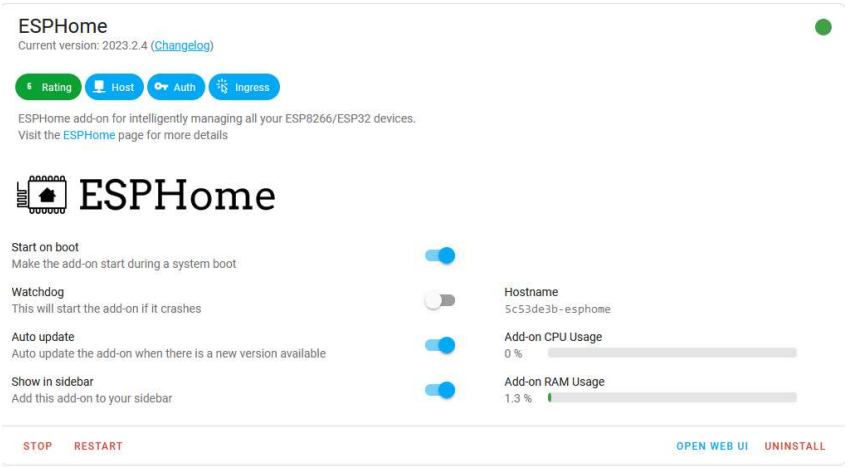
Installation:

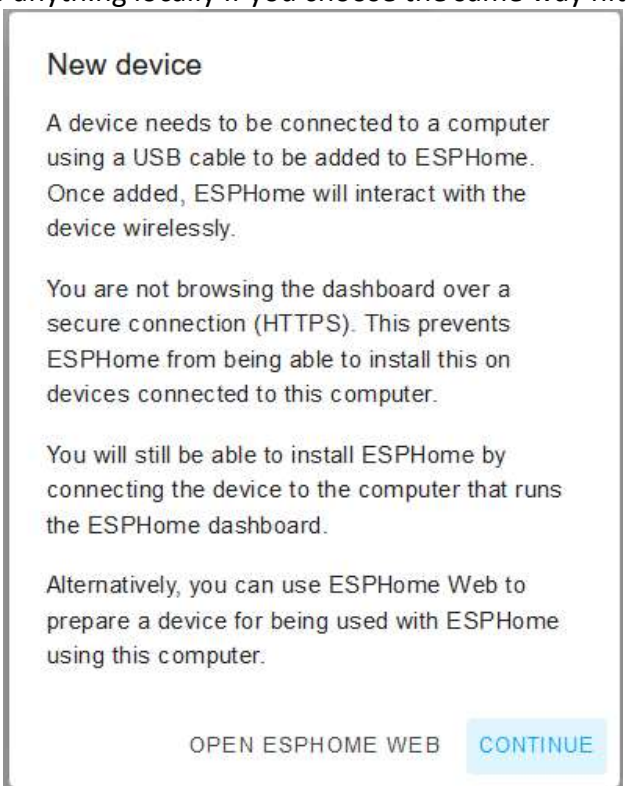
1.

If not done, install <ESPHome> to you HomeAssistant:
HomeAssistant > Settings > Add-ons > ADD-one Store >
select <ESPHome> > install it > activate <Show in Sidebar> and Start it.



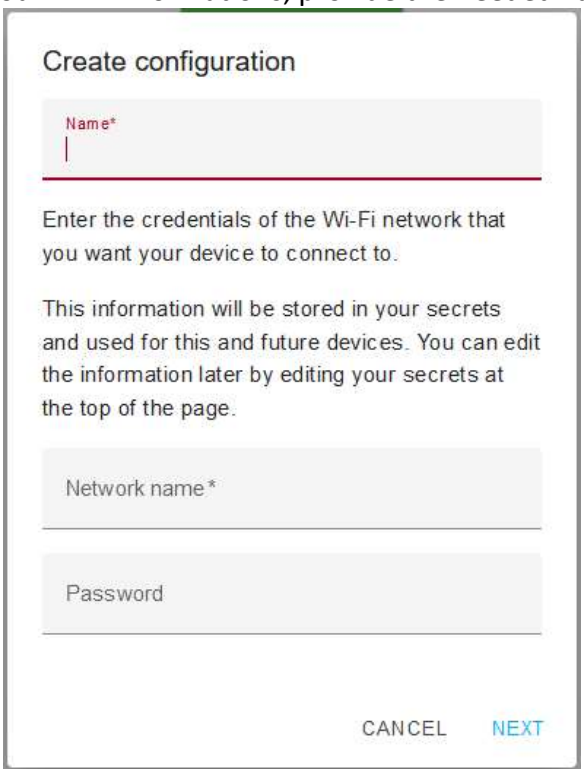
2.

