

ISD-10-Si

<http://www.gigahertz-optik.de/en-us/product/ISD-10-Si>

Product tags: VIS , NIR



Description

Integrating sphere detector with 100 mm diameter, configured to measure laser and laser diodes with a divergence up to 64° and peak powers up to 100 W.

25,4 mm Diameter Measurement Port

The ISD-10 integrating sphere detector with 100 mm diameter integrating sphere features a large 25,4 mm diameter measurement port making it suitable for use with larger diameter Laser beams like Laser range finders. The sphere is coated with Barium Sulfate (ODP97).

If needed, the measuring port can be reduced to smaller diameters with port reducers.

Broad Spectral Responsivity

The integrating sphere detector is equipped with a Si diode which covers the wavelength range from 400 nm to 1100 nm.

Detectors with Diffuser Windows

Diffuser windows mounted in front of the detectors enable the detectors to integrate reflected radiation from almost the complete integrating sphere surface minimizing hot-spots caused by the first beam reflection.

Detector in "Shadow Position"

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

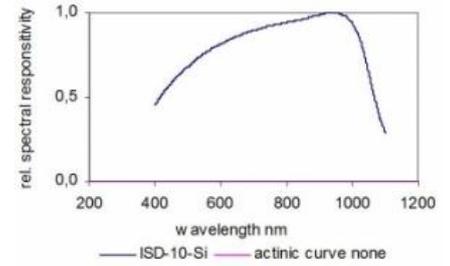
This eliminates the need to use a baffle.

Fiber Connector and Auxiliary Port

In addition to the detector port and the measurement port, the ISD-10 is also equipped with two additional ports:

- A SMA connector to connect a fiber from a spectralradiometer to the sphere
- An auxiliary port, e.g. to use for substitution correction

Specifications



ISD-10-Si Typical Spectral Responsivity

Specification	
Sphere diameter	100 mm
Port Size	15 mm
Coating	ODP97
spectral responsivity	400 nm - 1100 nm Si Photodiode
typical responsivity	1.6 mA/W @ 633 nm 1.9 mA/W @ 900 nm
max. Radiant Power (CW)	0.6 W * 0.5 W * * The max CW or average power is limit by the max operation temperature
Max. signal current	1 mA
Cable Length	2 m
Plug Types	-1,-2,-4
Calibration	Calibration of spectral responsivity in A/W in 10nm steps from 400 to 1100nm
spectral range	(400 - 1100) nm
Miscellaneous	
temperature range	(5 - 40) °C

Downloads

Type	Description	File-Type	Download
Datenblatt	Dimensions	pdf	http://www.gigahertz-optik.de/assets/Uploads/102848-isd-10-si-pdf

Configurable with

Produktname	Product Image	Description	Show product
P-9710		High-quality device for measurement of CW-, single pulse and modulated radiation. 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	http://www.gigahertz-optik.de/en-us/product/P-9710
X1		Four-channel USB optometer designed for mobile use. 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.	http://www.gigahertz-optik.de/en-us/product/X1

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

Purchasing information

Article-Nr	Modell	Description
Product		
15298336	ISD-10-Si (-1 Con.)	Detector, Calibration Certificate
15298337	ISD-10-Si (-2 Con.)	Detector, Calibration Certificate
15298338	ISD-10-Si (-4 Con.)	Detector, Calibration Certificate
Re-calibration		
15300256	K-ISD10Si-SD	Detector, Calibration Certificate