

ISD-3P-IGA

<https://www.gigahertz-optik.com/en-us/product/isd-3p-iga-2>

Product tags: NIR



Description

Integrating Sphere Detector

The ISD-3P-IGA integrating sphere detector employ a 30 mm diameter ODM98 coated integrating sphere with 5mm diameter measurement port. The unique collar baffle limits direct irradiation of the detector from dispersed light. The collar baffle enables optional detector ports to be added for additional detectors, fiber connectors or auxiliary use. The ISD-3P-IGA features an InGaAs photodiode detector for use in the spectral range from 800 to 1800nm spectral range.

Synthetic Coating

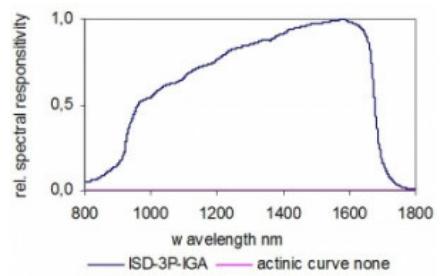
Gigahertz-Optik's synthetic ODM98 coating offers almost perfect hemispherical diffuse reflection for best light distribution inside the sphere.

Traceable Calibrations

Calibration of spectral radiant power sensitivity in W is performed in 10 nm steps from 800 to 1800 nm at Gigahertz-Optik's Calibration Laboratory for Optical Radiation Quantities.



detector for Laser power



Typical Spectral Responsivity

Specifications

Calibration

Calibration Calibration of spectral radiant power responsivity in A/W in 10 nm steps from 800 nm - 1800 nm

Specification

typical responsivity 800 nm - 1800 nm radiometric

typical responsivity 0.17E-04 A/W @ 1300 nm

0.20E-04 A/W @ 1550 nm

max. Radiant Power (Peak) 11.7 mW @ 1300 nm & 200 μ A

10 mW @ 1550 nm & 200 μ A

58.8 mW @ 1300 nm & 1 mA

50 mW @ 1550 nm & 1 mA

max. Radiant Power (CW) may be limited by max. operation temperature

Max. signal current 1 mA

Input optics 5 mm Ø

Sphere diameter	30 mm
Coating	synthetic ODM98
Sensor	Si photodiode
spectral range	(800 - 1800) nm
Rise time	0.875 ns
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

Product Name	Product Image	Description	Show product
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.	https://www.gigahertz-optik.com/en-us/product/tr-9600
P-9802		Light meter for laboratory use with up to 24 measurement heads. Features: For use with up to 24 photometric and/or radiometric measurement heads. RS232 interface.	https://www.gigahertz-optik.com/en-us/product/p-9802
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.	https://www.gigahertz-optik.com/en-us/product/p-2000
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.	https://www.gigahertz-optik.com/en-us/product/p-9202-4

Purchasing information

Article-Nr	Modell	Description
Product		
15298324	ISD-3P-IGA-1	Detector head with -1 connector, calibration certificate
15298325	ISD-3P-IGA-2	Detector head with -2 connector, calibration certificate
15298326	ISD-3P-IGA-3	Detector head with -4 connector, calibration certificate
Calibration		

Article-Nr	Modell	Description
15300252	K-ISD3PIGA-SD	Re-calibration of spectral radiant power responsivity in A/W with calibration certificate
Options		
101219	UM-DP-11	additional detector port
100929	UFC-11-SMA	SMA connector