

# Installation and Configuration Manual — eCharge Hardy Barth cPµ2 Pro

Version:2026.10.1

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# 1. Introduction

## 1.1. Legal provisions

The information contained in these documents is the property of FENECON GmbH. Publication, in whole or in part, requires the written consent of FENECON GmbH.

Subject to changes and printing errors!

## 1.2. Qualification of the installing electrician

A qualified electrician is a person who has the necessary experience and training:

- Setting up, switching on, switching off, disconnecting, short-circuiting and repairing circuits and devices
- Standard maintenance and use of protective devices in accordance with current safety standards
- First aid/emergency care
- Current knowledge of local regulations, standards and guidelines

# 2. Product description

## 2.1. Before installing the FEMS App eCharge Hardy Barth cPµ2 Pro Charging Station

In the Salia web interface, go to *Configuration* and check the following settings:

| | |
|---|---|
| **Free Charging** AND **Heartbeat** enabled? | ☑ |
| For charging stations with phase switching: Is **Phase Switching** active? | ☑ |

Table 1. Checklist for Additional Settings

# 3. Commissioning

| | |
|---|---|
|  | To install the Hardy-Barth charging station, please follow the instructions in the "cPµ2 Charging Station Installation and Operating Instructions."<br>cPµ2 operating instructions (v1.0) |
|  | You should also read and familiarize yourself with the "Configuration Manual" for the Salia PCB:<br>Configuration Guide — Salia PCB |

This quick guide refers to the original user manuals.
It serves as an installation aid for qualified electricians in the area of communication interfaces, but is not a substitute for studying the user manuals.

The plug connection for the LED display can be disconnected if required. This makes it easier to work on the charging station during commissioning.

We recommend checking the plug connection to the left of the Ethernet port on the Salia board, as in our experience this is often loose.

Once the charging station has been installed and configured, it must be connected to the customer network via the network interface (LAN) on the Salia board.

