High Temperature Wide Angle UV Probe

GUVx[1)]-T1x[2)]GC-x[3)]LO2.1

Genuine UV Technology

genUV

Features

- **High Temperature Environment (under 200℃)**
- **Very Flexible Optical Fiber (Min. R20)**
- **Viewing angel 170˚ Wide angle measurement**
- **UVV/UVA/UVB/UVC Detection**
- **Optional Output Type (Current / Voltage)**
- **Optional Operating Voltage (5 V / 9 ~ 24 V)**

Information

Part Name	Sensor Part	Optical Fiber
Image		
Dimension	57 * 37 * 21 ㎜	Cable : Φ5.0 / Core : 1.5 ㎜
Material	Al-60 / Black anodizing	SUS 304 casing
Operating Temperature	-30 ~ 85 ℃	- 30 ~ 200 ℃
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 / Bracket Φ5-2ea Fixing hole

Electro-Optical Characteristics (at 25 ℃)

Parameter		Symbol	Min.	Typ.	Max.	Unit	Remark
Supply Voltage		V_{cc}		5		V_{DC}	3
			9		24		3 or I8
Supply Current		I_Q	3.3		20	㎃	
Spectral Detection Range	GUVV-T10GC-xLO2.1	λ	230		395	㎚	10 % of R
	GUVA-T11GC-xLO2.1		220		370		
	GUVB-T11GC-xLO2.1		220		320		
	GUVC-T10GC-xLO2.1		220		280		
Output	Voltage	V_{out}	0		5	V	3
	Current	I_{out}	4		20	㎃	I8
Detection Power Range		P	0		100	㎽/㎠	* Standard
Response Time		T		10		㎳	

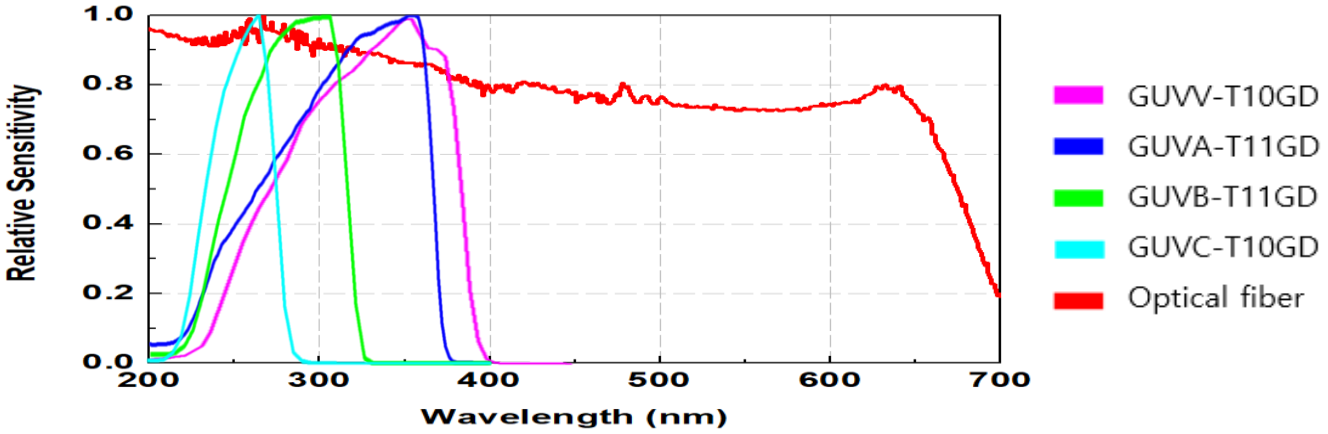
* Order production available (20, 50, 500 ㎽/㎠ etc.)

1) Spectral detection range

2) Serial number of sensor

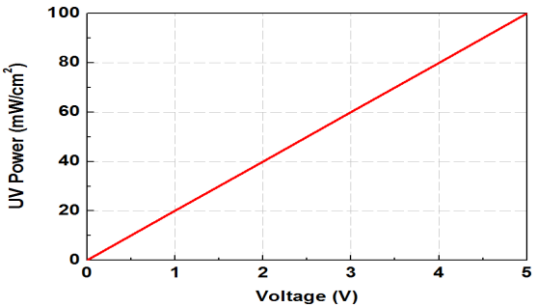
3) Type of output (3 : Voltage, I8 : Current)

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



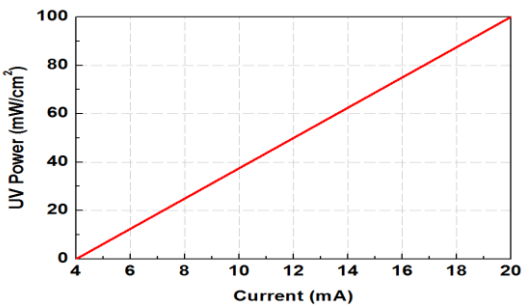
Output along UV Power

- Type Voltage



[UV Power (㎽/㎠) = Vout (V) × 20]

