

# ISD-5-VISNIR

<https://www.gigahertz-optik.com/en-us/product/isd-5-visnir/>

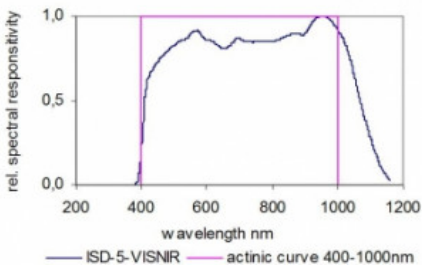
**Product tags:** VIS , NIR



# Description

## Compact Integrating Sphere Detector

The ISD-5-VISNIR integrating sphere detector employs a 50 mm / 2 inch diameter Barium Sulfate (ODP97) coated integrating sphere with 12.7 mm / 0.5 inch diameter measurement port and a (400-1100) nm radiometric detector.



## Diffuser Window

The sphere mounted photometric sensor is equipped with a diffuser so that the detector integrates reflected light from almost the complete integrating sphere surface. This greatly reduces hot spot effects caused by the first reflection of the light.

Typical Spectral Responsivity

## Baffle

The sensor is positioned close to the measurement port to produce a large acceptance angle within the sphere without direct irradiation of the detector.

## Traceable calibration



Calibration of radiant power responsivity in W is performed at Gigahertz-Optik's Calibration Laboratory for Optical Radiation Quantities.

# Specifications

Calibration		
Calibration	Calibration of integral radiant power responsivity in A/W	
Specification		
Spectral responsivity	400 nm - 1100 nm radiometric	
Typical responsivity	1.14 mA/W	
max. Radiant Power (Peak)	Power 800 mW 160 mW	Current 1 mA 200 µA
max. Radiant Power (CW)	may be limited by max. operation temperature	
Max. signal current	1 mA	
Input optics	12.7 mm Ø	
Sphere diameter	50 mm	
Coating	BaSO <sub>4</sub>	

<b>Miscellaneous</b>	
Mounting	M6 threaded hole
Connector	coaxial cable 2 m Long, with BNC (-1), calibration data (-2) or ITT (-4) connector
Temperature range	(5 - 40) °C

## Configurable with

Product Name	Product Image	Description	Go to product
P-9710		High-End Optometer for Measurement of CW-, Single Pulse and Modulated Radiation	<a href="https://www.gigahertz-optik.com/en-us/product/p-9710/">https://www.gigahertz-optik.com/en-us/product/p-9710/</a>
X9-4		Broadband light meter for for luminous flux and radiant power. Features: Mobile light meter. Integrating sphere detectors with photometric or radiometric 400-1000nm responsivity. Integrating spheres with 50mm dia. For use with polychromatic radiation sources.	<a href="https://www.gigahertz-optik.com/en-us/product/x9sub4sub/">https://www.gigahertz-optik.com/en-us/product/x9sub4sub/</a>

## Purchasing information

Article-Nr	Modell	Description
<b>Product</b>		
15298315	ISD-5-VISNIR-1	Detector head with -1 connector, calibration certificate
15298316	ISD-5-VISNIR-2	Detector head with -2 connector, calibration certificate
102841-4	ISD-5-VISNIR-4	Detector head with -4 connector, calibration certificate
<b>Re-calibration</b>		
15300248	K-ISD5VISNIR-I	Re-calibration of integral luminous flux responsivity in A/W with calibration certificate
15300580	K-Si-SR	Re-calibration of the relative spectral responsivity

## 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