EVI GUI

The given values are susceptible to change without prior notice.

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Contents

1 Introduction

This document is a user manual for using the EVI Graphical user interface (GUI). The GUI is a web application with a server running on the EVI :
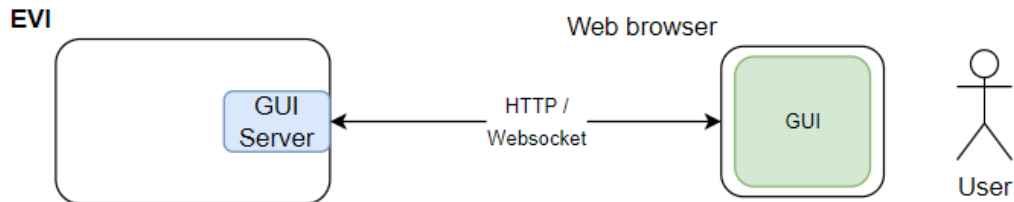

Figure 1 – GUI User diagram

2 Connecting to the GUI

A web browser is required in order to use the GUI, W&W recommends using the latest google chrome versions. The GUI is accessible at the following address:

http://dhsom.local:8333

2.1   Connecting through wi-fi hotspot

The EVI comes with support for TP-LINK 727N wi-fi dongle out of the box. If plugged in, it will act as a wi-fi access point, to which anyone can connect. The wi-fi access point contains the serial number of the EVI board. E.g.: **EVI_20056**. For information on the credentials please walk through our customer credentials delivery process:

1. W&W will send to customer an e-mail with link to get credentials (i.e. https://onetimesecret.com/)
2. Customer calls W&W technical support to get the « unlock password » by phone (vocal transmission)
3. Customer connects to website to unlock credentials.
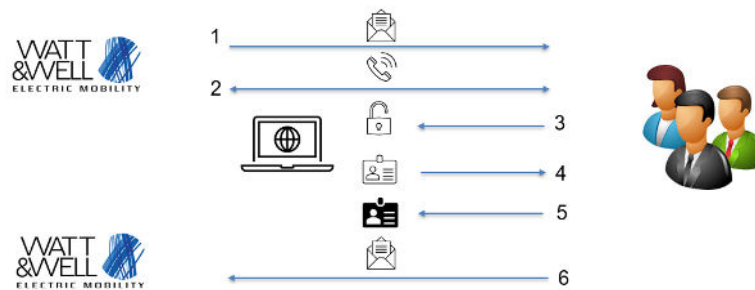4. Customer gets login and password

Figure 2 – Credentials delivery process

2.2   Connecting through ethernet

The EVI also has an ethernet port to which a user can connect. The standard IP address is **192.168.137.100**, therefore the user should configure his ethernet port to use a IP address in the range **192.168.137.x**.

