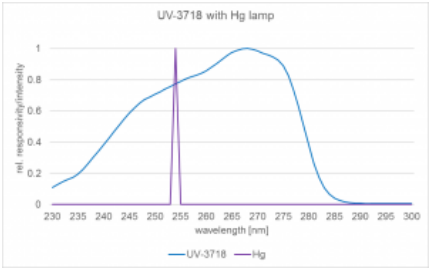
UV-3718

https://www.gigahertz-optik.com/en-us/product/uv-3718

Product tags: UV

Description

The detector head UV-3718 is designed for narrow band UV-C 254 nm radiation sources with distinct 254 nm Peak Emission spectrum. Optical filters are used to shape the bare photodiode response to the desired spectral bandpass.



Typical Spectral Responsivity

Pre-aged Components

All optical and optoelectronic components of the UV-3718 detector pre-aged by UV-C Radiation for extended 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-3718 detector. The diffursor window is made by UV stable RADIN material. .

Designed for Wide Dynamic

The UV-3718 detectors is 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-3718 detector 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.

UV-C stable Housing and cable

The UV-3718 irradiance detector is built in a compact 37mm diameter black anodized aluminum housing. A side M6 tapped mounting hole allows the detector be fixed in place

Traceable Calibrations

Calibration of irradiance in W/m² and/or W/cm² 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

Calibration

Calibration	Calibration of irradiance responsivity in A/(W/m²) using a monochromatic 254 nm reference lamp.
Specification	
spectral responsivity	UV-C 254 nm
typical responsivity	2 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, 32 mm height
Mounting	side M6 thread hole
Connector	coaxial cable 2 m Long, with BNC (-1), calibration data (-2) or ITT (-4) connector. Flexible metal tube
temperature range	(5 - 40) °C
min. signal current	depends on optometer

Downloads

Type	Description	File-Type	Download
Drawing	UV-3718		

Configurable with

Product Name	Product Image	Description	Show 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
X1		Four-channel USB 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 interface. Battery operation or power supply USB.	https://www.gigahertz-optik.com/en-us/product/x1

Product Name	Product Image	Description	Show product
X1-2		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.	https://www.gigahertz-optik.com/en-us/product/x1-2
X1-RM		Optometer in 3HE housing for use in 19” racks. 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.	https://www.gigahertz-optik.com/en-us/product/x1-rm
X1-PCB		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.	https://www.gigahertz-optik.com/en-us/product/x1-pcb
X1-PCBC		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.	https://www.gigahertz-optik.com/en-us/product/x1-pcbc
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-9801		Eight-channel optometer. Features: State-of-the-art 8 channel laboratory optometer with a signal amplifier and sample & hold ADC per channel for clocked recording of the measurement signals. RS232 and IEEE488 interface. Trigger input and output.	https://www.gigahertz-optik.com/en-us/product/p-9801
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-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
X9-11 + X9-11u		254nm UV-C Radiometer. Features: Mobile meter. Measurement of 254nm UV-C irradiance from disinfection lamps (UVGI = UV Germicidal Irradiance Effective Radiation) and UV-C-EPROM erasing lamps.	https://www.gigahertz-optik.com/en-us/product/x911ux911u

Product Name	Product Image	Description	Show product

Purchasing information

Article-Nr	Modell	Description
Product		
101265	UV-3718-1	Detector head with -1 connector, calibration certificate.
15297127	UV-3718-2	Detector head with -2 connector, calibration certificate.
15297129	UV-3718-4	Detector head with -4 connector, calibration certificate.
15312114	UV-3718-5	Detector head with -5 connector, calibration certificate.
Calibration		
15311972	KP-UV3718X1-E-I	Option: DIN EN ISO/IEC 17025 Test Certificate (DAkkS). In combination with X1 optometer.
15311973	KP-UV3718P9710-E-I	Option: DIN EN ISO/IEC 17025 Test Certificate (DAkkS). In combination with P-9710 optometer.
Re-calibration		
15300669	K-UV3718-S	Re-calibration of irradiance responsivity in A/(W/m²) and A/(W/cm²) at 254nm with calibration certificate.
15300571	K-UV-SR	Re-calibration of the relative spectral responsivity.
15311971	KKP-UV3718X1-E-I	DIN EN ISO/IEC 17025 Test Certificate (DAkkS). Includes factory calibration. In combination with X1 optometer.
15311974	KKP-UV3718P9710-E-I	DIN EN ISO/IEC 17025 Test Certificate (DAkkS). Includes factory calibration. In combination with P-9710 optometer.