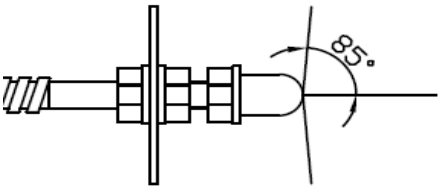
- Type Current



[UV Power (㎽/㎠) = [Iout (㎃)-4] × 6.25]

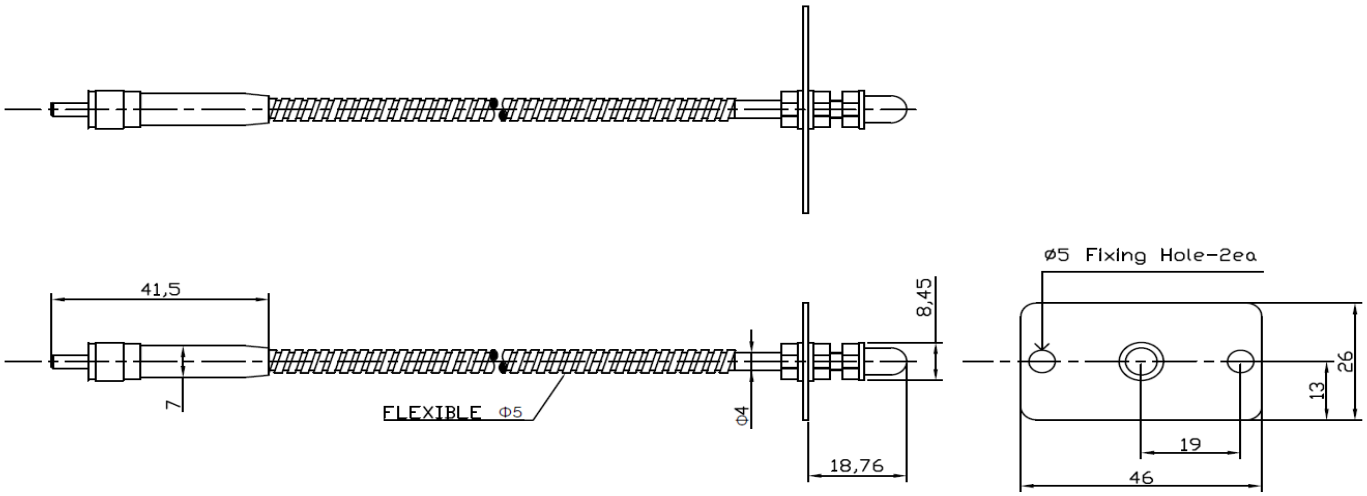
Characteristics of Optical Fiber

Resistant Glass Fiber	
Core diameter	45 ㎛
Clad diameter	50 ㎛
NA	0.57
Opening angle	170 °
Operating Temp.	-60 ~ 250 ℃ (MAX. 300 ℃)



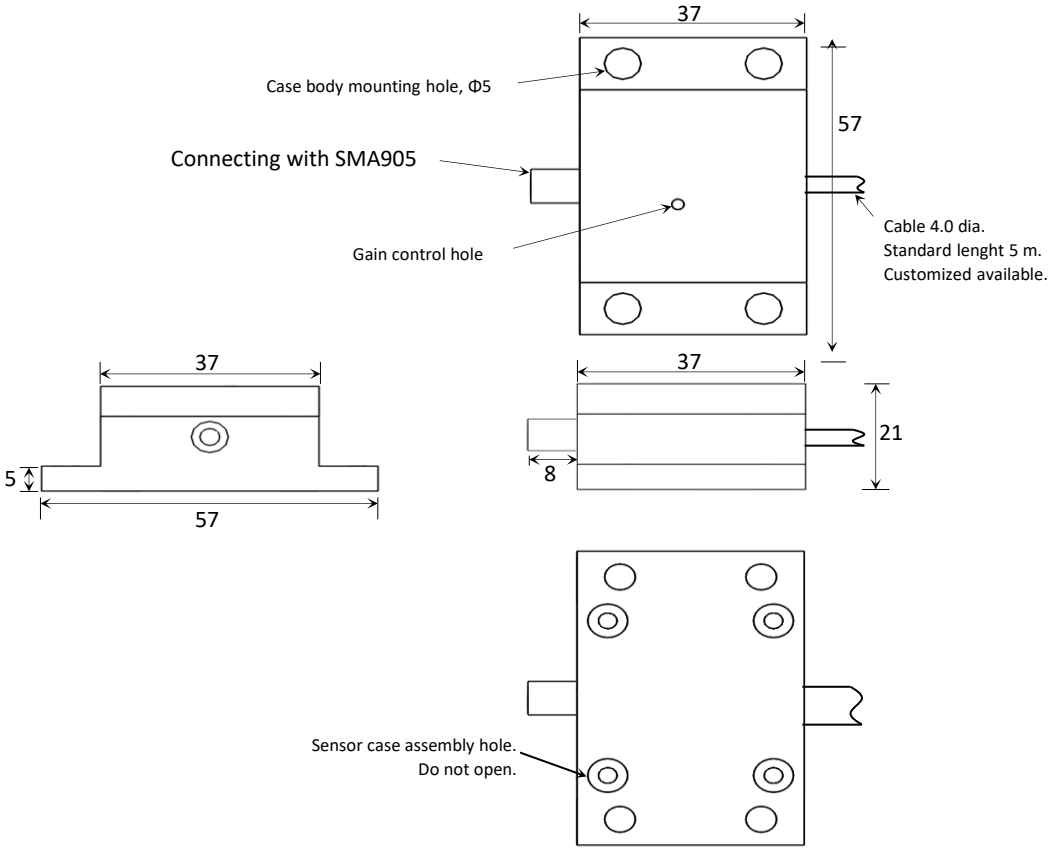
Dimensions (Unit : mm)

