

UV-WiFi

Wireless cosine-corrected UV sensor



GENERAL FEATURES

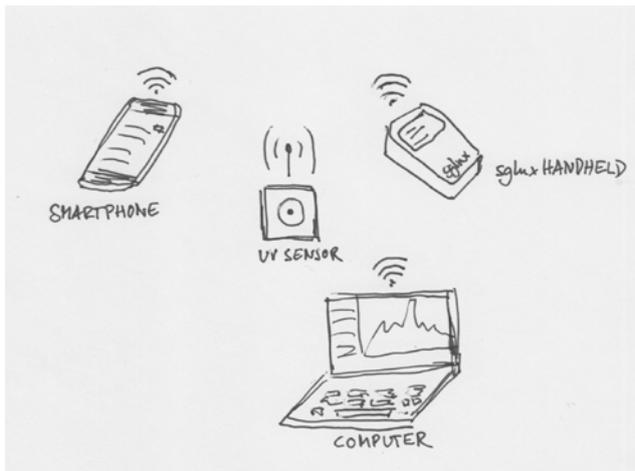


The UV-WiFi is a SiC-photodiode based UV sensor with cosine correction and a customized PTB traceable calibration.

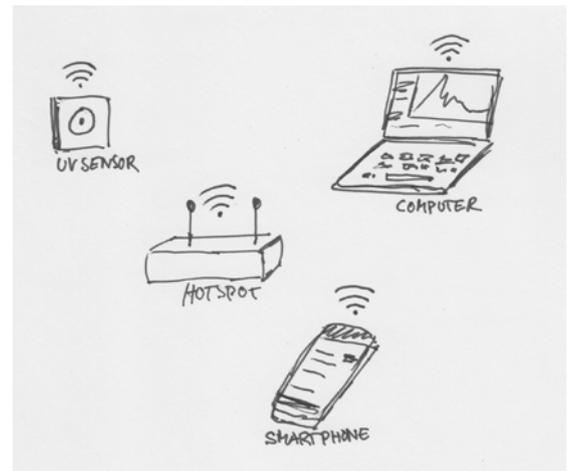
It is battery or power supply powered and acts either as a WiFi hotspot or as a part of an existing WiFi network. It can also be configured with a LAN terminal. The unit will be configured upon individual customers' requirements which are clarified within the order process. Configurable parameters are e.g. the WiFi properties (hotspot or network component), the measurement range and the spectral responsivity (see page 2). Please note that the housing of the customized product may differ from the picture given with the drawing. It may be smaller or larger or may consist of black PTFE instead of aluminium.

EXAMPLES HOW TO USE THE UV-WIFI

A quite common application is using the UV-WiFi inside of irradiation chambers where wiring is difficult or even impossible. The battery powered UV-WiFi acts as a hotspot. Outside of the chamber the signal is either received by a computer, a smartphone or a display unit produced by sglux. Air conditioning and air regeneration systems use the UV-WiFi as a power supply powered unit that communicates with an existing WiFi. The below sketches illustrate how to use the UV-WiFi.



The UV-WiFi acting as a hotspot



The UV-Wifi embedded into an existing network

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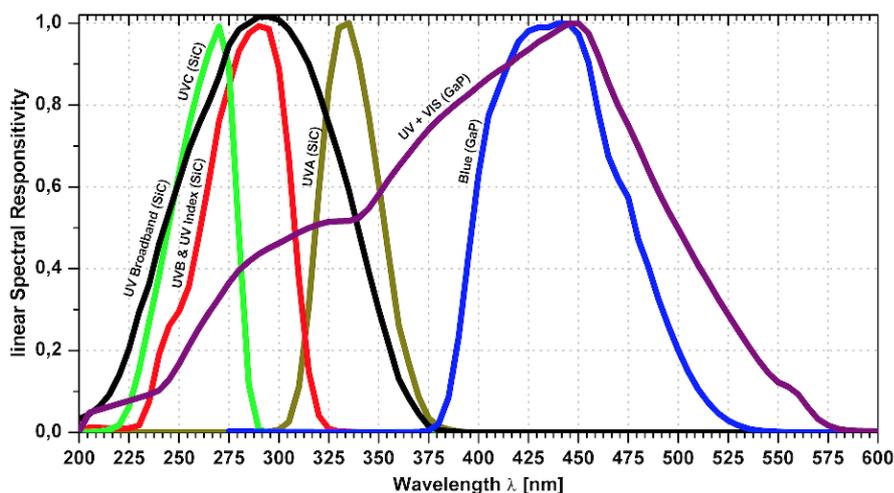


WIFI NETWORK SELECTION OPTION

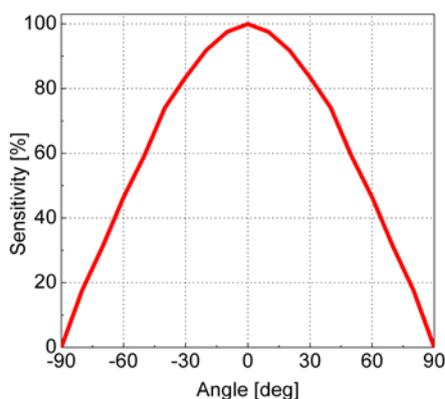
The UV-WiFi is not an off-the-shelf product. In close cooperation with the user we will do a careful customization. Parameters are e.g. the WiFi transmission power, the battery size or alternatively a power supply connection, the nature of the data structure and the question if the unit needs to work as a hotspot or a network component.

SPECTRAL RESPONSIVITY SELECTION OPTIONS

The below graph 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 are used instead.



SENSOR FIELD OF VIEW



DRAWING

