

# 4-Direction UV Sensor Probe for Water



GUVx<sup>1)</sup>-T1x<sup>2)</sup>GC-x<sup>3)</sup>LW11

## Features

Water Environment (<10 bar) / Optional Output Type (0-5 V or 4-20 mA)  
/ Measurement for 4-Direction Light Source / Single Supply Voltage

## Applications

UV Power Measure

UV Lamp and LED Monitoring



Fig.1. LW11 probe



Fig.2. 5 m Standard cable (IP67, Max. 10 m)



Color	Terminal	Remark
Red	V <sub>cc</sub>	DC 5 V or 24 V
Black	GND	
Green	V <sub>out</sub> / I <sub>out</sub>	DC 0 ~ 5 V or 4 ~ 20 mA
White	GND	

## Case Dimensions

Thread/Length for Mounting	Body (mm)	Head (mm)	Window (mm)	Length (mm)	Weight (g)	Body Material (stainless steel)
PT 1¼ "/21 mm	Φ42	Φ36×15	Φ24×24	81	0.44	316-L ( 1.4404 )

※ Cover thread with teflon tape or ceramo paste before turning in. Please also use a sealing ring behind thread.

## Absolute Maximum Ratings

Parameter	Symbol	Value			Unit	Remark
		Min.	Typ.	Max.		
Storage Temperature	T <sub>st</sub>	-40		90	°C	
Operating Temperature	T <sub>op</sub>	-30		85	°C	

## Electro-Optical Characteristics (at 25 °C)

Parameter	Symbol	Value			Unit	Remark
		Min.	Typ.	Max.		
Supply Voltage	V <sub>cc</sub>		5		V <sub>DC</sub>	4 4 / I7
		9		24		
Supply Current	I <sub>Q</sub>		3.3		mA	4 I7
			20			
Detection Range	λ	GUVV-T11GC-xLW11	230		nm	10% of Max.
		GUVA-T13GC-xLW11	220			
		GUVB-T12GC-xLW11	220			
		GUVC-T11GC-xLW11	220			
		GUVCL-T11GC-xLW11	220			
		GVBL-T13GC-xLW11	320			
		GVGR-T11GC-xLW11	300			
Output	Voltage	V <sub>out</sub>	5		V	4
	Current	I <sub>out</sub>	4	20	mA	I7
Detection Power Range	P	0		100	mW/cm <sup>2</sup>	*Standard
Response Time	T		10		ms	

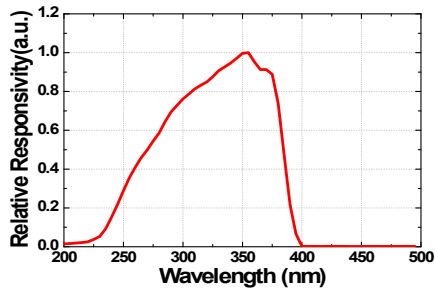
\* Order production available (20, 50, 500mW/cm<sup>2</sup> etc)

1) Detection range (GUVx-UV, GVxx-Visible)

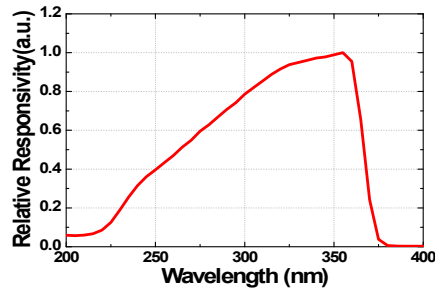
2) Serial No. of sensor

3) Output Type (4 : Voltage , I7 : Current)

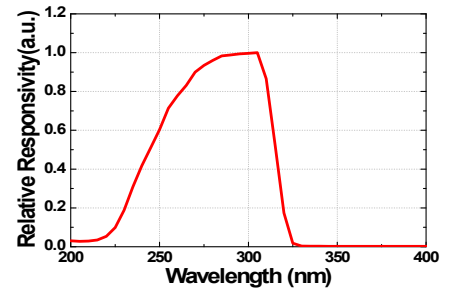
### Relative Responsivity Curve



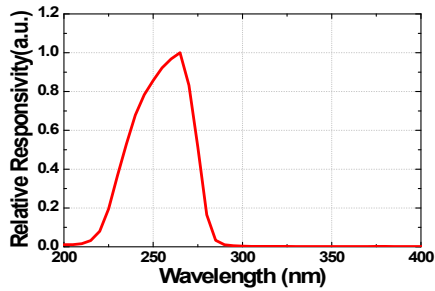
1) GUVV-T11GC-xLW11



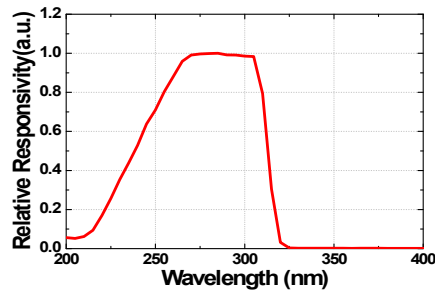
2) GUVA-T13GC-xLW11



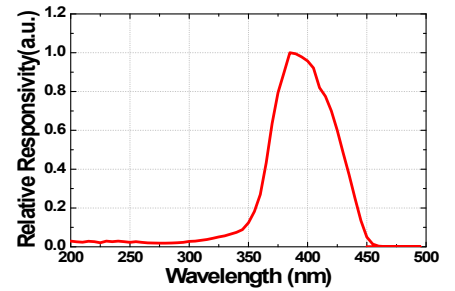
3) GUVB-T12GC-xLW11



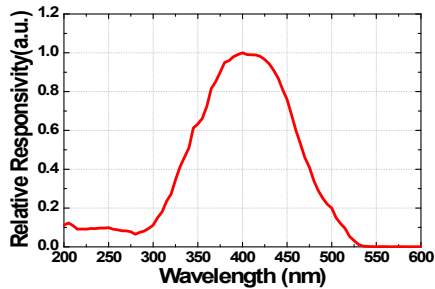
4) GUVCL-T11GC-xLW11



5) GUVBL-T11GC-xLW11



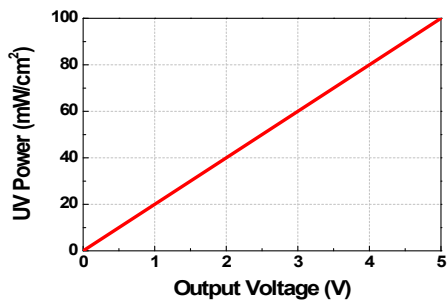
6) GVBL-T13GC-xLW11



7) GVGR-T11GC-xLW11

### UV Power along Output Type

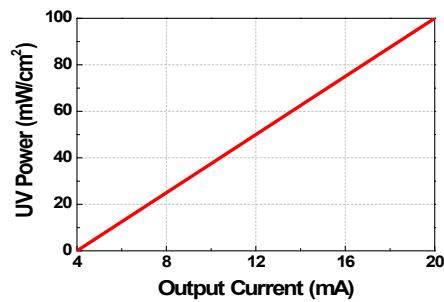
- Voltage



GUVx-T1xGC-4LW11

$$\text{UV Power (mW/cm}^2\text{)} = V_{\text{out}} \text{ (V)} \times 20$$

- Current



GUVx-T1xGC-I7LW11

$$\text{UV Power (mW/cm}^2\text{)} = [I_{\text{out}} \text{ (mA)} - 4] \times 6.25$$