Select select <ESPHome> from the sidebar and click on <NEW DEVICE>.
A pop-up window occurs, notice the content about how a device has to be connected.
I prefer to use the device to be connected to the computer running HomeAssistand
and to have do anything locally If you choose the same way hit <CONTINUE>.



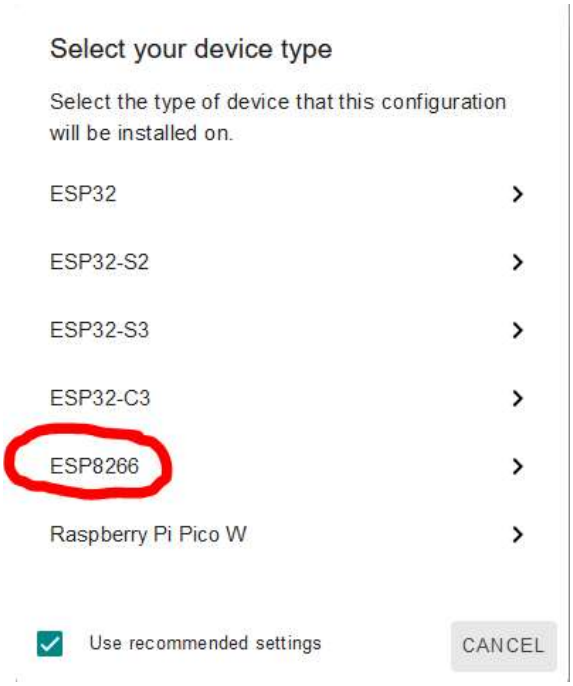
3.

In the next window you will be asked for the desired device name,
Simply enter one , and if it is the first time you create an ESPHome device additionally you will be asked for your WiFi informations, provide the needed values and click <NEXT>



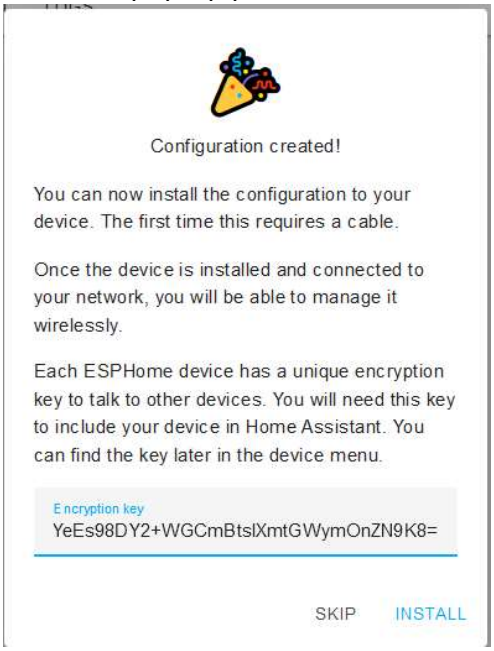
4.

At the next pop-up please select <ESP8266>



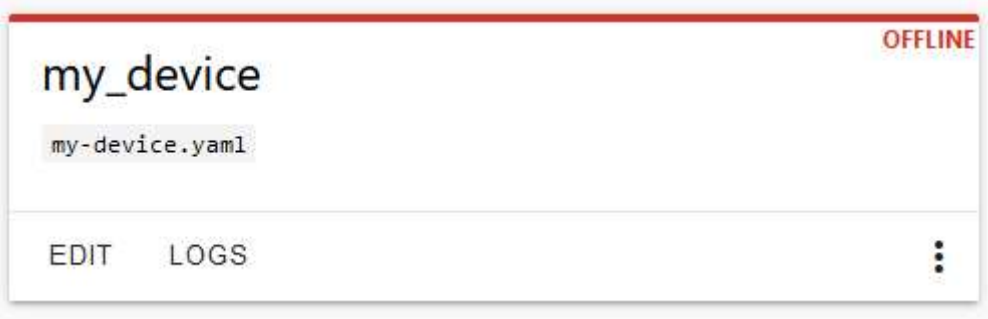
5.

At the next pop-up please select <SKIP> !



6.

