<Preliminary>

High temperature·High power·Narrow space UV probe

GUVx[1)]-T1XGC-ILO3(Supply Voltage: 24V, Current Output)

Genuine UV Technology
genUV

Features

- **High Temperature Environment (under 300℃)**
- **Very Flexible Optical Fiber (Min. R20)**
- **High power front measurement**
- **UVV/UVA/UVB/UVC/Visible Detection**
- **Narrow space measurement**
- **4~20㎃ current output**

Information

Part Name	Sensor Part	Optical Fiber
Image		Fixing hole Φ2*2ea / 8mm / 14mm
Dimension	57 * 37 * 21 ㎜	Cable : Φ5.0 / Core : 1.5 ㎜ Head part : 8*14*5mm / Light-receiving unit(4*4mm)
Material	Al-60 / Black anodizing	Fiber : SUS 304 casing / Head part : Aluminium
Operating Temperature	-30 ~ 85 ℃	- 30 ~ 300 ℃
Cable Length	Strandard : 5 m (the other length optional)	Strandard : 1.5 m (the other length optional)
Radius of Culvature	-	Very flexible (Min. R20)
Output Type	Voltage or Current	-
Remarks	Includes cable	SMA905 connector / Φ2-2ea Fixing hole

Detection Range(Option)

Parameter	Product	Symbol	Value	Unit	Remark
Detection Range	GUVV-T10GC-ILO3	λ	230 ~ 395	nm	10% of Max.
	GUVA-T11GC-ILO3		220 ~ 370		
	GUVB-T11GC-ILO3		220 ~ 320		
	GUVC-T10GC-ILO3		220 ~ 280		
	GVBL-T12GC-ILO3		330 ~ 445		
	GVGR-T10GC-ILO3		300 ~ 510		

*Refer to page 2 for responsivity curve

Electro-Optical Characteristics (at 25 ℃)

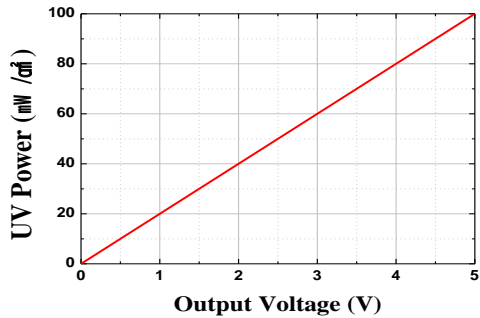| Parameter	Symbol	Value			Unit	Remark
		Min.	Typ.	Max.		
Supply Voltage	V_{cc}	9		24	V	
Offset Current	I_{off}	3.9	4	4.1	mA	
Supply Current	I_Q		0.05		mA	
Output Current	I_{out}	4		20	mA	
Detection Power Range	P	0		100	mW/㎠	*Standard
Response Time	T		10		㎳	

X[1)] : Detection Range(GUVx-UV, GVxx-Visible)

* Customizing available (20, 50, 500㎽/㎠, Max.10W/㎠ etc), <u>Please fill out the detection power range you want when ordering</u>

Relative Sensitivity along Input Spectrum (Light source : Xe-lamp)

Legend:
- GUVV-T10GD
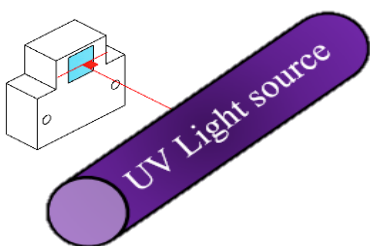- GUVA-T11GD
- GUVB-T11GD
- GUVC-T10GD
- GVBL-T12GD
- GVGR-T10GD
- Optical fiber
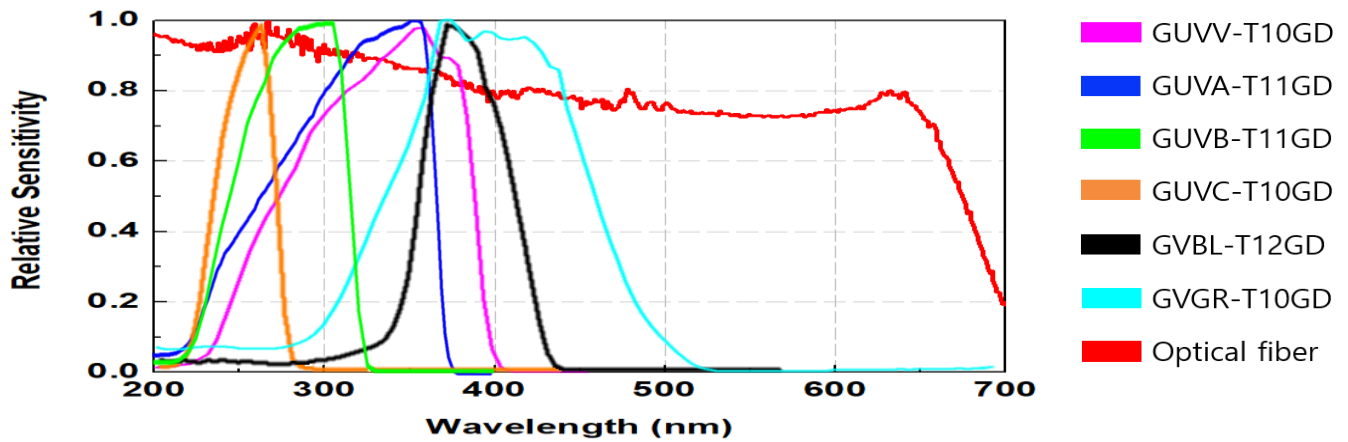
Output along UV Power

