

# RCH-XXXs Series

<https://www.gigahertz-optik.com/en-us/product/rch-xxxs/>

**Product tags:** UV ,



## Description

For UV-C disinfection systems, the fluence rate must be measured to ensure that the dose is sufficient for adequate disinfection. E.G. DIN 67506 requires as an option such measurements in order to characterize UV-C secondary air devices. With our RCH-OXXs detector series real spherical irradiance measurements, hence the fluence rate are possible. This traceable calibrated with high homogeneity to provide accurate measurements. This for 254 nm or UV-C LEDs.



*RCH-OXXs spherical irradiance detector*

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### Convincing specifications

A high degree of homogeneity of the spherical diffuser for precise measurements as well as high temperature resistance with little aging. We offer traceable calibrations, which can also be optimised for the desired radiation sources. To ensure a convincing application, the detector consists of a very small 10 mm diffuser sphere size and a flexible detector hose, which allows the measuring system to be easily inserted into systems.



real spherical irradiance detector for precise fluence rate measurements

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### Calibration

The detector can be built with different spectral responses and can be optimised and calibrated for various standard light sources or customer-specific lamps. The calibration is supplied with a factory calibration certificate that corresponds to the [high standard of the measuring laboratory for optical radiation measurements of Gigahertz-Optik](#). If necessary, a test certificate accredited according to DIN EN ISO / IEC 17025 can optionally be created for the detector with the associated measuring device.

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### Option

A version with rigid fiber is also available.

## Specifications

### General

Short description	UV spherical irradiance detectors for measuring the fluence rate in e.g. UV-C applications
Main features	Detectors for use with all Gigahertz-Optik measuring devices. Designed for use in with high-intensity and temperatures for fluence rate measurements.
Measurement ranges	depending on configuration (spectral response)
Typical applications	UV fluence rate measurements in disinfection with UV medium pressure arc lamps or high-performance UV LEDs

### Product

Sphere diameter	10 mm
Light Guide	Flexible: 50 cm / 20 inch
Input optics	inhomogeneity better $\pm$ 10% (except position of mechanical fixture)
Calibration	depending on setup, individually for typical LEDs or 254 nm
Typical responsivity	exemplarily for RCH-122s (rel. spectral similar to <a href="#">UV-3727</a> ): 5.15E-07 A/(W/cm <sup>2</sup> ) @ 222 nm 8.30E-07 A/(W/cm <sup>2</sup> ) @ 254 nm
<b>Miscellaneous</b>	
Temperature range	up to + 100 °C (short-term)
Humidity	<80%, non-condensing

## Purchasing information

Article-Nr	Modell	Description
<b>Product</b>		
15318570	RCH-022s-5	Spherical detector with -5 connector. Calibration with factory calibration certificate UV LED (250 - 300) nm in 5 nm steps and 222 nm, 254 nm
15318648	RCH-122s-5	Spherical detector with -5 connector. Rigid light guide. Calibration with factory calibration certificate UV LED (250 - 300) nm in 5 nm steps and 222 nm, 254 nm

## 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](#).

### Gigahertz Optik GmbH (Headquarter)

Tel.: +49 (0)8193-93700-0  
Fax: +49 (0)8193-93700-50  
[info@gigahertz-optik.de](mailto:info@gigahertz-optik.de)

An der Kaelberweide 12  
82299 Tuerkenfeld, Germany

### Gigahertz-Optik, Inc. (US office)

Phone: +1-978-462-1818  
[info-us@gigahertz-optik.com](mailto:info-us@gigahertz-optik.com)

Boston North Technology Park  
Bldg B - Ste 205  
Amesbury, MA 01913 USA