

Small UV Sensor Probe for Water

GUVx¹⁾-T1x²⁾GC-x³⁾LW5



Features Water Environment (<10 bar) / Single Supply Voltage / Optional Output Type (0-5 V or 4-20 mA)

Applications UV Power Measure UV Lamp and LED Monitoring



Fig.1. LW5 probe



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



Color	Terminal	Remark
Red	V _{cc}	DC 5 V or 24 V
Black	GND	
Green	V _{out} / I _{out}	DC 0 ~ 5 V or 4 ~ 20 mA
White	GND	

Case Dimensions

Thread/Length for Mounting	Diameter (mm)	Window (mm)	Wrench Size (mm)	Length (mm)	Weight (g)	Body Material (stainless steel)
PT1/4 "/12 mm	21	7	19	63	67	STS 316L (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 _{st}	-40		90	°C	
Operating Temperature	T _{op}	-30		85	°C	

Electro-Optical Characteristics (at 25 °C)

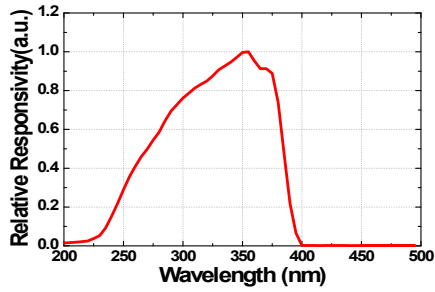
Parameter	Symbol	Value			Unit	Remark
		Min.	Typ.	Max.		
Supply Voltage	V _{cc}		5		V _{DC}	3
		9		24		3 / I8
Supply Current	I _Q		3.3		mA	3
			20			I8
Detection Range	λ	GUVV-T11GC-xLW5	230		nm	10% of Max.
		GUVA-T13GC-xLW5	220			
		GUVB-T12GC-xLW5	220			
		GUVC-T11GC-xLW5	220			
		GUVCL-T11GC-xLW5	220			
		GVBL-T13GC-xLW5	320			
		GVGR-T11GC-xLW5	300			
Output	V _{out}		5		V	3
	I _{out}	4		20	mA	I8
Detection Power Range	P	0		100	mW/cm ²	*Standard
Response Time	T		10		ms	

* Order production available (20, 50, 500mW/cm² etc)

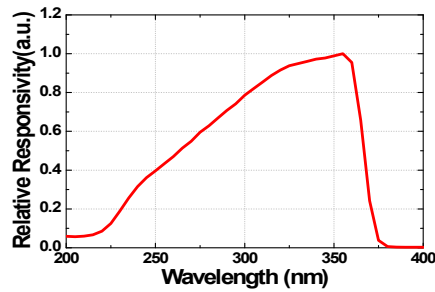
- 1) Detection range (GUVx-UV, GVxx-Visible)
- 2) Serial No. of sensor
- 3) Output Type (3: Voltage , I8: Current)

GUVx-T1xGC-xLW5

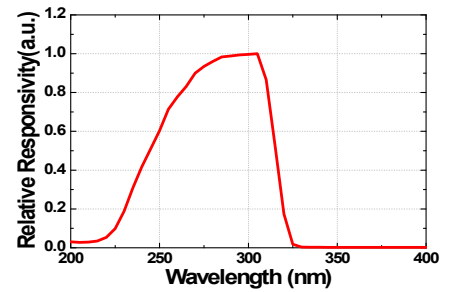
Relative Responsivity Curve



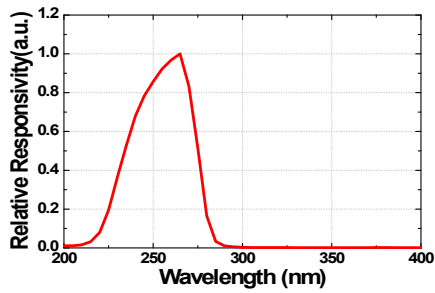
1) GUVV-T11GC-xLW5



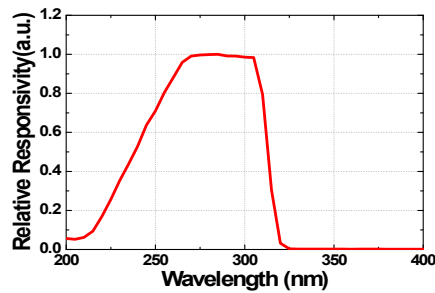
2) GUYA-T13GC-xLW5



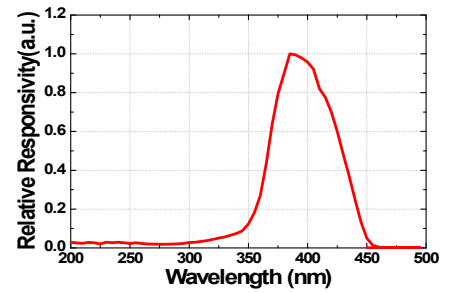
3) GUVB-T12GC-xLW5



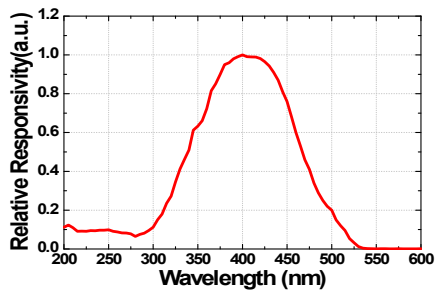
4) GUVV-T11GC-xLW5



5) GUVCL-T11GC-xLW5



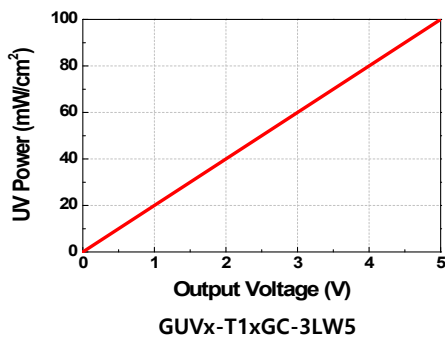
6) GVBL-T13GC-xLW5



7) GVGR-T11GC-xLW5

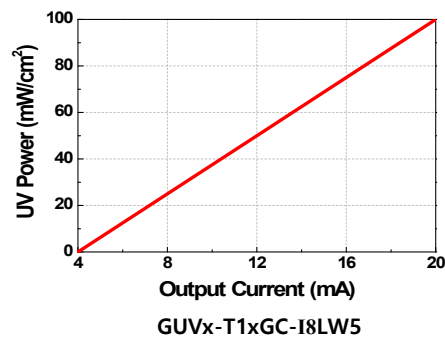
UV Power along Output Type

- Voltage



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

- Current



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