- Type Current

UV Power (mW/cm^2) = [Iout (mA)-4] × 6.25

Characteristics of Optical Fiber

Resistant Glass Fiber	
Core diameter	45 μm
Clad diameter	50 μm
NA	0.57
Operating Temp.	-60 ~ 250 °C (MAX. 300 °C)

How to install

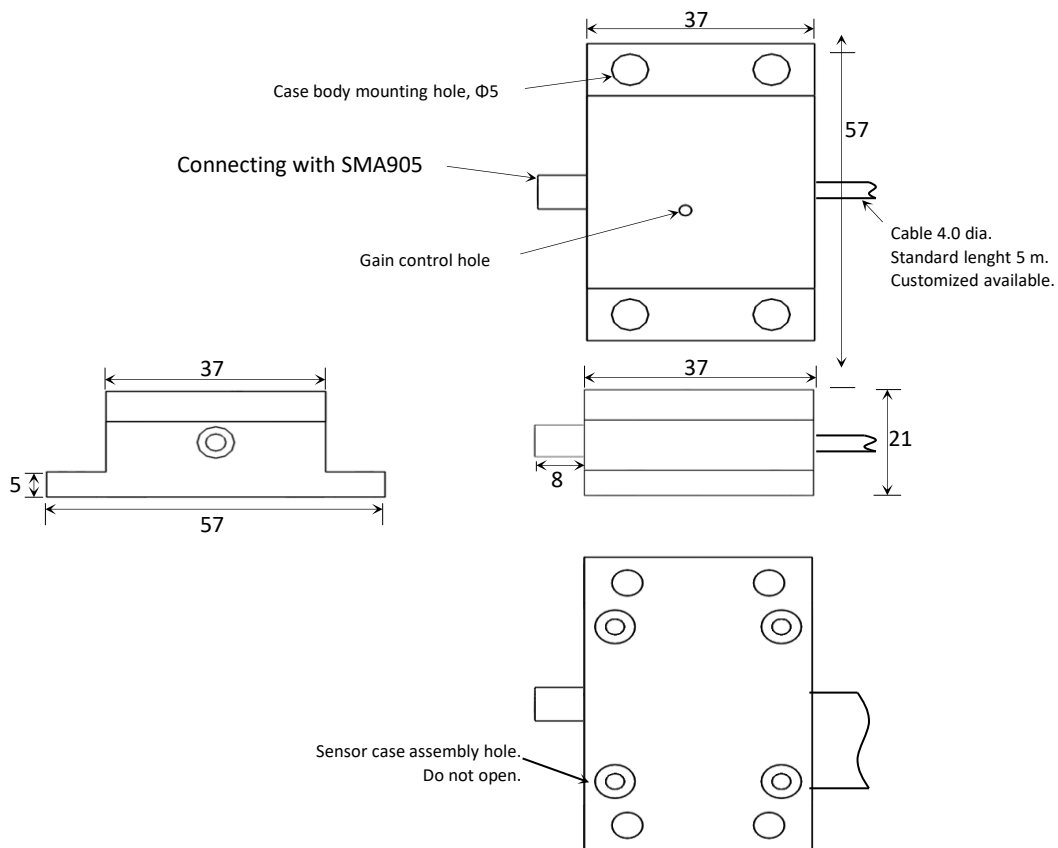
Install so that it is perpendicular to the light source.

