

## PD-9310 with SRT-M37-L

[https://www.gigahertz-optik.de/en-us/product/PD-9310 with SRT-M37-L](https://www.gigahertz-optik.de/en-us/product/PD-9310%20with%20SRT-M37-L)

**Product tags:** VIS



## Description

### Illuminance and luminance measurement

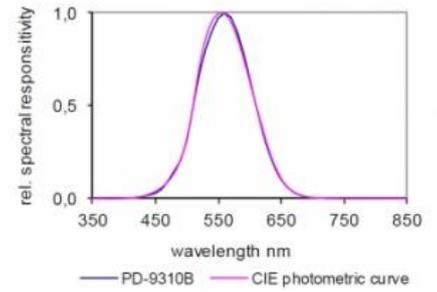
The PD-9310B-N is detector designed for measurement of low illuminance levels. Because of not having a diffuser window, the PD-9310B-N offer higher illuminance responsivity compared to the PD-9310B detector with diffuser window. The fact it does not have a diffuser window however limits its field of view and only light sources whose extent is within the field of view of the measurement head e.g. spot lamps can be measured. The application potential of the PD-9310B-N can be enhanced using an SRT-M37-L series optical head so as to measure the luminance in  $\text{cd}/\text{m}^2$ . Since measurement field focusing is hereby not possible, this combination is mostly applicable for extensive illumination fields.

The SRT-M37-L optical head can be directly screwed onto the front screw of the PD-9310B-N measurement head.

Optical heads with  $1^\circ$ ,  $2^\circ$ ,  $5^\circ$  and  $10^\circ$  measurement field angles are hereby offered.

### Traceable calibrations

Luminance responsivity calibration of the optical head combined with the measurement head is possible. The calibration is performed by Gigahertz-Optik's calibration laboratory for optical measurands. Calibration is validated by a calibration certificate.



*PD-9310B-N Typical Spectral Responsivity*

## Specifications

### Calibration

Calibration of the luminance responsivity in  $\text{A}/(\text{cd}/\text{m}^2)$

Calibration of the relative spectral responsivity in the visible spectral range

### Specification

spectral responsivity	$V(\lambda)$
Lens diameter	22.4mm
typical responsivity	17pA/( $\text{cd}/\text{m}^2$ ) ( $1^\circ$ lens)
typical responsivity	68pA/( $\text{cd}/\text{m}^2$ ) ( $2^\circ$ lens)
typical responsivity	360pA/( $\text{cd}/\text{m}^2$ ) ( $5^\circ$ lens)
typical responsivity	1700pA/( $\text{cd}/\text{m}^2$ ) ( $10^\circ$ lens)

### Options

SRT-M37Z01

Lens hood made of soft rubber for the SRT-M37-L lens adapter. Also recommended for contact measurements

## 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>	<a href="https://www.gigahertz-optik.de/en-us/product/P-9710">https://www.gigahertz-optik.de/en-us/product/P-9710</a>
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>	<a href="https://www.gigahertz-optik.de/en-us/product/X1">https://www.gigahertz-optik.de/en-us/product/X1</a>
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>	<a href="https://www.gigahertz-optik.de/en-us/product/X1-RM">https://www.gigahertz-optik.de/en-us/product/X1-RM</a>
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>	<a href="https://www.gigahertz-optik.de/en-us/product/X1-PCB">https://www.gigahertz-optik.de/en-us/product/X1-PCB</a>
P-2000		<p>Two-channel optometer.</p> <p>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.</p>	<a href="https://www.gigahertz-optik.de/en-us/product/P-2000">https://www.gigahertz-optik.de/en-us/product/P-2000</a>
P-9801		<p>Eight-channel optometer.</p> <p>Features: State-of-the-art 8 channel laboratory optometer with a signal amplifier and sample &amp; hold ADC per channel for clocked recording of the measurement signals. RS232 and IEEE488 interface. Trigger input and output.</p>	<a href="https://www.gigahertz-optik.de/en-us/product/P-9801">https://www.gigahertz-optik.de/en-us/product/P-9801</a>

Produktname	Product Image	Description	Show product
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.	<a href="https://www.gigahertz-optik.de/en-us/product/P-9802">https://www.gigahertz-optik.de/en-us/product/P-9802</a>
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.	<a href="https://www.gigahertz-optik.de/en-us/product/P-9202-4">https://www.gigahertz-optik.de/en-us/product/P-9202-4</a>
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 <sup>-10</sup> A/V to 1×10 <sup>-3</sup> A/V.	<a href="https://www.gigahertz-optik.de/en-us/product/P-9202-5">https://www.gigahertz-optik.de/en-us/product/P-9202-5</a>
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 <sup>-11</sup> A/V to 1×10 <sup>-4</sup> mA/V.	<a href="https://www.gigahertz-optik.de/en-us/product/P-9202-6">https://www.gigahertz-optik.de/en-us/product/P-9202-6</a>

## Purchasing information

Article-Nr	Modell	Description
<b>Product</b>		
15298288	PD-9310B-N-1	Detector, protective cap, calibration certificate (lx), cable with BNC plug
15298286	PD-9310B-N-2	Detector, protective cap, calibration certificate (lx), cable with –2 plug
15298287	PD-9310B-N-4	Detector, protective cap, calibration certificate (lx), cable with –4 plug
<b>Calibration</b>		
15300264	K-PD9310-I	Re-calibration, Calibration certificate
15300580	K-SI-SR	Re-Kalibrierung (nur in Verbindung mit K-PD9310-I)
15300530	K-PD9310SRT-I	Re-calibration, only together with K-PD9310-I
15300178	K-SAZ-08	Simulated calibration correction factors for visible LED sources out of the Gigahertz-Optik GmbH lamp emission spectrum database. Monochromatic LEDs in 10nm steps and white LEDs.
<b>Miscellaneous</b>		
15295950	SRT-M37Z-01	Lens hood
<b>Options</b>		
15295665	SRT-M37L-1	1° measurement field angle lens adapter
15295666	SRT-M37L-2	2° measurement field angle lens adapter

<b>Article-Nr</b>	<b>Modell</b>	<b>Description</b>
15295668	SRT-M37L-5	5° measurement field angle lens adapter
15295740	SRT-M37L-10	10° measurement field angle lens adapter