

# UV Sensor Probe

## GUvx<sup>1)</sup>-T1x<sup>2)</sup>GC-x<sup>3)</sup>LW5.1



### Features

- Water Environment (<10 bar), Single DC Supply Voltage, 0-5V Voltage or 4-20mA Current Output

### Applications

UV Power Measure, UV Lamp Monitoring



Fig1. LW5.1 Probe



Fig2. 5m Standard Cable(Max. 10m)

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

### Case Dimensions

Thread/Length for Mounting	Diameter (mm)	Window (mm)	Wrench Size (mm)	Length (mm)	Weight (g)	Body (stainless steel)
FT1/4 "(8A FT) /12 mm	21	7	19	63	67	316-L ( 1.4404 )

### 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	3
		9		24		3 or I8
Supply Current	I <sub>Q</sub>		3.3		mA	3
Offset Current	I <sub>off</sub>	3.9	4	4.1		I8
Detection Range	λ	230		395	nm	10% of Max.
		220		370		
		220		320		
		220		280		
		220		320		
		320		445		
		300		510		
Output Voltage	V <sub>out</sub>	0		5	V	3
Output Current	I <sub>out</sub>	4		20	mA	I8
Detection Power Range	P	0		100	mW/cm <sup>2</sup>	*Standard
Response Time	T		10		ms	

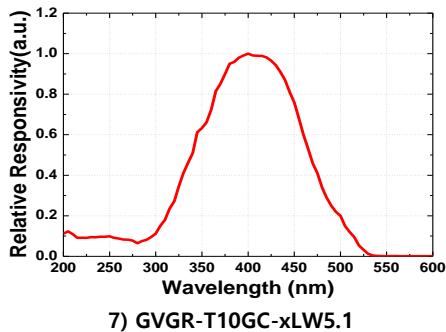
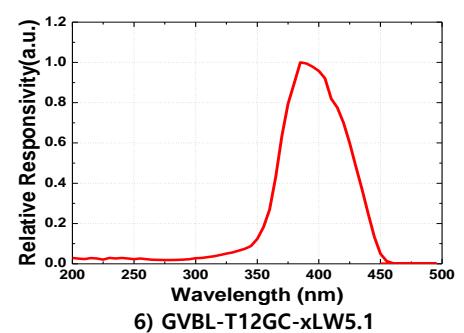
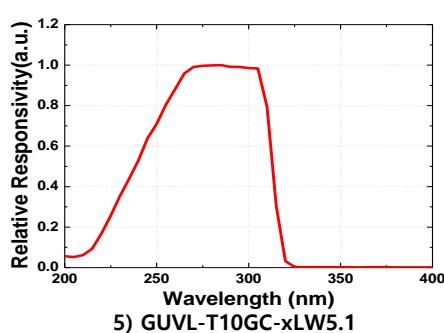
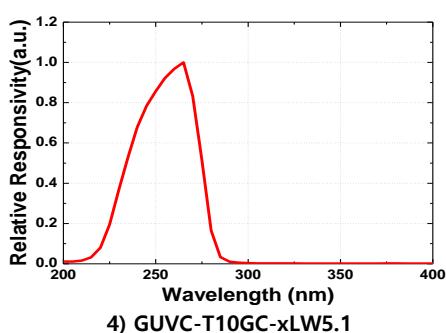
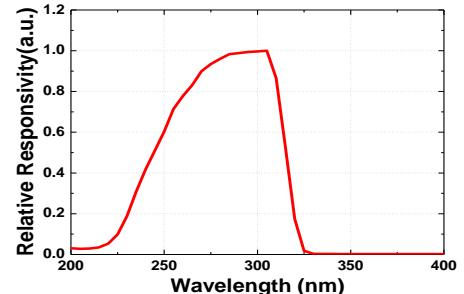
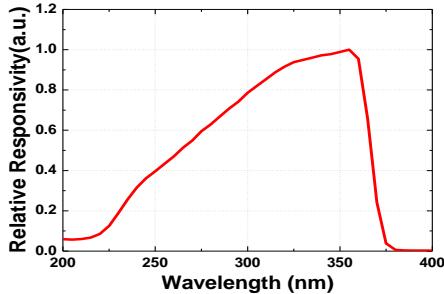
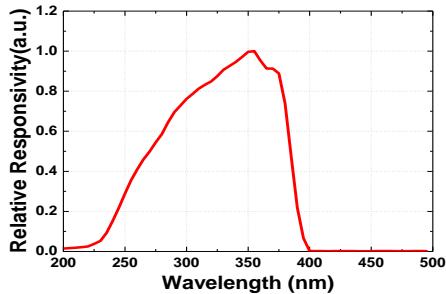
1) Detection range(GUvx-UV, GVxx-Visible)

2) Serial No. of sensor

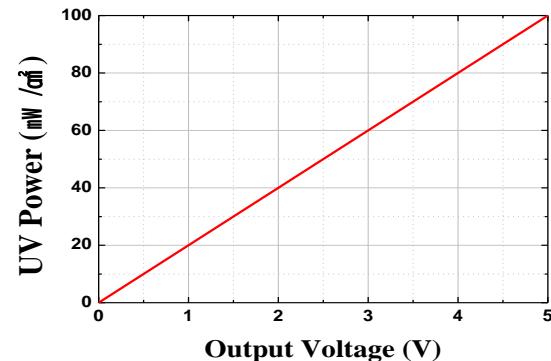
3) Output Type (3: Voltage , I8: Current)

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

## Responsivity Curve

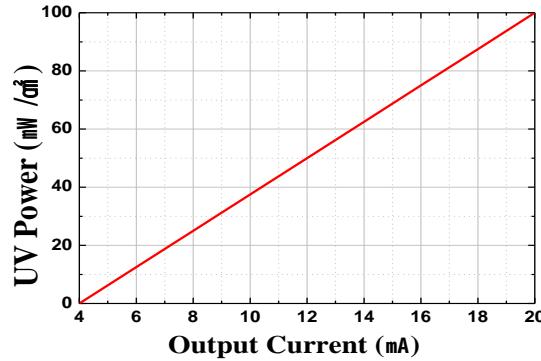


## UV Power along Output Voltage



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

## UV Power along Output Current



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

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