Dimensions (Unit : mm)

- Optical fiber

41,5

7

FLEXIBLE Φ5

14

Φ4

12,5

5

8,0
4,0
4,5
8,0
14,0
M2 HOLE-2EA
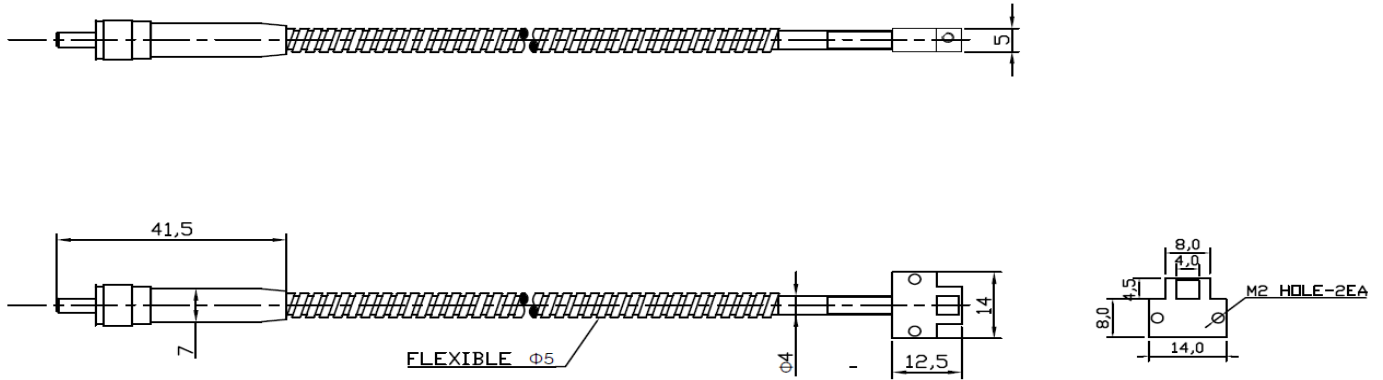
Material : Fiber-Stainless steel (SUS304), Head part-AL-60

- Sensor part

37

Case body mounting hole, Φ5

Connecting with SMA905

Gain control hole

57

Cable 4.0 dia.
Standard lenght 5 m.
Customized available.

37

5

57

37

8

21

Sensor case assembly hole.
Do not open.

Material : Al-60 (Black anodizing)

Wiring Connections

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

Color	Terminals	Remark
Red	V_{cc}	DC 9~ 24 V
Black	GND	-
Green	I_{out}	4 ~ 20mA
White	GND	-

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

Red wire : Vcc(9~24V)
Black wire : GND
Green wire : Signal output(I)
White wire : GND
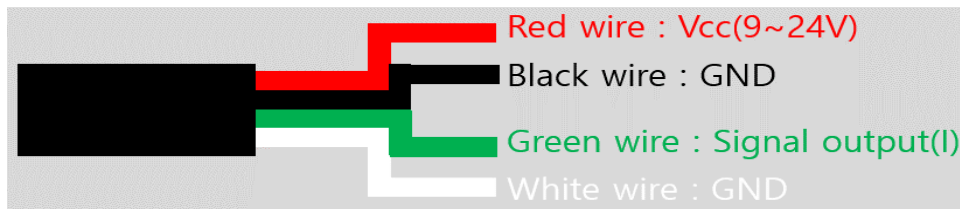
※ **If you connect wrong polarity it will cause the probe damaged or broken.**


Trouble Shooting and precaution

Please make sure that you understand the following before using.

• Do not use these units in locations with flammable or explisive 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.

   The operating voltage is 9~24V.

• 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, please fix using the Φ2-2ea fixing hole of Head part

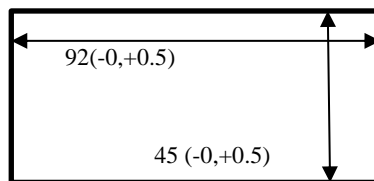## Connections with Genicom's Radiometers

- **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$_{out}$).
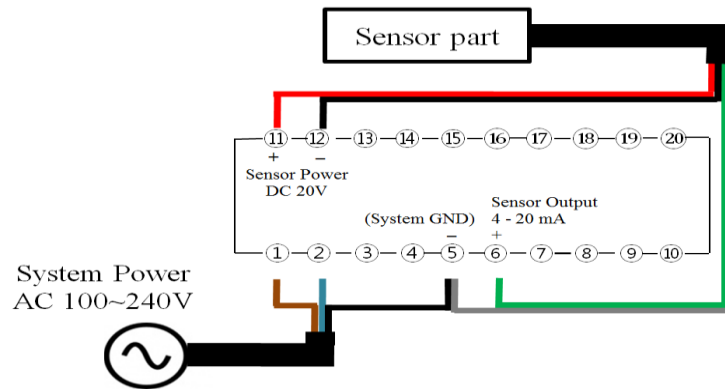
Panel Cutting Size

- MG-02

Panel Cut Out(mm)

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

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  E-mail : uvsensor@geni-uv.com, Website : http://www.geni-uv.com