

# High Temperature UV Probe

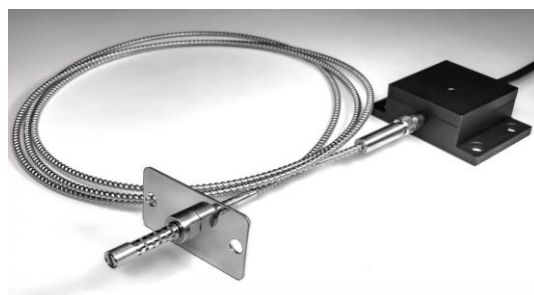
GUVS-T10EC-x<sup>1)</sup>LOHT



1) Output type : 3 - Voltage / 18 - Current

## Features

- High Temperature Environment (under 250°C)
- Very Flexible Optical Fiber (Min. R20)
- 360° Lateral Light Detecting
- UVA/B/C Detection
- Optional Output Type (Current / Voltage)
- Optional Operating Voltage (5 V / 9 ~ 24 V)



## Information

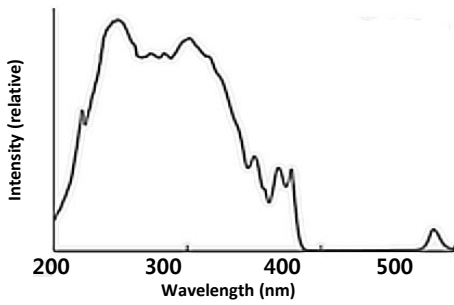
Part Name	Head Part	Sensor Part	Optical Fiber
Image			
Dimension	Body Φ6, Connector Φ8 L26 mm	57 * 37 * 21 mm	Cable : Φ5.0 Core : 1.5 mm
Material	SUS 316-L	Al-60 / Black anodizing	SUS 304 casing
Operating Temperature	Max. 300 °C	-30 ~ 85 °C	- 30 ~ 250 °C
Cable Length	-	Standard : 5 m (the other length optional)	Standard : 1.5 m (the other length optional)
Radius of Curvature	-	-	Very flexible (Min. R20)
Output type	-	Voltage or Current	-
Remarks	Includes M8, M4 nuts and mounting plate	Includes cable	SMA905 connector / M4 screw

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

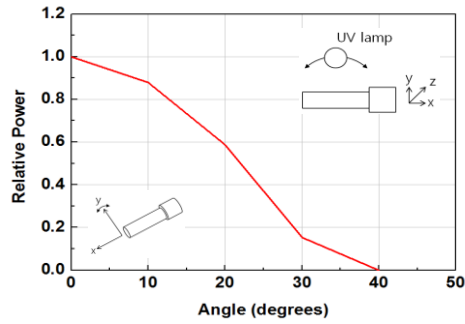
Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Supply Voltage	V <sub>cc</sub>		5		V <sub>DC</sub>	3
		9		24		3 / 18
Supply Current	I <sub>Q</sub>	3.3		4	mA	
Spectral Detection Range	λ	220		390	nm	
Output	Voltage	V <sub>out</sub>	0	5	V	3
	Current	I <sub>out</sub>	4	20	mA	18
Detection Power Range	P	0		100	mW/cm <sup>2</sup>	* Standard
Response Time	T		10		ms	

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

### Input Spectrum (Head part)



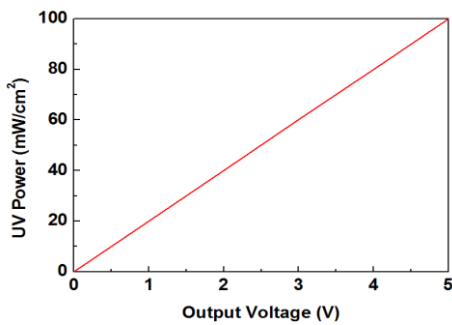
### Relative Power along Angle (Y direction)



