

Arduino Sensor Ultra Violet User

Manual



Introduction:

The UV Sensor is used for detecting the intensity of incident ultraviolet (UV) radiation. This form of electromagnetic radiation has shorter wavelengths than visible radiation. This module is based on the sensor UVM-30A, which has a wide spectral range of 200nm-370nm. The module outputs electrical signal which varies with the UV intensity, which gives your suggestion if it is a good idea to beach today.

Applications:

UV-A Lamp Monitoring UV Index Monitoring DIY UV electronic project,etc... Specification: Input voltage:5V Output voltage:DC 0-1V(Corresponding 0-10 UV index) Working current:0.06mA(0.1mA max) UV wavelength detect:200-370nm Test accuracy:±1UV INDEX Response time:<0.5s Operating temperature:-20°C-85°C Interface:Anolog IO x1 .NET gadgeteer connector (IDC10)Socket x1 Size:27 x 22mm



<u>Schematic:</u>

Diagram:



UV Index	0	1	2	3	4	5
Vout(mV)	<50	227	318	408	503	606
Analog Value	<10	46	65	83	103	124
UV Index	6	7	8	9	10	+ 7+
		-			•••	
Vout(mV)	696	795	881	976	1079	1170+

Sample Code:

- /* 1
- # This Sample code is for testing the UV Sensor. 2
- 3 #Connection:
- 4 VCC-5V
- 5 GND-GND
- 6 OUT-Analog pin 0 */
- 7
- 8
- 9 void setup()
- 10 {
- Serial.begin(9600);// open serial port, set the baud rate to 9600 bps 11
- 12 }
- void loop() 13
- 14 {
- 15 int sensorValue;
- sensorValue = analogRead(0);//connect UV sensors to Analog 0 16
- Serial.println(sensorValue);//print the value to serial 17
- delay(200); 18
- 19 }