

UV-3725

<https://www.gigahertz-optik.com/en-us/product/uv-3725>

Product tags: UV



Description

The detector head UV-3725 is designed for the measurement of UV-C 254 nm radiation sources used in air disinfection. The UV-C radiation of air disinfection installations must be measured under the aspects of effective irradiance levels as well as under UV hazard aspects.

Designed for wide dynamic

The UV-3725 detector is designed for the highest possible UV-C 254 nm irradiance sensitivity to fulfill the Need in UV hazard applications. However the wide range linearity of the photodiodes coupled with the Gigahertz-Optik optometers's wide dynamic signal range amplifiers enable the UV-3725 detector to be used in applications with high irradiances as well.

Cosine Field-of-View

The wide angle cosine F.O.V. characteristic of the detectors spatial responsivity specifies it for stray light UV hazard measurements.

Pre-aged components

All optical and optoelectronic components of the UV-3725 detector pre-aged by UV-C Radiation for extended long time stability.

Compact housing

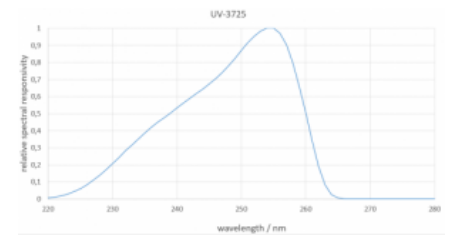
The UV-3725 irradiance detector is built in a compact 37mm diameter natural anodized aluminum housing.

Traceable calibrations

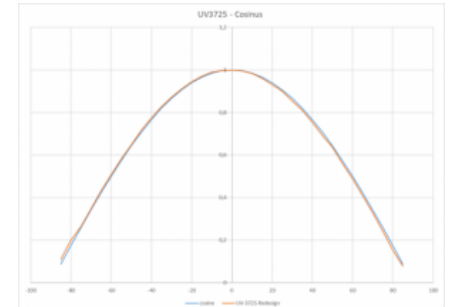
Calibration of irradiance in W/m^2 and/or W/cm^2 as well as the detector's relative spectral responsivity is performed at Gigahertz-Optik's Calibration Laboratory. Beside the regular calibration with spectral broadband reference lamps alternative calibrations with monochromatic or custom type reference lamps can be supplied as an option. The calibration and its traceability are confirmed in the calibration certificate supplied with each detector.



Detector for UV-C 254 nm irradiance with FOV 80°



Typical spectral responsivity of UV-3725 detector



Typical field of view with excellent cosine correction



Specifications

General

UV-3725 Detector for the measurement of UV-C 254 nm irradiance in air disinfection applications

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 UVC @254nm radiometric: 5E-5 A/(W/cm²)

Max. signal current 50 µA

Input optics 8 mm Ø diffusor window, f2 ≤ 3 %

Housing 37 mm Ø, 21 mm height

Connector coaxial cable 2 m Long, with BNC (-1), calibration data (-2) or ITT (-4, -5) connector.


temperature range (5 - 40) °C
temperature coefficient: -0.0595 %/K

min. signal current depends on optometer




Downloads

Type	Description	File-Type	Download
Drawing	UV-3725		

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

Product Name	Product Image	Description	Show product
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
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

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
LCR-20		Light-reflection hand-held meter for flat samples. Features: Fast and precise because of monitor detector and UV LED based light source.	https://www.gigahertz-optik.com/en-us/product/lcr-20
P-21		High-quality touchscreen 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, USB	https://www.gigahertz-optik.com/en-us/product/p-21

Purchasing information

Article-Nr	Modell	Description
Product		
15298463	UV-3725-1	Detector with -1 type connector. Calibration with factory calibration certificate.
15298464	UV-3725-2	Detector with -2 type connector. Calibration with factory calibration certificate.
15298465	UV-3725-4	Detector with -4 type connector. Calibration with factory calibration certificate.
15312097	UV-3725-5	Detector with -5 type connector. Calibration with factory calibration certificate.
15312791	UV-37253727FOV80	80° Field of View Adapter
15312782	UV-37253727BRACKETMOUNT	Bracket to mount UV-3725 detector head on M6 threads.
Calibration		
15312240	KP-UV3725X1-E-I	Option: DIN EN ISO/IEC 17025 Test Certificate (DAkkS) for 254 nm Hg lamps. In combination with X1 optometer.
15312241	KP-UV3725P9710-E-I	Option: DIN EN ISO/IEC 17025 Test Certificate (DAkkS) for 254 nm Hg lamps. Contact sales team for other wavelength options. In combination with P9710 optometer.
Re-calibration		
15300518	K-UV3725-S	Re-calibration of integral irradiance responsivity in A/(W/m²) at 254nm with calibration certificate.
15300571	K-UV-SR	Re-calibration of the relative spectral responsivity.

Article-Nr	Modell	Description
15312239	KKP-UV3725X1-E-I	DIN EN ISO/IEC 17025 Test Certificate (DAkkS) for 254 nm Hg lamps. Contact sales team for other wavelength options. Includes factory calibration. In combination with X1 optometer.
15312242	KKP-UV3725P9710-E-I	DIN EN ISO/IEC 17025 Test Certificate (DAkkS) for 254 nm Hg lamps. Contact sales team for other wavelength options. Includes factory calibration. In combination with P9710 optometer.