3 Login

When navigating to the GUI link, the user should be prompted with a login page.
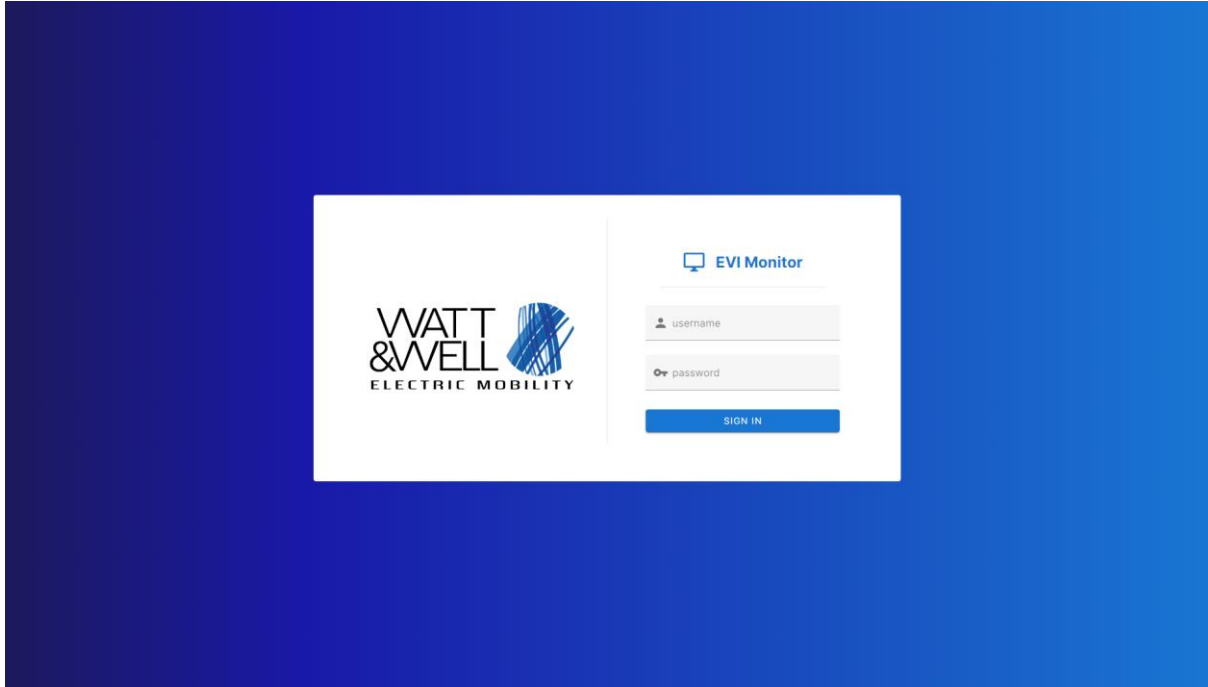

The GUI is protected by a login to prevent undesired access to the EVI board. In order to get the credentials please walk through our W&W credentials delivery process (**2.1**)

4 Global overview

The GUI is composed of several parts:

- A navigation containing information on the WebSocket connection status (live data feedback) as well as a logout button
- The menus, on the left hand side containing the different menus to navigate to
- The main window, with a different content depending on the menu
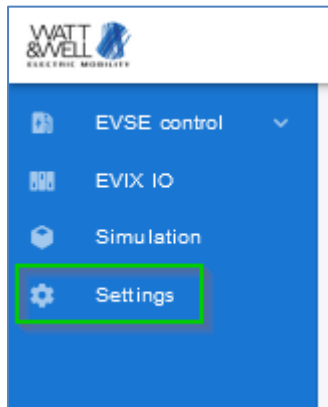- At the bottom of the menus, you will find the version of the GUI.
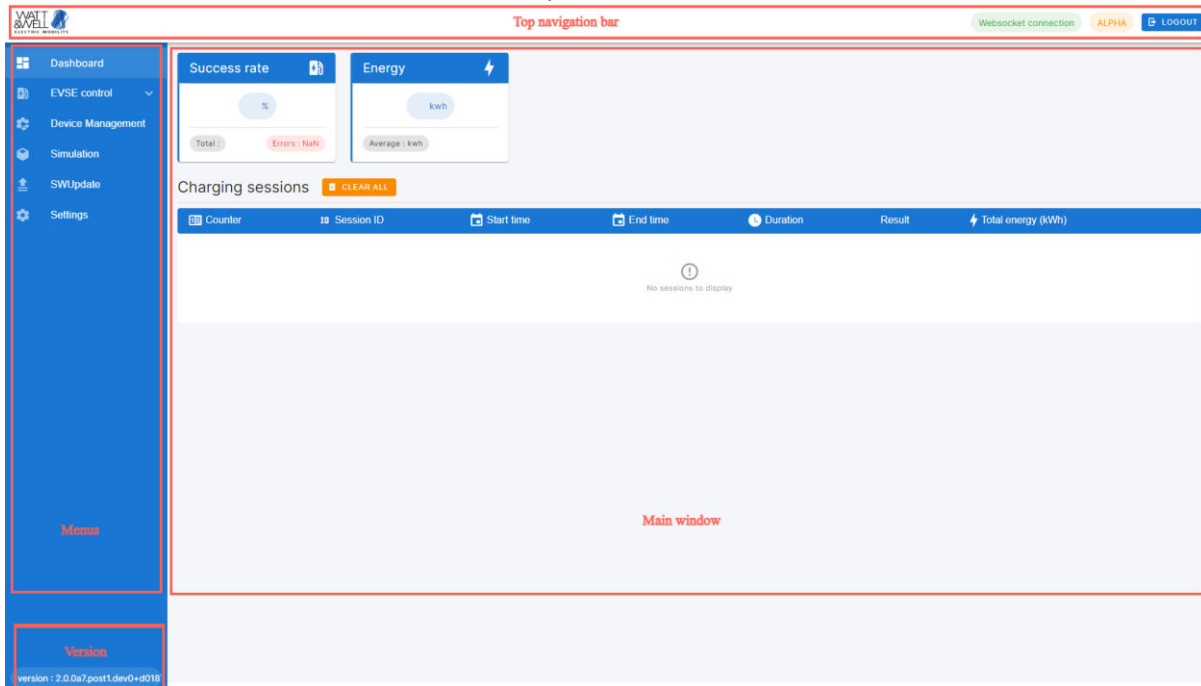
5 Dashboard view

