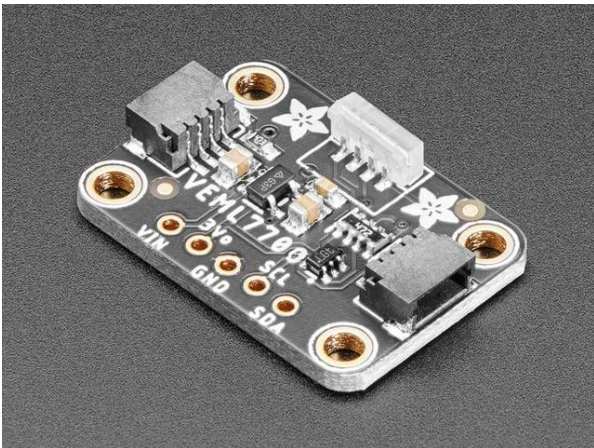


Using an ESP32 and Adafruit VEML7700 to measure UV light levels - UV index values and Lux levels:



```
esphome:
  name: light
  friendly_name: light
  includes:
    - /config/veml7700.h

  libraries:
    - "Wire"
    - "Adafruit Unified Sensor"
    - "SPI"
    - "Adafruit BusIO"
    - "Adafruit VEML7700 Library"

esp32:
  board: esp32dev
  framework:
    type: arduino

# Enable logging
logger:

# Enable Home Assistant API
api:
  encryption:
    key: "5ahEgIhdocQ2xU2wzJpOtMAar6ihhna9Xh7cJrHrGBU="

ota:
  password: "e77cc6a990001b6813a6705822241c8c"

wifi:
  ssid: !secret wifi_ssid
  password: !secret wifi_password

# Enable fallback hotspot (captive portal) in case Wi-Fi connection fails
ap:
  ssid: "Light Fallback Hotspot"
  password: "HsLOrYzCA2Pz"

captive_portal:

i2c:
```

sda: 21  
scl: 22  
scan: true  
id: bus\_a

sensor:

```
- platform: custom
lambda: |-
  auto my_veml7700_sensor = new MyVEML7700Sensor();
  App.register_component(my_veml7700_sensor);
  return {
    my_veml7700_sensor->veml7700_lux
    // , my_veml7700_sensor->veml7700_white
    // , my_veml7700_sensor->veml7700_raw_als
    // , my_veml7700_sensor->veml7700_gain
    // , my_veml7700_sensor->veml7700_it
    // , my_veml7700_sensor->veml7700_interrupt_status
  };
```

sensors:

```
- name: "VEML7700 Lux"
# filters:
# - median:
#   # window_size: 5
#   send_every: 1
#   # send_first_at: 2
# - exponential_moving_average:
#   # window_size: 5
#   send_every: 3
#   # send_first_at: 5
accuracy_decimals: 1
unit_of_measurement: lux
# poll_frequency: see veml7700.h, VEML_POLL_RATE
# - name: "${node_name} VEML7700 White"
# accuracy_decimals: 1
# unit_of_measurement: lux
# - name: "${node_name} VEML7700 raw ALS"
# accuracy_decimals: 1
# unit_of_measurement: raw
```

- platform: ltr390

uv\_index:  
name: "UV Index"

filters:  
- multiply: 95

uv:  
name: "UV Level"

light:  
name: "Light"

gain: "X1"

resolution: 18

window\_correction\_factor: 1.0

update\_interval: 5s