

UV lineSiC128

SiC based UV spectrometer - product announcement sheet

▶ ABOUT SiC BASED UV SPECTROSCOPY

sglux as the first company worldwide is working on a new product family of Silicon Carbide (SiC) based UV spectrometers. 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 (e.g. UV Index spectroscopy) 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).

- 128 pixel
- wavelength sensitivity 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 for precise UV Index spectroscopy)
- 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)