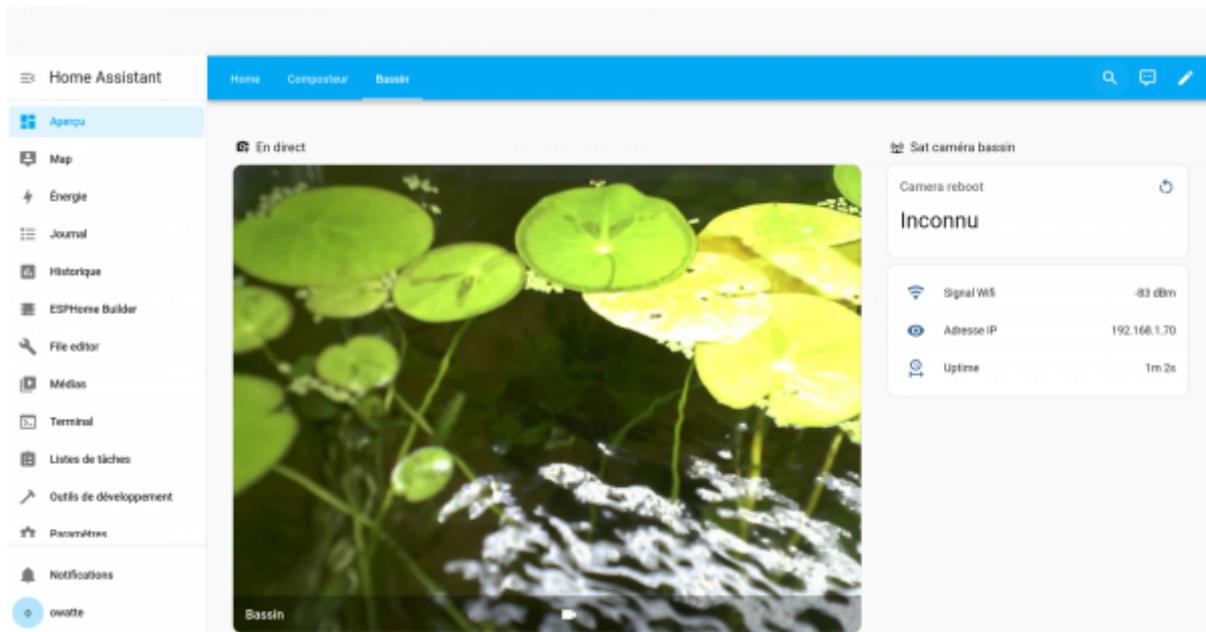# Sat Camera

Hardware

Code yaml ESPhome

camera.yaml

```yaml
substitutions:
  devicename: camera_bassin
  friendly_devicename: "Camera bassin"
esphome:
  name: ${devicename}
  friendly_name: ${friendly_devicename}

esp32:
  board: esp32dev
  framework:
    type: arduino

# Enable logging
logger:

# Enable Home Assistant API
api:
  encryption:
    key: "JLdvo56780TSRNRSTCeiu098765"

ota:
```

```yaml
  - platform: esphome
    password: "jldv9876povAUIE567987"

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

  # Enable fallback hotspot (captive portal) in case wifi connection
fails
  ap:
    ssid: "${friendly_devicename} Fallback Hotspot"
    password: "09876RSTCeiua0987654"

captive_portal:
esp32_camera:
  name: TimerX Camera
  external_clock:
    pin: GPIO27
    frequency: 20MHz
  i2c_pins:
    sda: GPIO25
    scl: GPIO23
  data_pins: [GPIO32, GPIO35, GPIO34, GPIO5, GPIO39, GPIO18, GPIO36,
GPIO19]
  vsync_pin: GPIO22
  href_pin: GPIO26
  pixel_clock_pin: GPIO21
  #power_down_pin: -1
  resolution: 800x600
  jpeg_quality: 10
  max_framerate: 15 fps
  idle_framerate: 0.1 fps
  vertical_flip: true
  horizontal_mirror: false

button:
  - platform: restart
    name: "Redémarrer TimerX Camera"

sensor:
  - platform: wifi_signal
    name: "signal WiFi ${friendly_devicename}"
    update_interval: 60s

  - platform: uptime
    name: "${friendly_devicename} Uptime"
    id: ${devicename}_uptime_sensor
    update_interval: 60s
    on_raw_value:
```

```yaml
        then:
          - text_sensor.template.publish:
              id: ${devicename}_uptime_human
              state: !lambda |-
                int seconds =
round(id(${devicename}_uptime_sensor).raw_state);
                int days = seconds / (24 * 3600);
                seconds = seconds % (24 * 3600);
                int hours = seconds / 3600;
                seconds = seconds % 3600;
                int minutes = seconds /  60;
                seconds = seconds % 60;
                return (
                  (days ? String(days) + "j " : "") +
                  (hours ? String(hours) + "h " : "") +
                  (minutes ? String(minutes) + "m " : "") +
                  (String(seconds) + "s")
                ).c_str();

text_sensor:
  - platform: wifi_info
    ip_address:
      name: "adresse IP ${friendly_devicename}"
      id: ${devicename}_ip_address

  - platform: template
    name: "Uptime ${devicename}"
    id: ${devicename}_uptime_human
    icon: mdi:clock-start

  - platform: version
    name: "Version d'ESPHome installée"
    id: ${devicename}_ESPHome_Version
```