Currently this view is in beta, and will contain information on the different charging sessions.
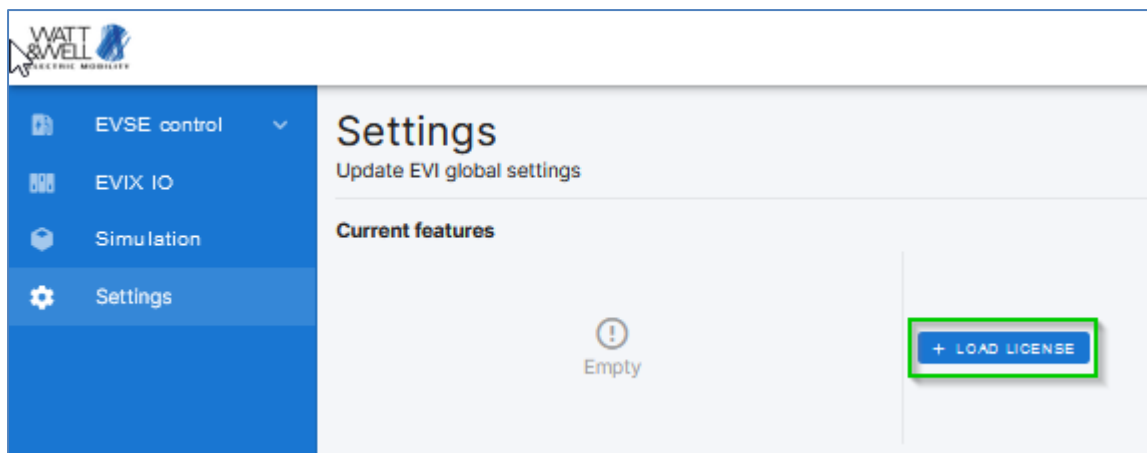
6 Import license key

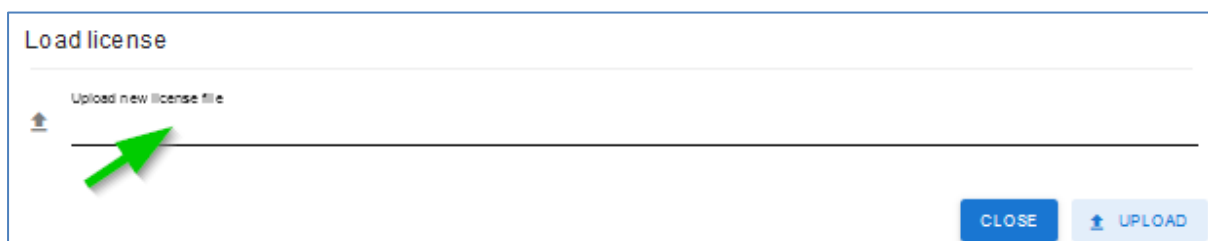License key is required to enable some of the EVI features.

