

UV-3702

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

Product tags: UV

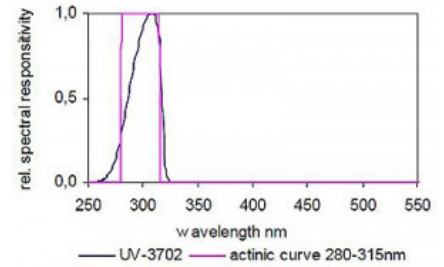


Description

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.



Typical Spectral Responsivity

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

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/m²)
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 2m Long, with BNC (-1), calibration data (-2), ITT (-4) or ITT Calibration Data (-5) connector Information about the individual connectors can be found here under “More info”
Temperature range	5 - 40 ° C
min. signal current	depends on optometer

Configurable with

Product Name	Product Image	Description	Go to product
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/
X1-RM		Optometer in 3HE Housing for use in 19” Racks	https://www.gigahertz-optik.com/en-us/product/x1-rm/
X1-PCBCL		Optometer respectively Current Amplifier Module with 4 Input Channels and 7 Gain Ranges	https://www.gigahertz-optik.com/en-us/product/x1-pcb/

Product Name	Product Image	Description	Go to product
X1-PCBCL		Optometer module with 4 channels based on X1 technologie	https://www.gigahertz-optik.com/en-us/product/x1-pcbc/
TR-9600		High-Speed and Short Rise Time Data Logger Optometer (Transient Recorder Current Amplifier)	https://www.gigahertz-optik.com/en-us/product/tr-9600/
P-9802		Current Amplifier (Optometer) for Laboratory Use with up to 24 Measurement Heads	https://www.gigahertz-optik.com/en-us/product/p-9802/
P-9801		8-Channel High Class Current Amplifier/Optometer	https://www.gigahertz-optik.com/en-us/product/p-9801/
P-2000		Two-Channel Optometer	https://www.gigahertz-optik.com/en-us/product/p-2000/
x9-7		Broadband radiometer for irradiance. Features: Mobile meter. Detectors with different bandwidths and spectral ranges to select. For use with polychromatic radiation sources.	https://www.gigahertz-optik.com/en-us/product/x9-7/
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		Multi-Purpose Touchscreen Optometer for Measurement of CW-, Single Pulse and Modulated Radiation in any Photometric and Radiometric Application	https://www.gigahertz-optik.com/en-us/product/p-21/

Purchasing information

Article-Nr	Modell	Description
Product		

Article-Nr	Modell	Description
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.
15312511	UV-3702-5	Detector head with -5 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.

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- Repairs & Updates
- OEM & Feasibility Consulting of Customized Solutions

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