

UV-3706

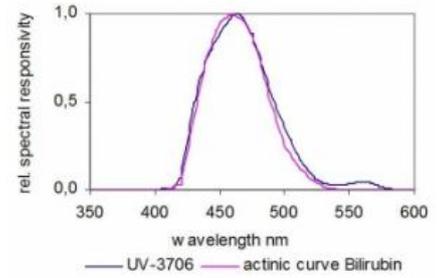
<http://www.gigahertz-optik.de/en-us/product/UV-3706>

Product tags:



Description

Newborn jaundice or neonatal hyperbilirubinemia, a yellowish appearance of the skin and whites of the eyes, is present to some degree in almost all newborn infants. This is caused by an elevated level of bilirubin molecule in the blood which results from immaturity of the liver function combined with the destruction of red blood cells present. When these levels are very high, one method of clearing the jaundice is by exposing the newborn to light in the blue spectral region between 400 to 550 nm.



Typical Spectral Response

Actinic Spectral Function

The UV-3706 detector enables the measurement of phototherapeutically effective irradiance employed for lowering the bilirubin level in newborn infants.

Traceable Calibration

Calibration of the detector bilirubin effective (W/m^2) responsivity is performed by the Gigahertz-Optik GmbH calibration laboratory for optical radiation measurements quantities. As with all light detectors supplied by Gigahertz-Optik calibration of absolute detector responsivity as well as detector individual measured relative spectral responsivity data is included.

Specifications

Specification	
spectral responsivity	actinic Bilirubin, 400 nm - 550 nm
typical responsivity	100 nA/(W/m ²)
Max. signal current	100 μ A
Input optics	15 mm \varnothing diffusor window
Input optics	Cosine F.O.V.
Housing	37 mm \varnothing , 32 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) $^{\circ}$ C
min. signal current	depends on optometer
Re-calibration	

Configurable with

Produktname	Product Image	Description	Show product
P-9710		<p>High-quality device for measurement of CW-, single pulse and modulated radiation.</p> <p>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</p>	http://www.gigahertz-optik.de/en-us/product/P-9710
X1		<p>Four-channel USB optometer designed for mobile use.</p> <p>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.</p>	http://www.gigahertz-optik.de/en-us/product/X1
X1-RM		<p>Optometer in 3HE housing for use in 19" racks.</p> <p>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.</p>	http://www.gigahertz-optik.de/en-us/product/X1-RM
X1-PCB		<p>Optometer module.</p> <p>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>	http://www.gigahertz-optik.de/en-us/product/X1-PCB
P-2000		<p>Two-channel optometer.</p> <p>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.</p>	http://www.gigahertz-optik.de/en-us/product/P-2000
P-9801		<p>Eight-channel optometer.</p> <p>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.</p>	http://www.gigahertz-optik.de/en-us/product/P-9801
P-9802		<p>Light meter for laboratory use with up to 36 measurement heads.</p> <p>Features: For use with up to 36 photometric and/or radiometric measurement heads. RS232 interface.</p>	http://www.gigahertz-optik.de/en-us/product/P-9802

Produktname	Product Image	Description	Show product
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.	http://www.gigahertz-optik.de/en-us/product/TR-9600
P-9202-4		Fast response time trans-impedance signal amplifier. Features: High quality analogue amplifier with current-voltage conversion. Minimal diode offset voltage for short circuit operations. Bandwidths of up to 330kHz. 1µs rise time. Large I-U amplification range from 10pA/V to 1mA/V.	http://www.gigahertz-optik.de/en-us/product/P-9202-4
P-9202-5		Universal trans-impedance signal amplifier. Features: High quality analogue amplifier with current-voltage conversion. Minimal diode offset voltage (1mV) for short circuit photodiode operations. 5µs to 20ms rise time depending on the amplification. Large I-U amplification range – 1×10 ⁻¹⁰ A/V to 1×10 ⁻³ A/V.	http://www.gigahertz-optik.de/en-us/product/P-9202-5
P-9202-6		Highly sensitive trans-impedance signal amplifier. Features: High quality analogue amplifier with current-voltage conversion with minimal diode offset voltage (0.5mV) for short circuit photodiode operation of . 2.5s to 25s rise time depending on the amplification. Large I-U amplification range – 1×10 ⁻¹¹ A/V to 1×10 ⁻⁴ mA/V.	http://www.gigahertz-optik.de/en-us/product/P-9202-6
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.	http://www.gigahertz-optik.de/en-us/product/X1-2
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.	http://www.gigahertz-optik.de/en-us/product/X1-PCBC

Purchasing information

Article-Nr	Modell	Description
Product		
15296526	UV-3706-1	Detector head with -1 connector, calibration certificate.
15297111	UV-3706-2	Detector head with -2 connector, calibration certificate.
15297113	UV-3706-4	Detector head with -4 connector, calibration certificate.
Re-calibration		
15300375	K-UV3706-I	Re-calibration of integral irradiance responsivity in A/(W/m ²) with calibration certificate.

Article-Nr**Modell****Description**

15300571

K-UV-SR

Re-calibration of the relative spectral responsivity.