

UV-3702

<https://www.gigahertz-optik.com/en-us/product/uv-3702/>

Product tags: UV



Description

The spectral responsivity range of the model UV-3702 covers the UV-B range from 280-315 nm

General Purpose UV Radiation Measurement Detector

The UV-37 series of UV radiometric detectors are primarily used for spectral broadband irradiance measurements within a defined spectral range of polychromatic radiation. Optical filters are used to shape the bare photodiode response to the desired spectral bandpass. The computer aided optical filter design produces the best possible broadband radiometric response within the spectral sector specified.

Pre-aged Components

All optical and optoelectronic components of the UV-37 detectors are UV Radiation pre-aged for Long time stability.

Cosine Field-of-View

A cosine F.O.V. characteristic of the detectors spatial responsivity is effected by the diffusor window of UV-37 detectors.

Designed for Wide Dynamic

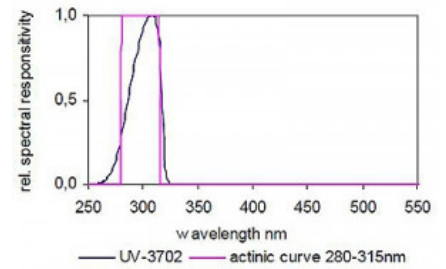
The UV-37 detectors are designed for the highest possible irradiance sensitivity for low irradiance level applications. However the wide range linearity of the photodiodes coupled with the Gigahertz-Optik optometers's wide dynamic signal range amplifiers enable the UV-37 series detectors to be used in applications with high irradiances as well. The upper range is limited only by the detector maximum operating current and its specified operation temperature.

Compact Housing

The UV-37 series irradiance detectors are built in a compact 37mm diameter black anodized aluminum housing. The shadow ring around the diffusor support the wide-angle cosine response. A side M6 tapped mounting hole allows the detector be fixed in place. The 37-type standard housing allows other SRT-M37 type accessories to be attached using the SRT-M45/37-B adapter for radiance or intensity measurements.

Traceable Calibrations

Calibration of irradiance in W/m^2 and/or W/cm^2 as well as the detector's







Typical Spectral Responsivity










relative spectral responsivity is performed at Gigahertz-Optik's Calibration Laboratory. Beside the regular calibration with spectral broadband reference lamps alternative calibrations with monochromatic or custom type reference lamps can be supplied as an option. The calibration and its traceability are confirmed in the calibration certificate supplied with each detector.



Specifications

Specification	
spectral responsivity	UV-B 280-315 nm
typical responsivity	1.7 nA/(W/m ²)
Max. signal current	50 µA
Input optics	11 mm Ø diffusor window
Input optics	Cosine F.O.V.
Housing	37 mm Ø, 50 mm height
Mounting	side M6 thread hole
Connector	coaxial cable 2 m Long, with BNC (-1), calibration data (-2) or ITT (-4) connector
temperature range	5 - 40 ° C
min. signal current	depends on optometer

Configurable with

Product Name	Product Image	Description	Go to product
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/
GB-GD-360-RB40		Goniometer for the measurement of 2π sources	https://www.gigahertz-optik.com/en-us/product/gb-gd-360-rb40/
X1		Four-Channel USB Optometer, Respectively Current Amplifier, Designed for Photometric and Radiometric Detectors for Mobile-Use	https://www.gigahertz-optik.com/en-us/product/x1/

Product Name	Product Image	Description	Go to product
X1-2		<p>Four-channel RS232 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 and RS232 interface. Battery operation or power supply USB.</p>	https://www.gigahertz-optik.com/en-us/product/x1-2/
X1-RM		<p>Optometer in 3HE Housing for use in 19" Racks</p>	https://www.gigahertz-optik.com/en-us/product/x1-rm/
X1-PCB		<p>Optometer Module / Current Amplifier</p>	https://www.gigahertz-optik.com/en-us/product/x1-pcb/
X1-PCBC		<p>Optometer module. 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>	https://www.gigahertz-optik.com/en-us/product/x1-pcbc/
TR-9600		<p>High-Speed and Short Rise Time Data Logger Optometer (Transient Recorder Current Amplifier)</p>	https://www.gigahertz-optik.com/en-us/product/tr-9600/
P-9802		<p>Current Amplifier (Optometer) for Laboratory Use with up to 24 Measurement Heads</p>	https://www.gigahertz-optik.com/en-us/product/p-9802/
P-9801		<p>8-Channel High Class Current Amplifier/Optometer</p>	https://www.gigahertz-optik.com/en-us/product/p-9801/
P-2000		<p>Two-Channel Optometer</p>	https://www.gigahertz-optik.com/en-us/product/p-2000/
x9-7		<p>Broadband radiometer for irradiance. Features: Mobile meter. Detectors with different bandwidths and spectral ranges to select. For use with polychromatic radiation sources.</p>	https://www.gigahertz-optik.com/en-us/product/x9-7/

Product Name	Product Image	Description	Go to product
P-9710		High-End Optometer for Measurement of CW-, Single Pulse and Modulated Radiation	https://www.gigahertz-optik.com/en-us/product/p-9710/
P-21		High-Quality Touchscreen Optometer for Measurement of CW-, Single Pulse and Modulated Radiation	https://www.gigahertz-optik.com/en-us/product/p-21/

Purchasing information

Article-Nr	Modell	Description
Product		
101255	UV-3702-1	Detector head with -1 connector, calibration certificate.
101822	UV-3702-2	Detector head with -2 connector, calibration certificate.
101823	UV-3702-4	Detector head with -4 connector, calibration certificate.
Calibration		
15300577	K-FOV	Calibration of the F.O.V
15311998	KP-UV3702X1-E-I	Option: DIN EN ISO/IEC 17025:2018 Test Certificate (DAkks). Integral irradiance in the wavelength range from 280 nm to 315nm. In combination with X1 optometer.
15311999	KP-UV3702P9710-E-I	Option: DIN EN ISO/IEC 17025:2018 Test Certificate (DAkks). Integral irradiance in the wavelength range from 280 nm to 315nm. In combination with P-9710 optometer.
Re-calibration		
15300693	K-UV3702-I	Re-calibration of integral irradiance responsivity in A/(W/m²) with calibration certificate.
15300571	K-UV-SR	Re-calibration of the relative spectral responsivity.
15311996	KKP-UV3702P9710-E-I	Factory Calibration Certificate with DIN EN ISO/IEC 17025:2018 Test Certificate. In combination with P-9710 optometer.
15311997	KKP-UV3702X1-E-I	Factory Calibration Certificate with DIN EN ISO/IEC 17025:2018 Test Certificate. In combination with X1 optometer.