

ISD-3P-Si

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

Product tags: VIS , NIR



Description

Integrating Sphere Detector

The ISD-3P-Si 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-Si features a Si photodiode detector for use in the spectral range from 400 to 1100nm spectral range.

Synthetic Coating

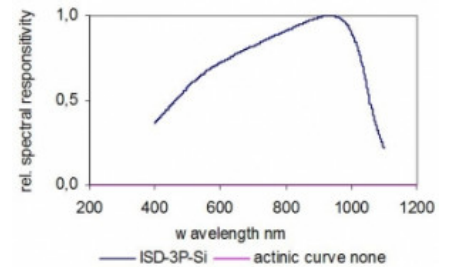
Gigahertz-Optik's synthetic ODM98 coating offers almost perfect hemispherical diffuse reflection for best light distribution inside the sphere.

Traceable Calibrations

Calibration of spectral radiant power sensitivity in W is performed in 10 nm steps from 400 to 1100 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 10nm steps from 400 nm - 1100 nm

Specification

typical responsivity 400 nm - 1100 nm radiometric

typical responsivity 6.41E-04 A/W @ 630 nm

8.87E-04 A/W @ 900 nm

max. Radiant Power (Peak) 312 mW @ 633 nm & 2 00µA

225 mW @ 900 nm & 2 00µA

1559 mW @ 633 nm & 1 mA

1127 mW @ 900 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	(400 - 1100) nm
Rise time	0.1 μ s
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
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	https://www.gigahertz-optik.com/en-us/product/p-9710
P-9710-2		High quality optometer for pulse-energy measurements of short pulses in photometric, radiometric and LASER application. Features: pulse energy measurement, CW, dose, simple and safe detector exchange, battery, main power, RS232	https://www.gigahertz-optik.com/en-us/product/p-9710-2
P-9710-4		High quality optometer for pulse-energy measurements of short pulses in photometric, radiometric and LASER application. Features: pulse energy measurement with external Trigger input, CW, dose, simple and safe detector exchange, battery, main power, RS232	https://www.gigahertz-optik.com/en-us/product/p-9710-4
TR-9600		High-speed 1 μ s 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

Product Name	Product Image	Description	Show product
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		
15298321	ISD-3P-Si-1	Detector head with -1 connector, calibration certificate
15298322	ISD-3P-Si-2	Detector head with -2 connector, calibration certificate
15298323	ISD-3P-Si-3	Detector head with -4 connector, calibration certificate
Re-calibration		
15300251	K-ISD3PSi-SD	Re-calibration of spectral radiant power responsivity in A/W with calibration certificate
Options		
101219	UM-DP-11	additional detector port
Accessories		
100929	UFC-11-SMA	SMA connector