UV Module for Arduino

GUVx[1)]-T1x[2)]GM-AD

Genuine UV Technology

Description

UV sensors of Genicom make the photocurrent under UV light, but the level of photocurent is very low. This small signal is not easy to be checked by normal current measure equipments and it is not to fit input signal of analog-to-digital converter (ADC). So, our modules make the voltage output. If you want, you can use this output to the other devices like a Arduino.

Features

- Without separate supply voltage
- Analog voltage output (0~5V)
- Adjustable detection range

Applications

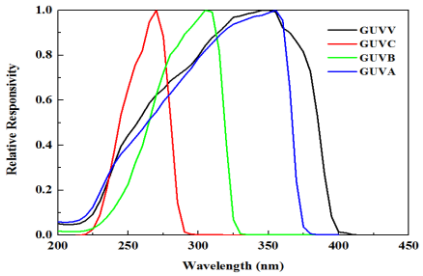
- UV Lamp power checking or monitoring
- Designed the UV measurement system with Arduino

Characteristics (at 25 ℃)

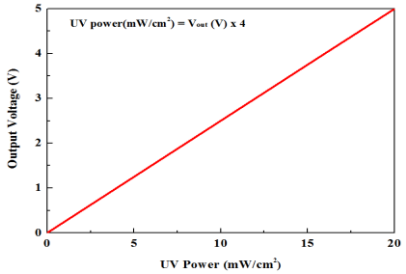
Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Supply Voltage	V_{cc}	1.8		5.5	V	Use Arduino 5V output
Supply Current	I_Q		0.05		mA	
Spectral Detection Range [1)]	λ	220		400(UVV)	nm	10% of Max.
Output Voltage	V_{out}	0		5	V_{dc}	
Power Detection Range	P	0		20	mW/㎠	V_{cc} = 5V
Response Time	T		10		ms	

1) Spectral range is changeable according to sensor spectrum.
2) A gorwth type of Epi.

Relative Responsivity



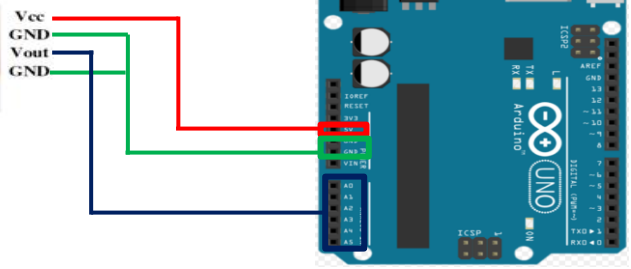
Output Voltage VS UV Power



Connecting UV module to Arduino Uno R3

- V_{cc} (Supply Voltage) : 5V (**Red wire**)
- GND : GND (**Green wire**)
- Vout (Output Voltage) : ANALOG IN (**Navy wire**)

UV module
(Size : 28×17×9 ㎜)



※ This example shows connecting with Arduino uno R3 board. But, any Arduino boards that have [5V], [GND], and [ANALOG IN] ports can be used.

Caution

ESD can damage the device, hence please avoid ESD. Insulate the cap of TO-CAN or it can cause malfunction of the device.