This little sensor is a great way to add UV light sensing to any microcontroller project. The VEML6070 from Vishay has a true UV A light sensor and an I2C-controlled ADC that will take readings and integrate them for you over ~60ms to 500ms.

Please note, for UV sensing we now recommend the VEML6075 which is an improved version of this sensor with both UVA and UVB sensors and UV Index calculations.

Unlike the Si1145, this sensor will not give you UV Index readings. However, the Si1145 does UV
Index approximations based on light level not true UV sensing. The VEML6070 in contrast does have a real light sensor in the UV spectrum. It's also got a much much simpler I2C interface so you can run it on the smallest microcontrollers with ease. Unlike the GUVA analog sensor, the biasing and ADC is all internal so you don't need an ADC.

This UV sensor works great with 3 or 5V power or logic, its nice and compact, and its easy to use with any I2C-capable microcontroller. Each order comes with one assembled PCB with a sensor, some handy pullup resistors, a 270K rset resistor and a small piece of header. Some light soldering is required to attach the header but its a fast task!

Check out our tutorial for details on how to use this sensor, including files, code and assembly!

TECHNICAL DETAILS

VEML6070 Details:
- UV spectrum sensitivity: 320-410nm (peak at 355nm)
- Voltage Supply: 2.7-5.5V
- Schematic, Datasheet, EagleCAD PCB files, and Fritzing available in the product tutorial

Product Dimensions: 14.0mm x 13.0mm x 3.0mm / 0.6" x 0.5" x 0.1"

Product Weight: 0.5g / 0.0oz

RoHS

LEARN

Adafruit IO Environmental Monitor for Feather or Raspberry Pi
Build an internet-enabled environmental monitor to see what's in the air you breathe using Arduino or CircuitPython

Adafruit VEML6070 UV Sensor Breakout
Read UV light intensity over I2C

I2C addresses!
I2C addresses from 0x00 to 0x7F (inclusive)

MAY WE ALSO SUGGEST...
"Elegance is not a dispensable luxury but a quality that decides between success and failure" - Edsger W. Dijkstra