X1-UV-3725

https://www.gigahertz-optik.com/en-us/product/x1-1-uv-3725/

Product tags: UV , Handheld device ,



Description

UV-C Disinfection of Air, Water and Surfaces

Using ultraviolet germicidal irradiation (UVGI) fixtures such as 254 mm low-pressure mercury lamps to produce UV-C disinfection waves, is an effective technique for the disinfection of air and surfaces.

- UV-C disinfection is being increasingly used in healthcare facilities to combat Healthcare Acquired Infections (HAI's).
- UV-C lamps in the Heating Ventilation and Air Conditioning (HVAC) systems can prevent the transmission of airborne pathogens such as tuberculosis bacteria and influenza viruses.
- Portable UV-C lamp systems are used in the process of decontaminating patient rooms or surgical suites.

Validating the effectiveness of the germicidal UV dose – particularly as those low-pressure Hg light sources age, is an ongoing concern. UVC radiometers measure the UV irradiance at the location of exposure. If there is a possibility of human exposure to the UV radiation, the potential risk to skin and eyes from relatively low UV intensity also needs to be determined. Carrying out both of these measurements with one device requires UV radiometers with a very large dynamic range. Having a portable, hand held lab quality UVC meter for in the field use is a definite plus.

X1-UV-3725 UVC Radiometer System for Measuring UV-C of 254 nm germicidal light sources

The X1-UV-3725 UV-C Radiometer features an X1 four-channel optometer and a UV-3725 irradiance detector ideal for both germicidal effectiveness and UV hazard measurement of low pressure mercury lamps at 254nm. The detector assembly is pre-aged to increase stability over long term use.

- Accurately measure germicidal irradiance levels up to 2000 mW/cm²
- Assess UV-C risk hazard down to 0.002 µW/cm²
- Individually calibrated for spectral irradiance responsivity at 254 nm
- Cosine corrected field of view
- Peak hold function allows unmanned UVGI measurement in unoccupied areas
- Protective stainless steel sheath protects UV degradation of detector cable
- Optional software for remote control and datalogging via PC
- Portable, hand held system for in the field use

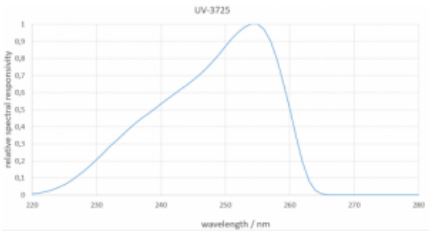
One of the unique features of the X1-UV-3725 is its ability to measure both germicidal UV output to ensure efficacy and ICNIRP/ACGIH/ IEC 62471 hazard weighted irradiance values (µW/cm²) for a 254 nm low-pressure Hg lamps.

Calibration

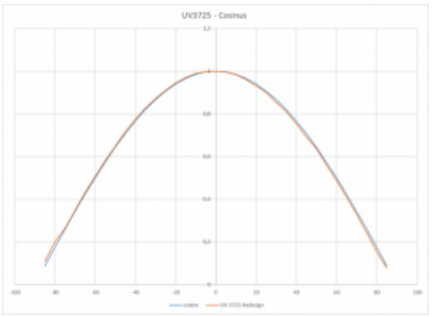
One essential quality feature of radiometric devices is their precise and traceable calibration. The calibration is performed by Gigahertz-Optik's calibration laboratory that is accredited by DAkkS (D-K-15047-01-00) for the *spectral responsivity* and *spectral irradiance* according to ISO/IEC 17025.



UV radiometer for germicidal UV-C 254nm mercury lamps



Typical spectral responsivity of UV-3725 detector



Typical field of view with excellent cosine correction



Mobile UV radiometer with separate measuring device and detector for measuring the irradiance and dose of germicidal mercury lamps.

The calibration and calibration values are confirmed by a calibration certificate for every detector.

Specifications

General	
Short description	UV radiometer for UV-C low-pressure Hg germicidal lamps
Main features	Mobile measuring device with separate detector. Easy to use. Large measuring range for high radiation intensities for disinfection efficacy of Hg lamps and low radiation levels for the evaluation of UV hazard.
Measurement ranges	For 254 nm low pressure Hg lamps. Linear measuring range up to > 2000 mW / cm² with instrument X1. N.E.I. 0.004 µW / cm². Resolution 0.001 µW / cm²
Typical applications	UVGI for disinfection of air and surfaces
Calibration	Calibration of the absolute responsivity at 254 nm and the relative spectral responsivity.
Measurement Head	
Broadband detector	UV-3725 UV detector for low-pressure Hg germicidal lamps. UV-3725 data sheet
Accessories	
Display	X1 Handheld meter for display of irradiance mW/cm^2 and dose J/cm^2 with peak-hold function. X1 data sheet

Downloads

Type	Description	File-Type	Download
Drawing	UV-3725	pdf	https://www.gigahertz-optik.com/assets/V127944.pdf
Drawing	UV-37xx-Z02	pdf	https://www.gigahertz-optik.com/assets/Uploads/V127915.pdf

Purchasing information

Article-Nr	Modell	Description
Product		
15312097	UV-3725-5	Detector with -5 type connector. Calibration with factory calibration certificate.
15312065	X1-5	Instrument for use with UV-3725-5, 2 x 1.5 V AA batteries, USB cable, manual.
15312791	UV-37xx-Z01	80° Field of View Adapter
15312782	UV-37xx-Z02	Bracket to mount UV-3725 detector head on M6 threads.

Article-Nr	Modell	Description
15298465	UV-3725-4	Detector with -4 type connector. Calibration with factory calibration certificate.
15311738	X1-1-V03	Instrument for use with UV-3725-4, 2 x 1.5 V AA batteries, USB cable, manual
15297539	BHO-11	Hard case for X1 instrument and UV-3725 detector connected to the meter.
15312240	KP-UV3725X1-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 X1 optometer.
Re-calibration		
15300518	K-UV3725-S	Re-calibration of irradiance responsivity in A/(W/m²) and A/(W/cm²) at 254nm with calibration certificate.
15300671	K-X11-C	Current calibration and adjustment of Gigahertz-Optik´s optometer X1-1 by use of a calibrated current source. Calibration certificate.
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.
Software		
15298071	S-X1	User software for X1 Optometer.
15298071	S-SDK-X20	Software development kit for software implementation of the X20 electronic into custom made software. Support X1-1, X1-2, X1-PCB.

Contact, Calibration, Service & Support

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- Technical Consulting & Sales
- After-Sales Support
- Calibrations & Re-Calibrations (ISO/IEC 17025 Calibration Services, factory calibration, Calibration of Third-Party Products)
- Repairs & Updates
- OEM & Feasibility Consulting of Customized Solutions

Send us your inquiry or contact us by phone or e-mail. We would welcome your feedback too or review us on Google.

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