



Part Number: SEN0175

Description: Gravity: Analog UV Sensor (ML8511)

## ***INTRODUCTION***

The ML8511 is a UV sensor, which is suitable for acquiring UV intensity indoors or outdoors. It is equipped with an internal amplifier, which converts photo-current to voltage depending on the UV intensity. This unique feature offers an easy interface to external circuits such as ADC. In the power down mode, typical standby current is 0.1A, thus enabling a longer battery life.

This sensor detects 280-390nm light most effectively. This is categorized as part of the UVB (burning rays) spectrum and most of the UVA (tanning rays) spectrum. It outputs an analog voltage that is linearly related to the measured UV intensity (mW/cm<sup>2</sup>). If your microcontroller can do an analog to voltage conversion then you can detect the level of UV.



## ***FEATURES***

- Photodiode sensitive to UV-A and UV-B
- Embedded operational amplifier
- Analog voltage output
- Low supply current (300 $\mu$ A typ.) and low standby current (0.1A typ.)
- Small and thin surface mount package (4.0mm x 3.7mm x 0.73mm(0.16" x 0.15" x 0.03"), 12-pin ceramic QFN)

## ***APPLICATIONS***

- Smartphone
- Smart Watch
- Weather Station
- Bicycle Navigation
- Accessories
- Gaming

## ***SPECIFICATION***

- Supply Voltage: DC 5V
- Operating Temperature: -20~70°C
- Sensitivity Region : UV-A and UV-B
- Sensitivity Wave Length:280-390nm
- Module Size: 30 x 22mm(1.18 x 0.87")

## ***SHIPPING LIST***

- UV Sensor v1.0-ML8511 x1