- **Optical fiber**



Material : Stainless steel (SUS304)

- **Sensor part**



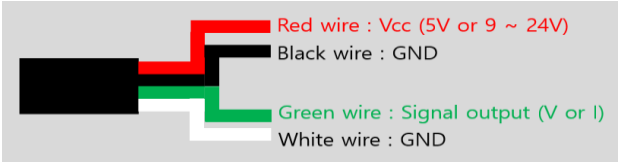
Material : Al-60 (Black anodizing)

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 5 V or 9 ~ 24 V
Black	GND	-
Green	V_{out} / I_{out}	DC 0 ~ 5 V or 4 ~ 20 ㎃
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 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.

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.

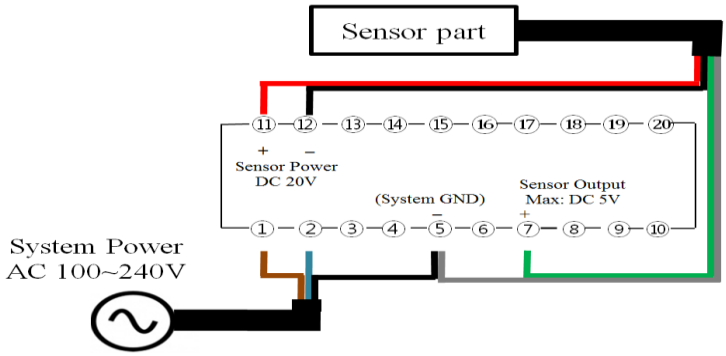
• The analog output value will change due to temperature drift.

• The gain control hole of Sensor part is not protected against UV exposure.

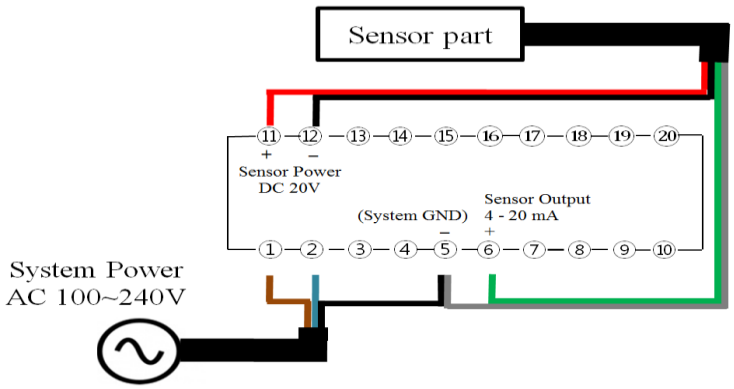
• The SMA905 connector of optical fiber is connect with sensor part, please fix using the Φ5-2ea fixing hole of bracket

Connections with Genicom's Radiometers

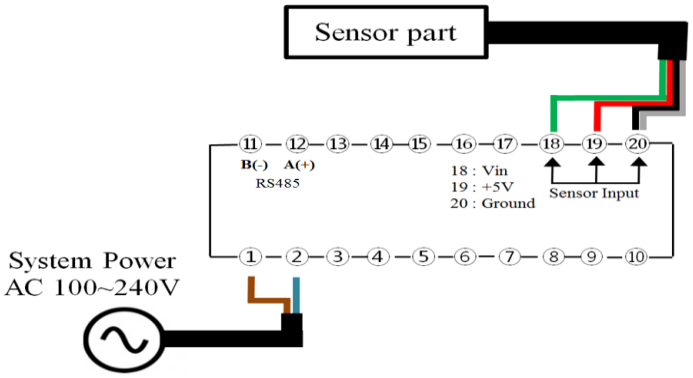
- **MG-02 (V_{out})**
  - Connection AC power to #1 and #2, and connect GND wire #5.
  - Connect Red wire to #11 (Vcc), Black wire to #12 (GND), White wire to #5 (GND), Green wire to #7 (Vout).



- **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}).

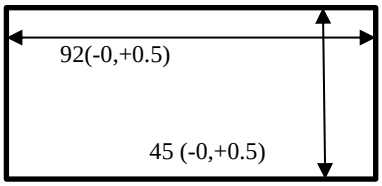


- **MG-05/05.1 (V_{out})**
  - Connection AC power to #1 and #2.
  - Connect Green wire to #18 (V_{in}), Red wire to #19 (V_{cc}), Black & White wires to #20 (GND).



Panel Cutting Size

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



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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