\* Position of UV lamp : parallel to z axis and perpendicular to x axis

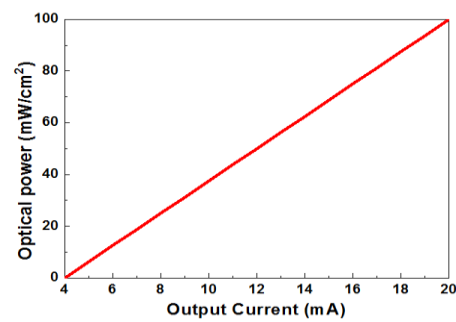
### Output along UV Power

- Type Voltage



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

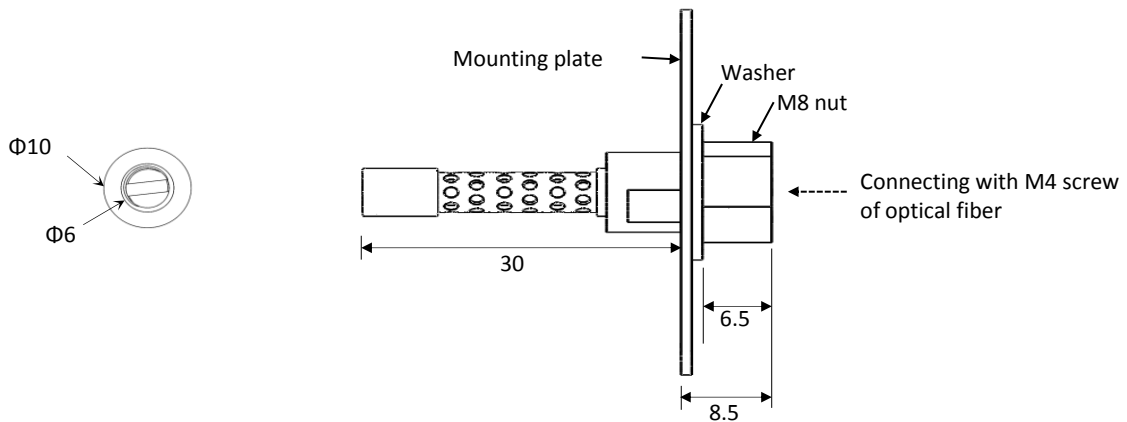
- Type Current



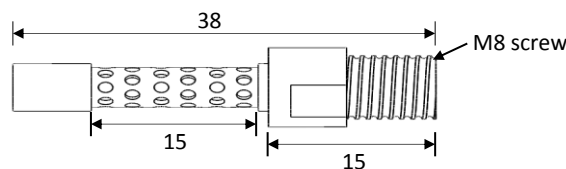
$$[\text{UV Power (mW/cm}^2\text{)} = [\text{Iout (mA)} - 4] \times 6.25]$$

### Dimensions (Unit : mm)

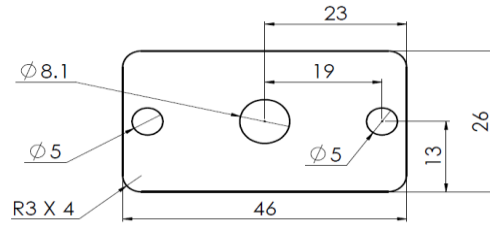
- Head part (Material : Stainless steel / SUS316L)