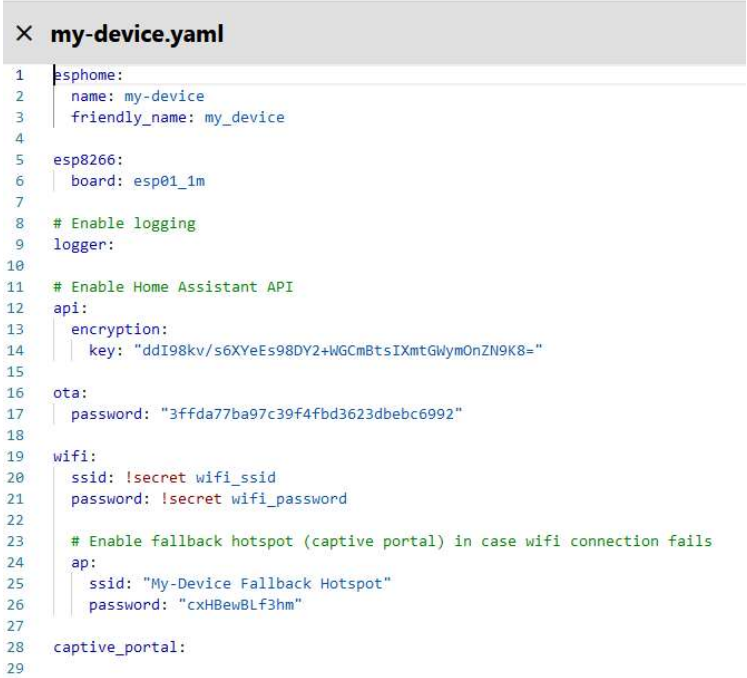
Now you should be back to the ESPHome desktop and see a template with your choosen name (I have choosen <my_device> for these instructions)



7.

Now we have to do the most important steps.

Click on <EDIT> on the new template and you should see something like this



8.

Now you have to open the provided example .yaml file

https://github.com/PitHerm/esphome-externalcomponents/blob/main/Docs/s5_gr3p15kww3.yaml

within a new browser session !

now you have to insert/replace parts from the sample .yaml into your .yaml file but take care not to overwrite the parts which I marked in RED of your file shown here:

```
esphome:
  name: my-device
  friendly_name: my_device

esp8266:
  board: esp01_1m

# Enable logging
logger:

# Enable Home Assistant API
api:
  encryption:
    key: "ddI98kv/s6XYeEs98DY2+WGCmBtsIXmtGWymOnZN9K8="

ota:
  password: "3ffda77ba97c39f4fbd3623dbebc6992"

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

  # Enable fallback hotspot (captive portal) in case wifi
connection fails
  ap:
    ssid: "My-Device Fallback Hotspot"
    password: "cxHBewBLf3hm"

captive_portal:
```

after all it should look like this (I marked the parts to keep with RED again):

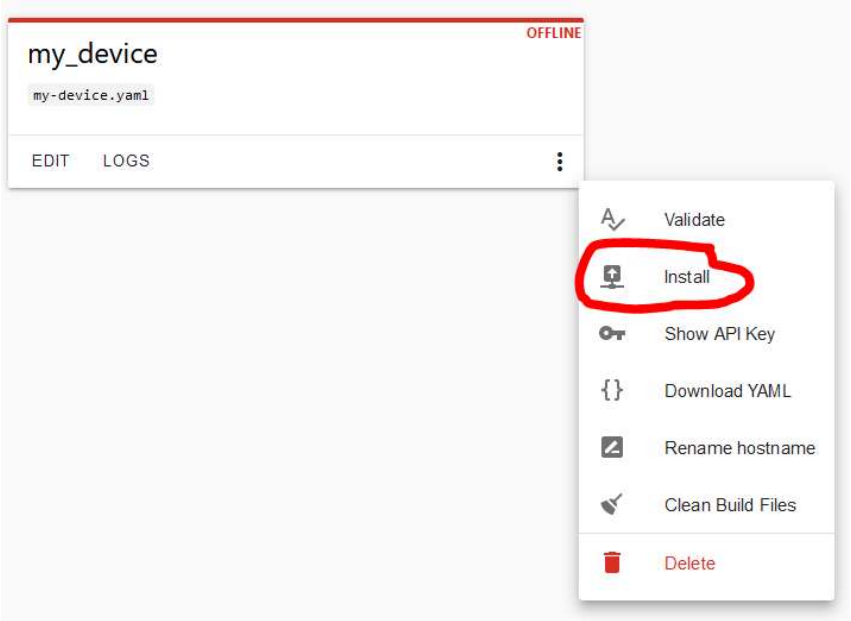
```
esphome:
  name: my-device
  friendly_name: my_device

external_components:
  source:
    type: git
    url: https://github.com/PitHerm/esphome-
externalcomponents

esp8266:
  board: esp01_1m

# Enable logging
logger:
  baud_rate: 0

web_server:
  port: 80

# Enable Home Assistant API
api:
  encryption:
    key: "ddI98kv/s6XYeEs98DY2+WGCmBtsIXmtGWymOnZN9K8="

ota:
  password: "3ffda77ba97c39f4fbd3623dbebc6992"

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

  # Enable fallback hotspot (captive portal) in case wifi
connection fails
  ap:
    ssid: "My-Device Fallback Hotspot"
```

```
    password: "cxHBewBLf3hm"

captive_portal:

sensor:
  - platform: uptime
    name: Solis Inverter ESPHome Uptime
    update_interval: 60s
  - platform: wifi_signal
    name: Solis Inverter ESPHome Wifi Signal
    update_interval: 60s

uart:
  id: uart_bus
  tx_pin: GPIO5
  rx_pin: GPIO4
  rx_buffer_size: 4096
  #tx_pin: 1
  #rx_pin: 3
  baud_rate: 9600
  debug:
    direction: BOTH
    dummy_receiver: false
    after:
      delimiter: "\n"
    sequence:
      - lambda: UARTDebug::log_string(direction, bytes);

s5_gr3p15kww3:
  id: solisinverter
  uart_id: uart_bus
  update_interval: 60s
  voltage_dc_1:
    name: "Solis Inverter DC Voltage 1"
  voltage_dc_2:
    name: "Solis Inverter DC Voltage 2"
  voltage_ac_u:
```

```
  name: "Solis Inverter AC Voltage U"
voltage_ac_v:
  name: "Solis Inverter AC Voltage V"
voltage_ac_w:
  name: "Solis Inverter AC Voltage W"
current_dc_1:
  name: "Solis Inverter DC Current 1"
current_dc_2:
  name: "Solis Inverter DC Current 2"
current_ac_u:
  name: "Solis Inverter AC Current U"
current_ac_v:
  name: "Solis Inverter AC Current V"
current_ac_w:
  name: "Solis Inverter AC Current W"
power_dc_1:
  name: "Solis Inverter DC Power 1"
power_dc_2:
  name: "Solis Inverter DC Power 2"
power_ac_total:
  name: "Solis Inverter AC Power Total"
va_ac_total:
  name: "Solis Inverter AC VA Total"
powerfactor_ac:
  name: "Solis Inverter AC Power Factor"
energy_today:
  name: "Solis Inverter Energy Today"
energy_thismonth:
  name: "Solis Inverter Energy This Month"
energy_total:
  name: "Solis Inverter Energy Total"
temperature_inv:
  name: "Solis Inverter Temperature"
```