Open the EVI global settings view by clicking on "Settings" button:

If no license key has been loaded, the current features list must be "empty" (see below). To upload Then click on "LOAD LICENSE" button:
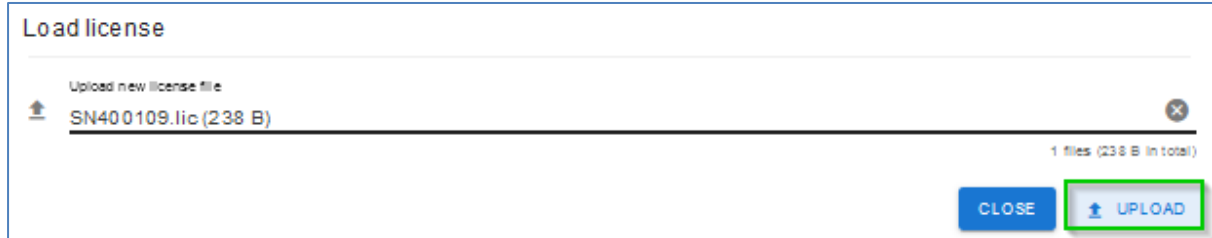

Then click on "Upload new license file" field and select the license key file, this file has format: SN<EVI_SERIAL_NUMBER>xxxxx.lic :

| SN400109 | Thursday 5, October, 2023 ... | LIC File |

Then press "UPLOAD" button:

Load license

Upload new license file

⬆ SN400109.lic (238 B)   ⊗

1 files (238 B in total)

CLOSE   ⬆ UPLOAD

A green pop-up windows should appear with message: "uploaded license". The allowed features must be displayed. In the following example, only the basic features are allowed:

🔋	EVSE control ⌄	**Settings**
🔲	EVIX IO	Update EVI global settings
💿	Simulation	**Current features**
⚙	Settings	BASIC + LOAD LICENSE
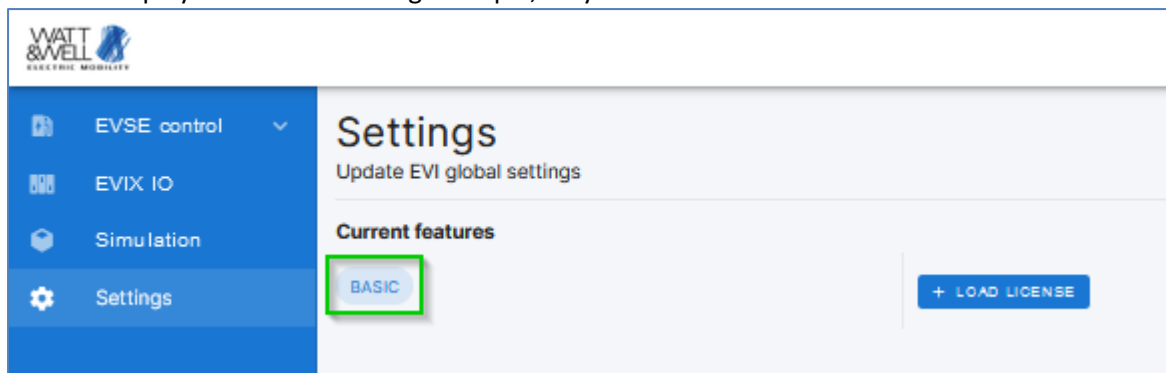
7   EVSE Control view

