

# XD-9509

<https://www.gigahertz-optik.com/en-us/product/xd-9509/>

**Product tags: UV**



# Description

The typical symptom of UV erythema is acute skin inflammation caused by UV radiation (sunburn) which may be linked to skin cancer over prolonged exposure times. The XD-9509 detector permits direct measurement of the UV Erythema effective irradiance by means of its spectral responsivity adaptation to the nominal CIE Erythema spectral function. Its two sensor design offers best possible isolation between the UV-A<sub>eff</sub> and UV-BC<sub>eff</sub> sensors and also provides the best spectral match to Erythema actinic spectral function.

## Cosine Corrected Field of View

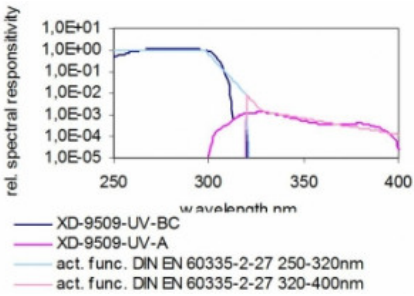
The angular response of the XD-9509-4 detector is cosine corrected.

## Traceable calibration

Calibration of the detector responsivity is performed by the Gigahertz-Optik GmbH calibration laboratory for optical radiation measurements quantities. As with all light detectors supplied by Gigahertz-Optik calibration of absolute detector responsivity as well as detector individual measured relative spectral responsivity data is included.

## Recommended Optometer

[X1](#)



XD-9509-4 - Typical Spectral Responsivity

# Specifications

Specification			
Spectral responsivity	CH1: Erythema UV-A <sub>eff</sub> (320 - 400) nm		
	CH2: Erythema UV-BC <sub>eff</sub> (250 - 320) nm		
Typical responsivity	CH1: UV-A: 1 µA/(W/m²)		
	CH2: UV-BC: 3.8 nA/(W/m²)		
Max. signal current	CH1: UV-A: 100 µA		
	CH2: UV-BC: 50 µA		
Input optics	8 mm Ø Cosine diffuser		
Measurement ranges	Sensor XD-9509-CH1	min (0.1 pA NEI) 2.50E-08	max (100 µA) 2.50E+01
	Sensor XD-9509-CH2	min (0.1 pA NEI) 6.67E-05	max (50 µA) 3.33E+04
Miscellaneous			
Temperature range	(5 - 40)°C		
Cable Length	2 m		

# Purchasing information

Article-Nr	Modell	Description
Product		
15296380	XD-9509 (-4 Connector)	Detector, Calibration Certificate

Article-Nr	Modell	Description
Re-calibration		
15300416	K-UV-D-SR	Calibration of relative spectral responsivity from 250 nm to 550nm
15300415	K-XD9509-I	Recalibration with Calibration Certificate

## Contact, Calibration, Service & Support

We are known worldwide for excellent technical consulting and after sales support. Contact us to find together the best solution for you. Our services:

- Technical Consulting & Sales
- After-Sales Support
- Calibrations & Re-Calibrations ([ISO/IEC 17025 Calibration Services](#), [factory calibration](#), [Calibration of Third-Party Products](#))
- Repairs & Updates
- OEM & Feasibility Consulting of Customized Solutions

[Send us your inquiry](#) or contact us by phone or e-mail. We would welcome your feedback too or review us on [Google](#).

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