SiC UV Spectrometer

- **world's first SiC based UV spectrometer**
- **The high visible blindness of SiC now allows precise UV spectrometry in the presence of strong visible radiation (no stray light effects).**
- **SiC's high radiation hardness and low dark current create an enhanced dynamic range compared with Si-photodiode based spectrometers.**

sglux
The UV Experts

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UV Spectrometers

Catalog

sglux
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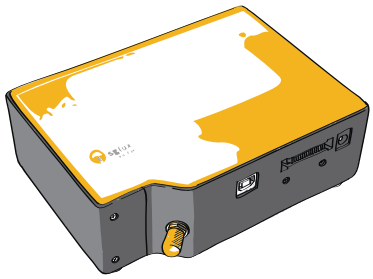
SIC UV SPECTROMETERS



Together with the Berlin Ferdinand Braun Institute sglux does R&D in the area of the development of the word's first UV-spectrometers that base on the semiconductor detector material Silicon Carbide. The advantage of such kind of UV spectrometers result from the extreme radiation hardness and very high visible blindness of SiC compared with Si based UV spectrometers leading to zero stray light effects caused by visible light.

This new spectrometer technology allows precise UV spectrometry also at presence of strong visible light such as UV measurements in the bright sun or under room light. Another advantage of the SiC UV spectrometer results from the high radiation hardness and low dark current of this material. This features lead to a broader dynamic range of the spectrometer compared with conventional Si based spectrometers.

FIRST PRODUCT "UV LINESIC128"

A first product of this new series is available (as a pre-series version). Development work on this new series is still ongoing aim to achieve higher resolution and smaller size.

Features of the UV lineSiC128 are:

- 128 pixel
- wavelength sensititvity range 200...385 nm
- wavelength resolution 2.3 nm/pixel (down to 0.4 nm/pixel under development with optimized grating and doubling of pixel number)
- intensity readings: 16 Bit resolution (20 Bit under development)
- dynamic range:
  1.5 orders via integrator ranges,
  3 orders by integration time (up to 5 orders under development)
- direct sunlight measurements possible
- very low degradation of detector either at high UV intensities (compared to UV enhanced Si-based spectrometers)