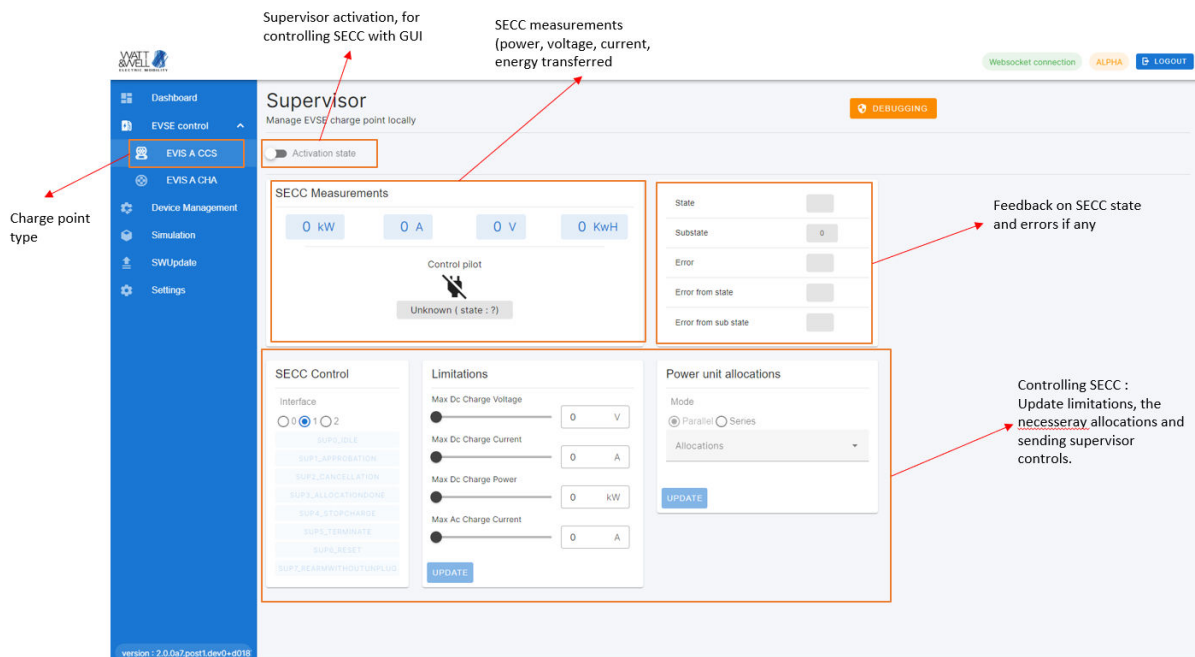This view is used to control and monitor the charge point.

Figure 3 – EVSE Control

When activated the control view should look something like the following :
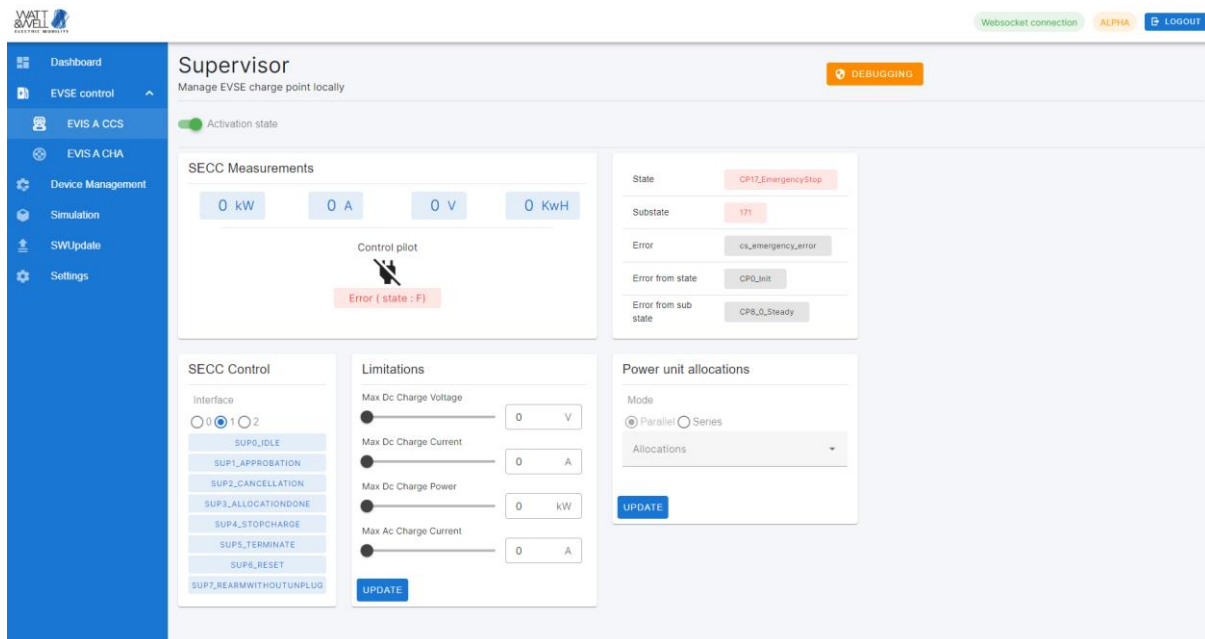