- without mounting plate, washer and M8 nut

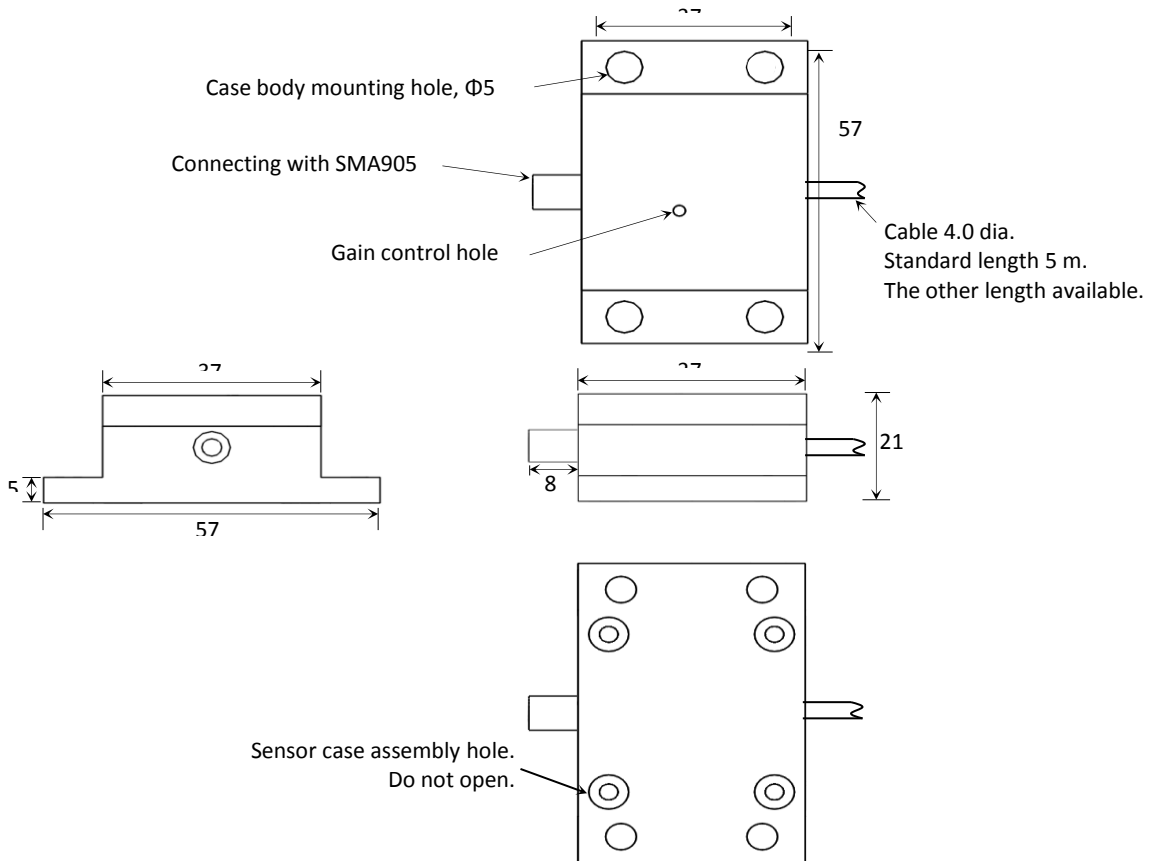


- Mounting plate

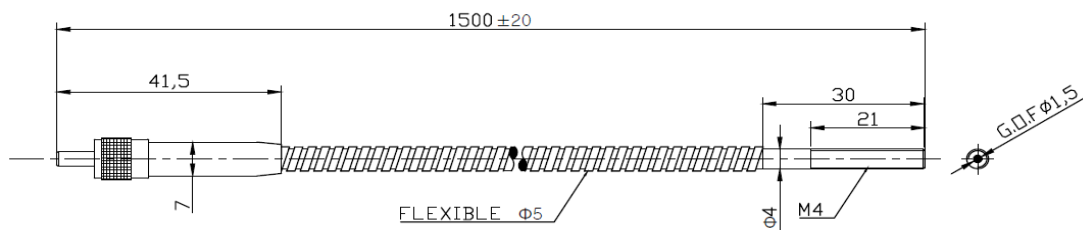


Material : Stainless steel (SUS316L)

• Sensor part (Material : Al-60 / Black anodizing)



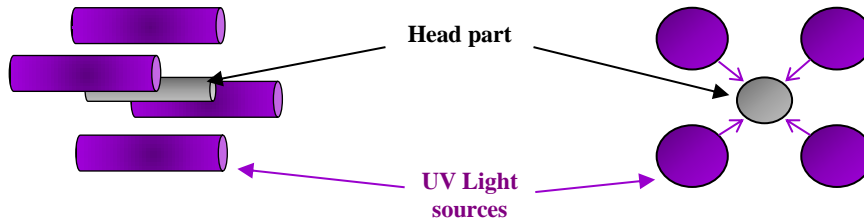
• Optical fiber



Material : Stainless steel (SUS304)

## Measuring Direction

- Lateral measuring

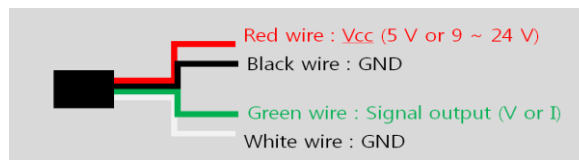


## Wiring Connections

- To connect the wiring, check the connection terminals. The color-coded terminals are available as follows.□

Color	Terminals	Remark
Red	V <sub>CC</sub>	DC 5 V or 9 ~ 24 V
Black	GND	
Green	V <sub>out</sub> / I <sub>out</sub>	DC 0 ~ 5 V or 4 ~ 20 mA
White	GND	

- Black and white lines (GND) are connect to the internal sensor probe.