9.

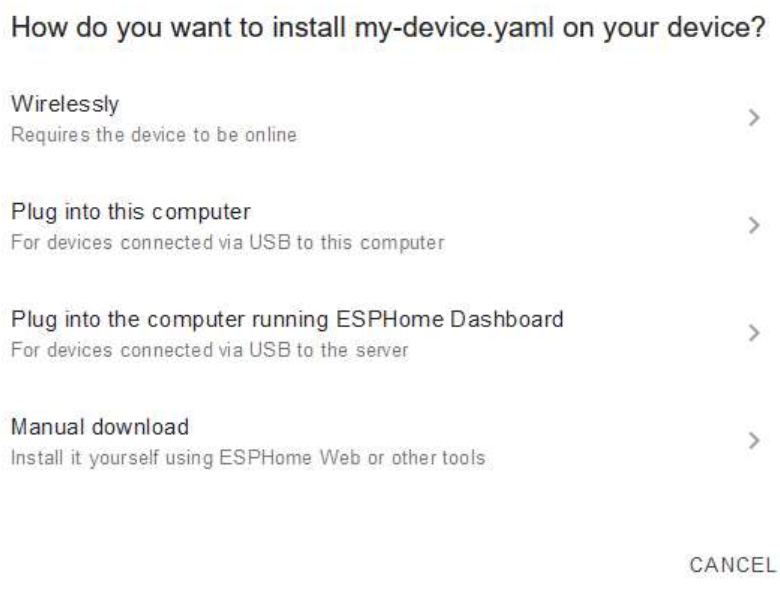
Now click on <SAVE> to save the file.and then on <X> to close it.
After that click on the three vertically point on the template of your new device and select <Install>



10.

Within the next pop-up select how you want to install the software to the D1-mini.
Before you select a way to, read the following lines and connect the D1-mini on your choice
Then select the way to.

Wirelessly : not possible for first installation
Plug into this computer : if you are connected remotely to the computer running HomeAssistant and the D1-mini is connected to this computer ,
works only with Chrome or Edge browser.
Plug into the computer running the ESPHome Dashboard : (my preferred) the D1-mini is plugged into the computer running HomeAssistant.



11.

A new windows opens and you will see the progress of compiling etc.
It takes some time for compiling etc , please be patient.

If it is ready, close the window and select Settings > Devices
After some seconds your new device should appear (if not reboot HomeAssistant)
Now <Configure> the new device.

12.

Connect the new device to your inverter and after (depending at what time the stick did the last request) maximum 10 Minutes your values will appear.