Figure 4 – EVSE Control, supervisor started

The user can enter :

- **Charging limitations** and click on "Update". This will be used when communicating to EV to give the charge point capabilities.
- **Power unit allocations** to allocate the power units to the charge point. This will depend on the configured IDs of the connected power units on the CAN bus.
- **Control SECC :** by sending start/stop signals as well as the interface.

Thorough explanations of the EVI interface can be found in **AN005- Reference manual**.

EVI has several interface types, in particular interface 2, which is needed in order to use V2G functionality adds additional information :

Figure 5 – Interface 2 specific parameters

For a charging sequence example, please read chapters **7.1** and **7.2** of the document **AN005 – Technical reference manual**.

8 Device management view

The device management view can be used to access information on the connected devices of the CAN bus. This page is still in development and should only be used to view the connected devices.

9 EVIX-IO view

This view can be used to drive EVIX-IO board outputs as well as display its API's feedbacks.

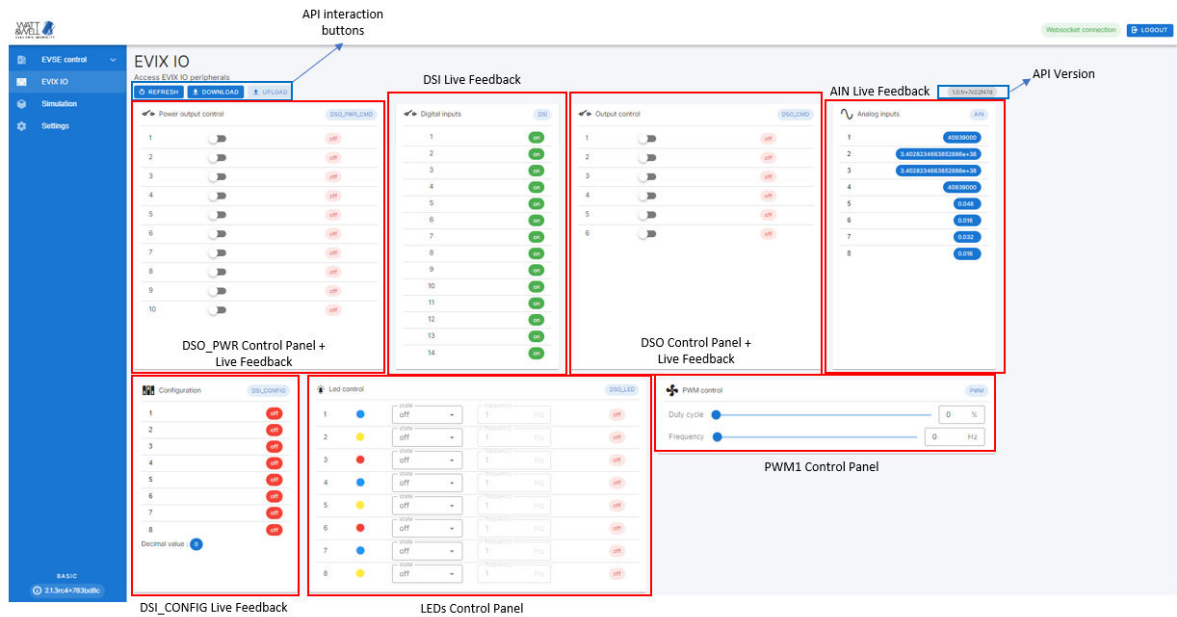**Figure 6: Segmentation of the EVIX-IO view**