※ If you connect wrong polarity it will cause the probe damaged or broken.□

## Trouble Shooting and precaution

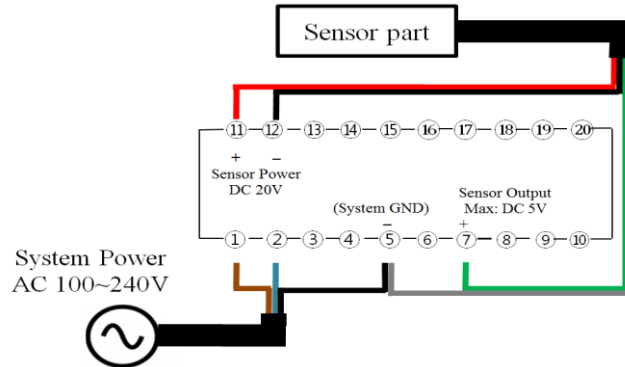
Please make sure that you understand the following before using.

- Do not use these units in locations with flammable or explosive gases.
- Do not use these units in the water.
- Do not attempt to disassemble, repair, or improve these products.
- Do not use AC power supply.
- Be sure that wiring of Sensor part is correct, such as the polarity of the power supply leads.
- Make sure that the power supply voltage is to match with operation voltage.  
 Operating voltages are two options that 5 V / 9 ~ 24 V.
- Output signal noise will be excessive if the power supply is not grounded.
- UV light is harmful, turn off the UV light source before installing the Head part.
- The analog output value will change due to temperature drift.
- The gain control hole of Sensor part is not protected against UV exposure.
- The SMA905 connector of optical fiber is connect with sensor part, and M4 screw is connect with head part.

## Connections with Genicom's Radiometers

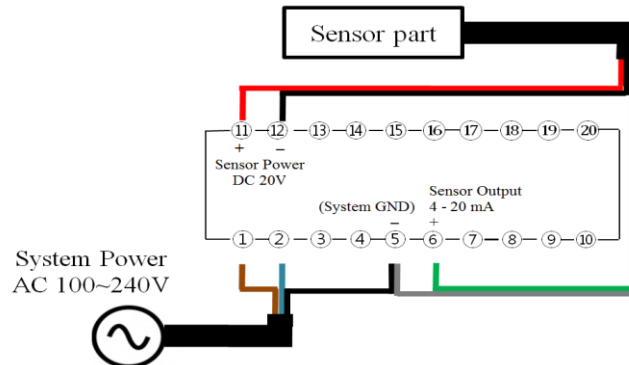
- **MG-02 ( $V_{out}$ )**

- Connection AC power to #1 and #2, and connect GND wire #5.
- Connect Red wire to #11 ( $V_{cc}$ ), Black wire to #12 (GND), White wire to #5 (GND), Green wire to #7 (Vout).



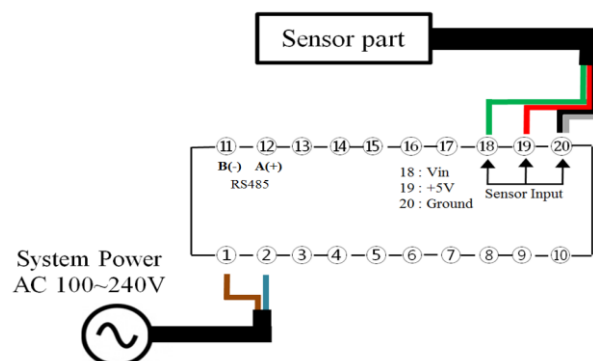
- **MG-02 ( $I_{out}$ )**

- Connection AC power to #1 and #2, and connect GND wire #5.
- Connect Red wire to #11 ( $V_{cc}$ ), Black wire to #12 (GND), White wire to #5 (GND), Green wire to #6 ( $I_{out}$ ).



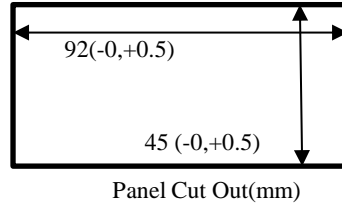
- **MG-05/05.1 ( $V_{out}$ )**

- Connection AC power to #1 and #2.
- Connect Green wire to #18 ( $V_{in}$ ), Red wire to #19 ( $V_{cc}$ ), Black & White wires to #20 (GND).



## Panel Cutting Size

- MG-02, MG-05, MG-05.1 have same panel cutting size.



## A/S Request in Case of Product Failure

- Should any failure is found in product, please call the sales company or customer center for A/S.
- Product warranty period is 1 year from the date of procurement with no charge.  
However, failure which is caused by user's misuse or carelessness within warrant period or any failure after the warrant period shall be chargeable for it's A/S.
- Product inquiry and on-line customer service  
Tel : +82-42-862-3982, Fax : +82-42-862-2982, □  
E-mail : uvsensor@geni-uv.com, Website : <http://www.geni-uv.com>