

ISD-5-VISNIR

<http://www.gigahertz-optik.de/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

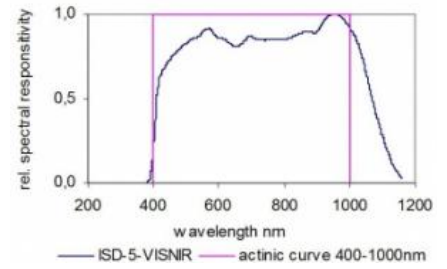
The sphere mounted photometric sensor is equipped with a diffuser so that the detector integrates reflected light from almost the complete integrating sphere surface. This greatly reduces hot spot effects caused by the first reflection of the light.

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.



Typical Spectral Responsivity

Specifications

Calibration

Calibration	Calibration of integral radiant power responsivity in A/W
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Specification








spectral responsivity	400 nm - 1100 nm radiometric
typical responsivity	1.14 mA/W
max. Radiant Power (Peak)	800 mW @1 mA
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 ₄
Sensor	RW-1105

Miscellaneous

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

Produktname	Product Image	Description	Show product
P-9710		<p>High-quality device for measurement of CW-, single pulse and modulated radiation.</p> <p>Features: Optometer for all detector heads with calibration data plug. Measurement modes: CW, pulse energy, dose, peak-to-peak, effective luminous intensity (Blondel-Rey), data logger, battery, main power, RS232</p>	http://www.gigahertz-optik.de/en-us/product/P-9710
P-9710-2		<p>High quality optometer for pulse-energy measurements of short pulses in photometric, radiometric and LASER application.</p> <p>Features: pulse energy measurement, CW, dose, simple and safe detector exchange, battery, main power, RS232</p>	http://www.gigahertz-optik.de/en-us/product/P-9710-2
P-9710-4		<p>High quality optometer for pulse-energy measurements of short pulses in photometric, radiometric and LASER application</p> <p>Features: pulse energy measurement with external Trigger input, CW, dose, simple and safe detector exchange, battery, main power, RS232</p>	http://www.gigahertz-optik.de/en-us/product/P-9710-4
X1		<p>Four-channel USB optometer designed for mobile use.</p> <p>Features: Compact device for use with all photometric, radiometric, colorimetric, plant-physiologic and photo-biologic measurement heads from Gigahertz-Optik. USB interface. Battery operation or power supply USB.</p>	http://www.gigahertz-optik.de/en-us/product/X1
X1-RM		<p>Optometer in 3HE housing for use in 19" racks.</p> <p>Features: Its USB and RS232 remote interface and two additional RS232 device interfaces make the device highly flexible when it comes to system integration. Its four signal inputs enable use with all photometric, radiometric, colorimetric, plant-physiologic and photo-biologic measurement heads from Gigahertz-Optik.</p>	http://www.gigahertz-optik.de/en-us/product/X1-RM
X1-PCB		<p>Optometer module.</p> <p>Feature: The X1 optometer is available as a printed circuit board either with or without a housing and is suited for applications that do not require a keyboard or display. Four signal inputs enable connection with all measuring heads from Gigahertz-Optik.</p>	http://www.gigahertz-optik.de/en-us/product/X1-PCB

Produktname	Product Image	Description	Show product
P-2000		Two-channel optometer. Features: For use with most photometric and radiometric detectors supplied by Gigahertz-Optik. Modes: CW, pulse energy from both single and multiple flashes, effective luminous intensity (Blondel-Rey), data logger and others.	http://www.gigahertz-optik.de/en-us/product/P-2000
P-9801		Eight-channel optometer. Features: State-of-the-art 8 channel laboratory optometer with a signal amplifier and sample & hold ADC per channel for clocked recording of the measurement signals. RS232 and IEEE488 interface. Trigger input and output.	http://www.gigahertz-optik.de/en-us/product/P-9801
P-9802		Light meter for laboratory use with up to 36 measurement heads. Features: For use with up to 36 photometric and/or radiometric measurement heads. RS232 interface.	http://www.gigahertz-optik.de/en-us/product/P-9802
TR-9600		High-speed 1µs or 100ns rise time data logger optometer. Features: Laboratory device for recording of clocked intensity progress readings in single light flashes, flash sequence or modulated light. Calculation of pulse data e.g. peak intensity, pulse length, pulse half width, pulse energy and pulse repeat rate, etc.	http://www.gigahertz-optik.de/en-us/product/TR-9600
P-9202-4		Fast response time trans-impedance signal amplifier. Features: High quality analogue amplifier with current-voltage conversion. Minimal diode offset voltage for short circuit operations. Bandwidths of up to 330kHz. 1µs rise time. Large I-U amplification range from 10pA/V to 1mA/V.	http://www.gigahertz-optik.de/en-us/product/P-9202-4
P-9202-5		Universal trans-impedance signal amplifier. Features: High quality analogue amplifier with current-voltage conversion. Minimal diode offset voltage (1mV) for short circuit photodiode operations. 5µs to 20ms rise time depending on the amplification. Large I-U amplification range – 1×10 ⁻¹⁰ A/V to 1×10 ⁻³ A/V.	http://www.gigahertz-optik.de/en-us/product/P-9202-5
P-9202-6		Highly sensitive trans-impedance signal amplifier. Features: High quality analogue amplifier with current-voltage conversion with minimal diode offset voltage (0.5mV) for short circuit photodiode operation of . 2.5s to 25s rise time depending on the amplification. Large I-U amplification range – 1×10 ⁻¹¹ A/V to 1×10 ⁻⁴ mA/V.	http://www.gigahertz-optik.de/en-us/product/P-9202-6

Purchasing information

Article-Nr	Modell	Description
Product		
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
Re-calibration		

Article-Nr	Modell	Description
15300248	K-ISD5VISNIR-I	Re-calibration of integral luminous flux responsivity in A/lm with calibration certificate
15300580	K-Si-SR	Re-calibration of the relative spectral responsivity