API interaction buttons functions are described in the table below :

Button	Function
Refresh	**Resynchronizes the bistable buttons and fillable areas of the GUI with the API's current feedback.** Should the page be refreshed , or another service be using the API concurrently with the GUI, the buttons don't get automatically updated.
Download	**Downloads the current drive settings of the various outputs into a reusable Request.json file.**
Upload	**Uploads to the API a pre-formatted or previously downloaded Request.json file to automatically set multiple outputs to their desired states/values.**

The API version is displayed on the top-right corner of the EVIX-IO view.

Multiple boxes are displayed in the body of the view and correspond each to a set of I/Os controlled and observed by the EVIX-IO API.
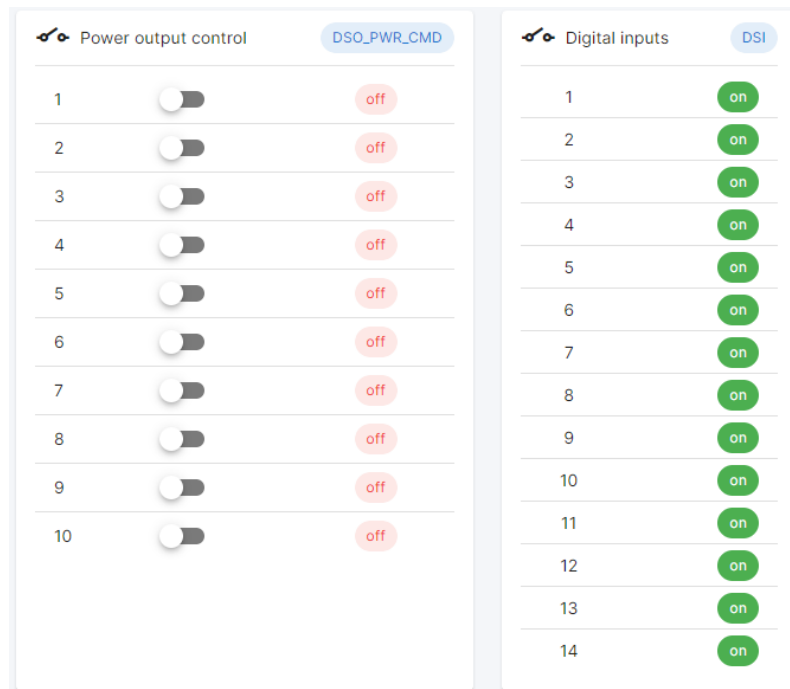
Figure 7: Example with DSO_PWR and DSI

In those boxes, the number besides any button or displayed value corresponds to the id of the named peripheral (e.g. 1 in Power output control = DSO_PWR_CMD_1).

All outputs have either bistable switch buttons to toggle them ON and OFF, fillable areas to set specific values, or slider bars to roughly set said values. In output peripheral boxes, the value of the last sent command is seen as a feedback right next to each driving command button as shown below.

Figure 8: Example for DSO_PWR_CMD

All inputs (Digital and Analog) as well as feedbacks are automatically refreshed periodically, with a default refresh rate of 500ms (2Hz).

10 Simulation view

This view can be used to emulate power units and the PM. This is still under development and is currently not documented.

11 SwUpdate view

Still under development, will be used to update EVI with SwUpdate.

12 Settings

Still under development, will be used for general EVI configurations.