified within the order process. Configurable parameters are the measurement range and the spectral responsivity (see page 2).

SPECIFICATIONS OF THE SENSOR UNIT

Dimensions	see drawing on page 2
Weight of sensor unit	151 g
Temperature coefficient (30 to 65°C)	0.05 to 0.075%/K
Operating and storage temperature	0°C to +60°C
IP protection class	IP40
Spectral sensitivity	Broadband UV, UVA, UVB, UVC, UV-Index, Bluelight and UV+VIS
Battery lifetime	10 hours (unlimited use with charger attached)
Radio range	15 meters in air, 10 meters if wall in between and 3 meters in a chamber
Connections	micro USB charger terminal
Measuring range	five orders of magnitude, individually configured according to customers' requirements
Transmission	low-power 2.4 GHz

SPECIFICATIONS OF THE RECEIVER UNIT

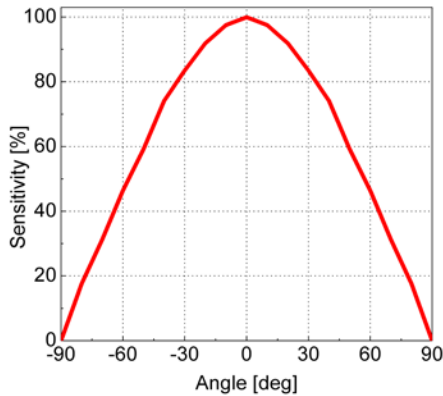
Dimensions	see drawing on page 2
Weight	131 g
Operating temperature	0°C to +40°C
Storage temperature	0°C to +60°C
IP protection class	IP4
Battery lifetime	10 hours (unlimited use with charger attached)

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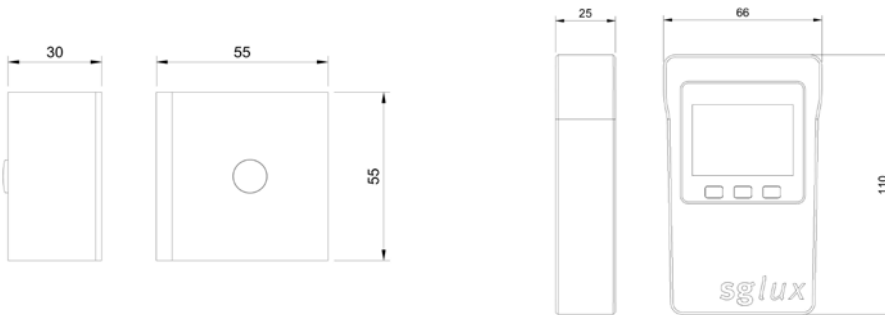
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SENSOR FIELD OF VIEW



DRAWINGS

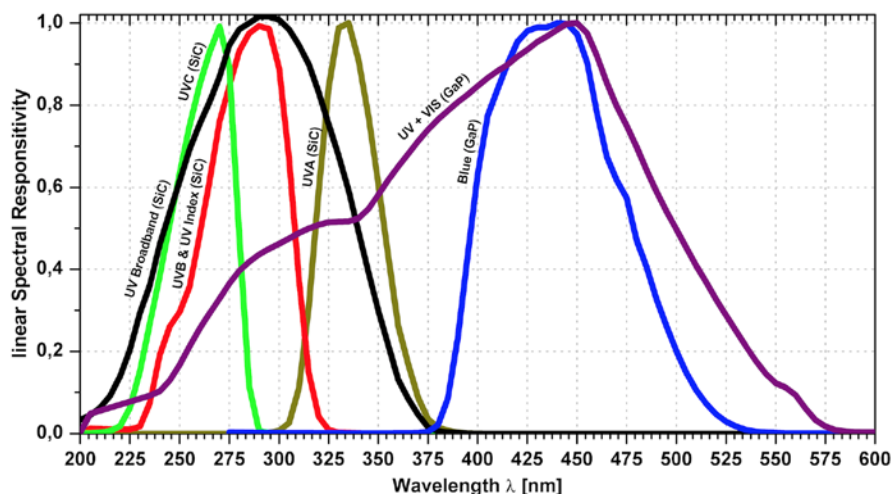


Drawing of the sensor unit

Drawing of the receiver unit

SPECTRAL RESPONSIVITY SELECTION OPTIONS

The below shows the available spectral responsivity curves. For UV measurement, by default, unfiltered broadband SiC should be applied. If a UV source also emits radiation, which must not contribute to the sensor's signal (e.g. UV medium pressure lamps that also emit non germicidal UV radiation), a filtered sensor (UVC, UVB or UVA only) is to be applied. For measurement of radiation around 400 nm, SiC is not suitable. GaP-based detectors should be used instead.



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GETTING STARTED

Charge the sensor unit while removing the cover and insert the USB cable. Charge the receiver unit while inserting the USB cable. Switch on both units while pressing the red power button on the display unit. The power switch of the sensor unit is behind the cover. The display unit can be switched off by double pressing of the power button



The receiver starts displaying the current irradiance. While pressing the "start" button, a dose measurement can be started.



The current dose and the time elapsed since the dose measurement start is displayed. The dose measurement can be stopped while pressing the "stop" button.



After having stopped the dose measurement, it is possible to continue (press the "continue" button) or to reset (press the "reset" button) the dose measurement. After resetting the dose measurement, the "start" button re-appears.