



UV Sensor Probe

GUV_x-T1xGC-3LW5.1



Features

Water Environment (<10 bar)

Single Supply Voltage, 0-5V Voltage Output

Applications

UV Power Measure

UV Lamp Monitoring



LW5.1 Probe (Socket : 8A FT tab SUS)



Connection Cable (IP67, 5m)

Fig1. UV Sensor Probe

Case dimensions

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

Absolute Maximum Ratings

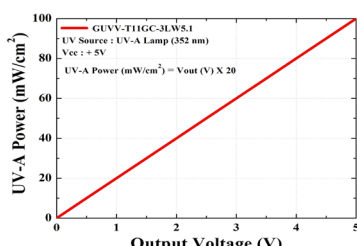
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Remark |
|-----------------------|-----------------|------|------|------|------|--------|
| Storage Temperature | T _{st} | -40 | | 90 | °C | |
| Operating Temperature | T _{op} | -30 | | 85 | °C | |

Electro-Optical Characteristics (at 25 °C)

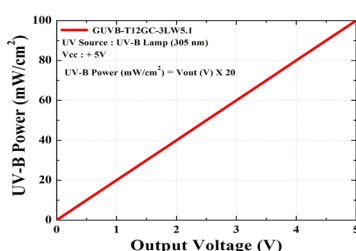
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Remark |
|-----------------------|-------------------|------|------|------|--------------------|-------------|
| Supply Voltage | V _{cc} | 9 | | 24 | V | DC |
| Supply Current | I _Q | | 3.3 | | mA | |
| Detection Range | GUVV-T11GC-3LW5.1 | λ | 230 | 395 | nm | 10% of Max. |
| | GUVB-T12GC-3LW5.1 | λ | 220 | 320 | nm | 10% of Max. |
| | GUVC-T11GC-3LW5.1 | λ | 220 | 280 | nm | 10% of Max. |
| Output Voltage | V _{out} | 0 | | 5 | V | |
| Detection Power Range | P | 0 | | 100 | mW/cm ² | |
| Response Time | T | | 10 | | ms | |

* Maximum of detection power : 20 mW/cm² (Option), 100 mW/cm² (Standard), 1000 mW/cm² (Option)

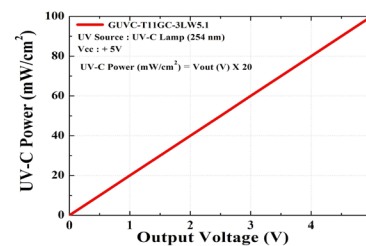
Output Voltage along UV power



GUVV-T11GC-3LW5.1



GUVB-T12GC-3LW5.1



GUVC-T11GC-3LW5.1

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