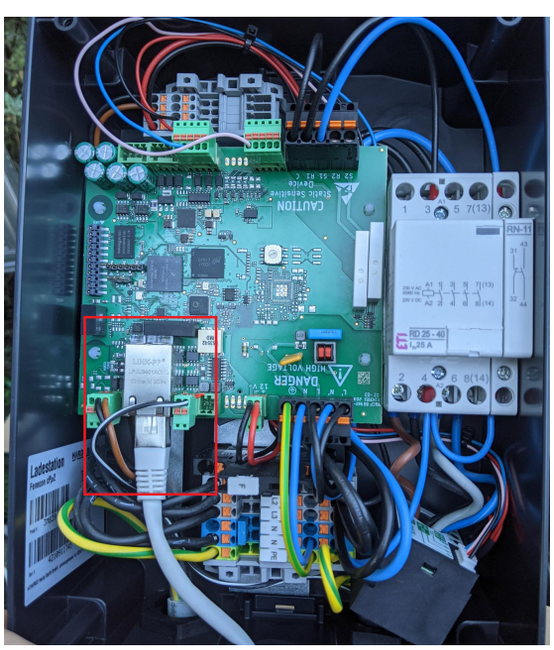



Image 1. Network interface (LAN) - Salia board

## 3.1. Connecting the meter

### 3.1.1. Connection to an external meter




Image 2. RS-485 meter connection

### 3.1.2. Connection to the internal meter (PCB)

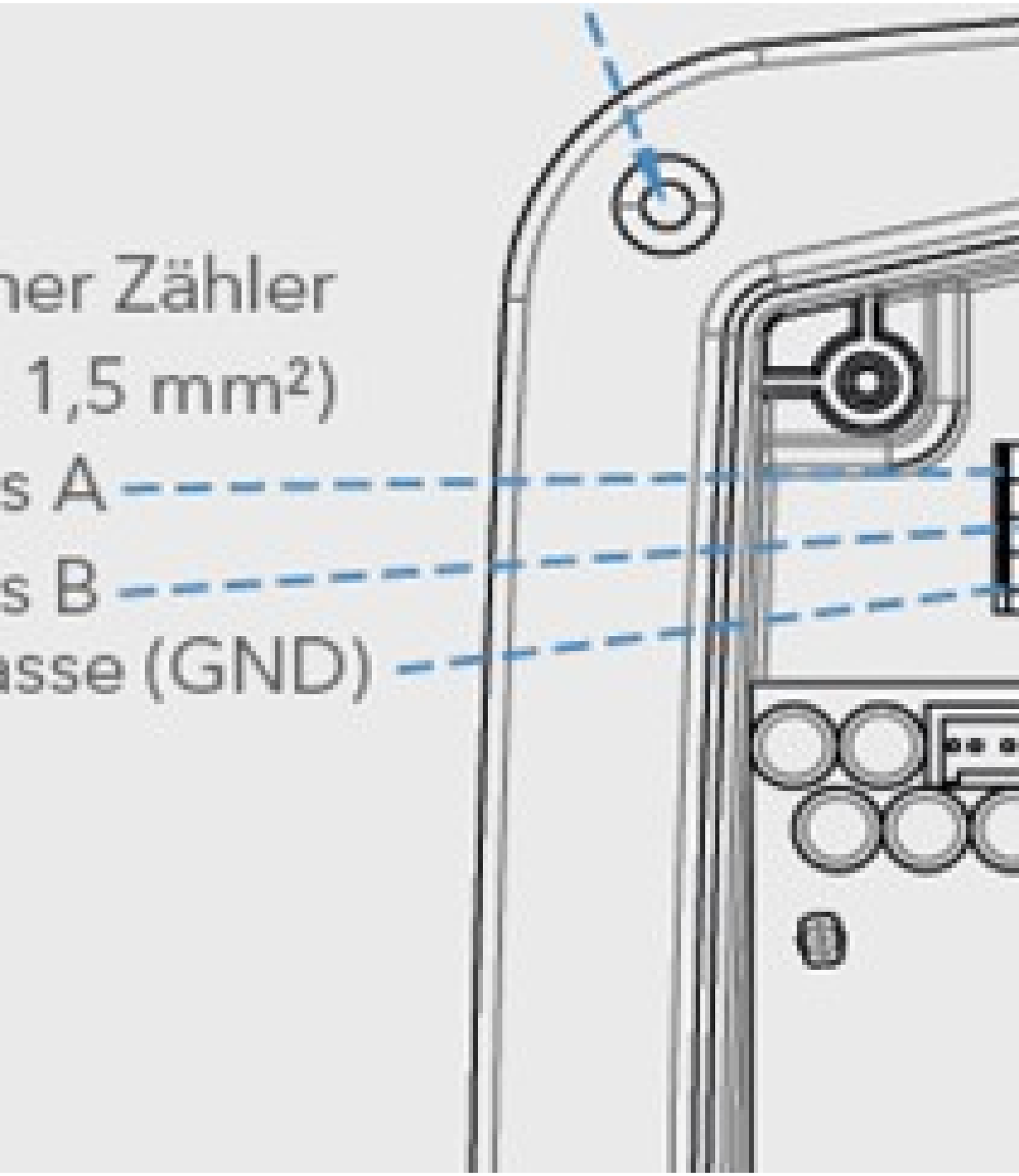



Image 3. Internal meter connection on the PCB

### 3.1.3. Connecting the input and output lines to the meter

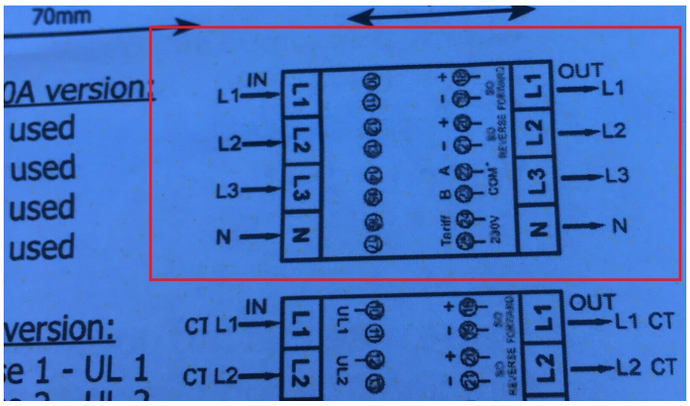



Image 4. Connecting the input and output lines to the meter

> Make sure that the meter is installed the right way round: *OUT* must point towards the charging station, *IN* towards the sub-distribution board.

Establish the communication connection to the meter as follows:

- Connect terminal A in the wallbox to contact A+ on the meter.
- Make a connection between terminal B in the wallbox and contact B- on the meter.
- Make a connection between terminal G in the wallbox and the GND contact on the meter.

## 3.2. Configuration

By default, the charging station can be reached under the IP address `192.168.25.30` (or `169.254.12.30`).

> If the wallbox was not purchased from a FENECON dealer, the IP address is: `169.254.12.53`.

To reach the charging station from your notebook/PC, it is necessary to set up a static IP address in the same subnet (e. g. `192.168.25.1`) in the network adapter settings.

