HOW-TO
Integration
into
Home Assistant

Important Note

Services like REST API and MQTT require a license.

Please visit www.whatwatt.ch/pricing for more information.

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1.   Introduction

This guide explains step-by-step how to integrate the WhatWatt GO device, which uses the MQTT protocol, with the Home Assistant system. The device publishes measurement data in JSON format on a single topic, allowing easy monitoring of parameters such as power, energy, and voltage.

2.   Requirements

- whatwatt Go connected to local network
- Working Home Assistant system – Version 14 or newer
- MQTT broker (e.g., Mosquitto) installed and running

3.   Configure mqtt on whatwatt Go

Step 1 · Access WebUI of whatwatt Go

Open your browser and enter the IP address of the WhatWatt GO device, e.g. `http://192.168.1.100` into the address field

Step 2 · Add MQTT Settings

Navigate to `MQTT` Settings in the WebUI

Enter the following details and activate mqtt

- **Broker URL** · `mqtt://<broker_address>` (e.g. `mqtt://192.168.1.101`)

- **Username** and **Password** · Provide your MQTT broker credentials

- **Client ID** · `whatwattGO` (or any other unique identifier)

- **Topic** · `energy/whatwatt/go` (or any other topic structure)

- **Template** (this is an example. Add/remove OBIS codes according to your needs. OBIS values delivered by your meter can be identified here **WebUI** > **Live**)

```
{
  "sys_id":"${sys.id}",
  "meter_id":"${meter.id}",
  "time":"${timestamp}",
  "power_in":"$"{1_7_0},
  "power_out":"$"{2_7_0},
  "energy_in":"$"{1_8_0},
  "energy_out":"$"{2_8_0},
  "voltage_l1":"$"{32_7_0},
  "voltage_l2":"$"{52_7_0},
  "voltage_l3":"$"{72_7_0}
}
```

Step 3 · Set Reporting Period

Navigate back to **WebUI** > **System** and set the **„Interval to Systems"** to 30 seconds

4. Configure Home Assistant

Step 1 · Add MQTT Broker to Home Assistant and verify that data is received by the broker

Please check the internet for the step

Enter topic **energy/whatwatt/go** into test field of you mqtt broker and hit **Subscribe**

Step 2 · Configure Sensors

Add the sensors in **configuration.yaml** file to receive data from the whatwatt Go topic

```yaml
mqtt:
  sensor:
  - name: "Power In"
    icon: "mdi:transmission-tower-import"
    state_topic: "energy/whatwatt/go"
    value_template: "{{ value_json.power_in }}"
    unit_of_measurement: "kW"

  - name: "Power Out"
    icon: "mdi:transmission-tower-export"
    state_topic: "energy/whatwatt/go"
    value_template: "{{ value_json.power_out }}"
    unit_of_measurement: "kW"

  - name: "Energy In"
    icon: "mdi:lightning-bolt"
    state_topic: "energy/whatwatt/go"
    value_template: "{{ value_json.energy_in }}"
    unit_of_measurement: "kWh"

  - name: "Energy Out"
    icon: "mdi:lightning-bolt"
    state_topic: "energy/whatwatt/go"
    value_template: "{{ value_json.energy_out }}"
    unit_of_measurement: "kWh"

  - name: "Voltage L1"
    icon: "mdi:sine-wave"
    state_topic: "energy/whatwatt/go"
    value_template: "{{ value_json.voltage_l1 }}"
    unit_of_measurement: "V"

  - name: "Voltage L2"
    icon: "mdi:sine-wave"
    state_topic: "energy/whatwatt/go"
    value_template: "{{ value_json.voltage_l2 }}"
    unit_of_measurement: "V"

  - name: "Voltage L3"
    icon: "mdi:sine-wave"
    state_topic: "energy/whatwatt/go"
    value_template: "{{ value_json.voltage_l3 }}"
    unit_of_measurement: "V"
```

Step 3 · Restart Home Assistant

Save changes made in **configuration.yaml** and restart Home Assistant

5.   Add Visualization

Step 1 · Check the Sensors

Go to **Developer Tools** > **States** in Home Assistant.

Verify that sensors like **sensor.power_in**, **sensor.energy_in**, or **sensor.voltage_l1** display values

Step 2 · Add Sensors to the Dashboard

Navigate to **Overview** in Home Assistant and click **Edit Dashboard**

Add an **Entity Card** widget for the desired sensors.

Save the changes to view the data on the dashboard.

After completing these steps, the WhatWatt GO device will be fully integrated with Home Assistant. The measurement data published by the device in JSON format will be correctly received and displayed in the system. This integration allows real-time monitoring of key parameters such as power, energy, and voltage.

6.   Tipps & Tricks

Recommendations and Notes to Facilitate Integration

- **MQTT Broker** – Ensure that you have a working MQTT broker and that Home Assistant is properly connected to it (e.g., using the Mosquitto add-on and configuring the MQTT integration in HA with the correct login credentials).

- **Correct Formatting When Copying Configuration** – If copying the configuration from the PDF, pay close attention to indentation and formatting. It is best to edit the configuration.yaml file using a text editor and ensure that the YAML structure follows the provided example exactly (2 spaces before sensor:, and another 2 spaces before each - name: entry, etc.). Incorrect indentation is one of the most common reasons why Home Assistant fails to read the configuration. Ensuring the correct structure, as in the example, will guarantee error-free loading of the settings.

- **Verifying Operation** – After saving the configuration and restarting Home Assistant, check in Developer Tools > States whether the sensor entities (e.g., sensor.power_in) appear and receive values . If there isn't display data, check the Home Assistant logs for any warnings (e.g. connection issues with the MQTT broker) and confirm that WhatWatt GO is publishing data (for instance, by using an MQTT client to subscribe to the topic).

- **Additional Improvements (Optional)** – The provided configuration will work as expected right away. However, you may consider minor enhancements, such as adding unique IDs (unique_id) for each MQTT sensor. While not mandatory, this allows for better management of these entities in HA's UI (e.g., renaming them or assigning them to areas). For example, you could add a line like unique_id: "whatwatt_power_in" to the sensor definition (each ID must be unique within the HA installation). Another possible improvement is specifying appropriate device_class and state_class attributes for energy-related entities if you plan to use HA's Energy Dashboard-although these attributes are not required for basic value readings.