

UV Sensor User Manual

1. Features

Boost convertor chip	SGM8521
Operating voltage	3.0V-5.5V
Output type	TTL level output
Responsive wavelength	200nm-370nm
Dimensions	21.0mm*13.0mm
Fixing hole size	2.0mm

Operating principle:

This module has an UV sensor, GUVA, which is a ideal device for detecting the amount of UV ray without wavelength filter, since it is UV ray sensitive only. In other word, the wavelengths of 365nm(UV-A) and 320nm(UV-B) are the cut-off thresholds of GUVA.

2. Applications

This module can be applied to UV ray detecting system, outdoors UV monitoring device, sterilizing lamp and etc.

3. Interfaces

Pin No.	Symbol	Descriptions
1	AOUT	Analog output
2	GND	Power ground
3	VCC	Positive power supply (3.0V-5.5V)

4. How to use

We will illustrate the usage of the module with an example of UV ray testing by connecting a development board.

- ① Download the relative codes to the development board.
- ② Connect the module to the development board via a serial wire, then, power up the development board and start the serial debugging software. Here is the configuration of the connection between the module and the development board.

Port	STM32 MUC pin
AOUT	GPIOA.6
GND	GND
VCC	3.3V

Port	Arduino pin
AOUT	A0
GND	GND
VCC	5V

Here is the configuration of the serial port

Baud rate	115200
Data bits	8
Stop bit	1
Parity bit	None

- ③ Turn on a currency detector and illuminate its UV ray to the UV sensor. You will find that the serial port outputs relative data from the test.