1. To do this, connect the Salia board to your device (here: notebook) via the RJ45 socket, as shown below:

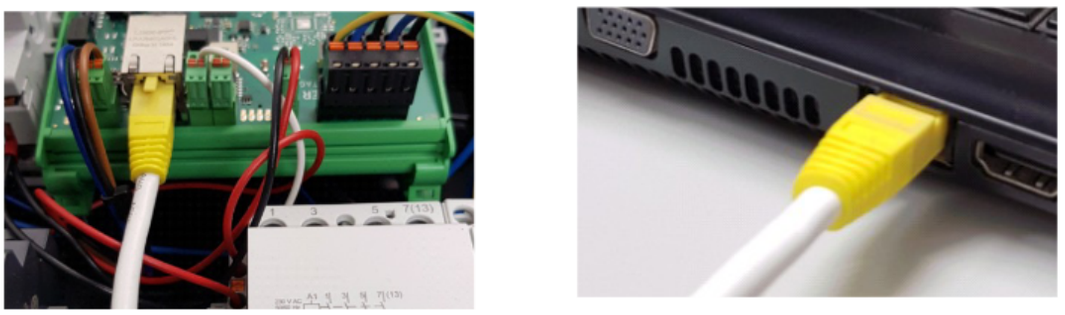


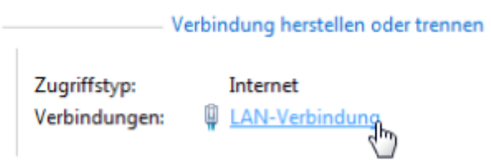
Image 5. Connecting the Salia board to the notebook

2. Open your web browser to access the web interface. To do this, enter the following IP address: `192.168.25.30`

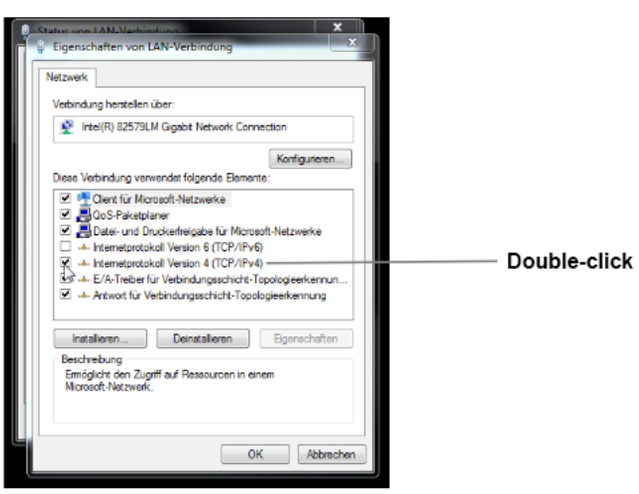
If the wallbox was not purchased from a FENECON dealer, the IP address is: `169.254.12.53`.

If problems occur in step 2, proceed as follows:

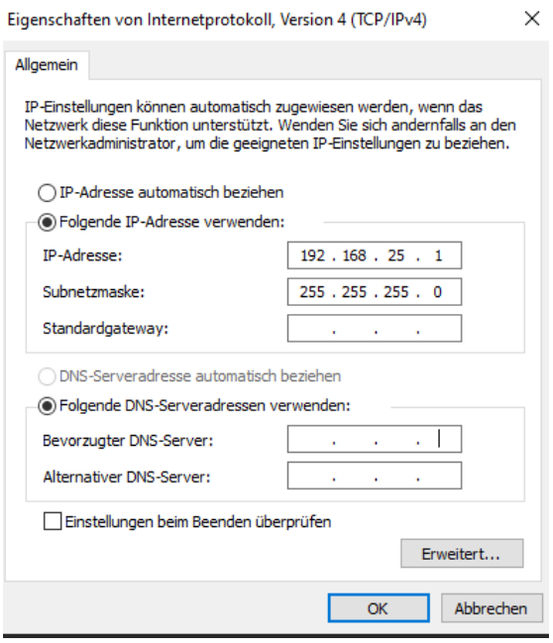
1. Open the "Network and Sharing Center" under the system settings of your PC.
2. Click on LAN connection.




3. In the newly opened window, click on Properties
4. In the new window, double-click to open the "Internet Protocol Version 4 (TCP/IPv4)" item (see graphic).
   Alternatively, select "Internet Protocol Version 4 (TCP/IPv4)" in the open window and then click on "Properties"



5. In the next window, select "Use the following IP address" to enter the IP address `192.168.25.1` and the subnet mask `255.255.255.0` as shown in the picture below. The entries for the DNS server can be left blank.




6. Confirm the entries. Then switch off the power to the wallbox once, wait a few seconds and allow the wallbox to reboot.

The charging station can then be configured via the web interface. To do this, enter the IP address of the charging station (`192.168.25.30`) in the address bar of the browser. The web interface then appears as shown below:

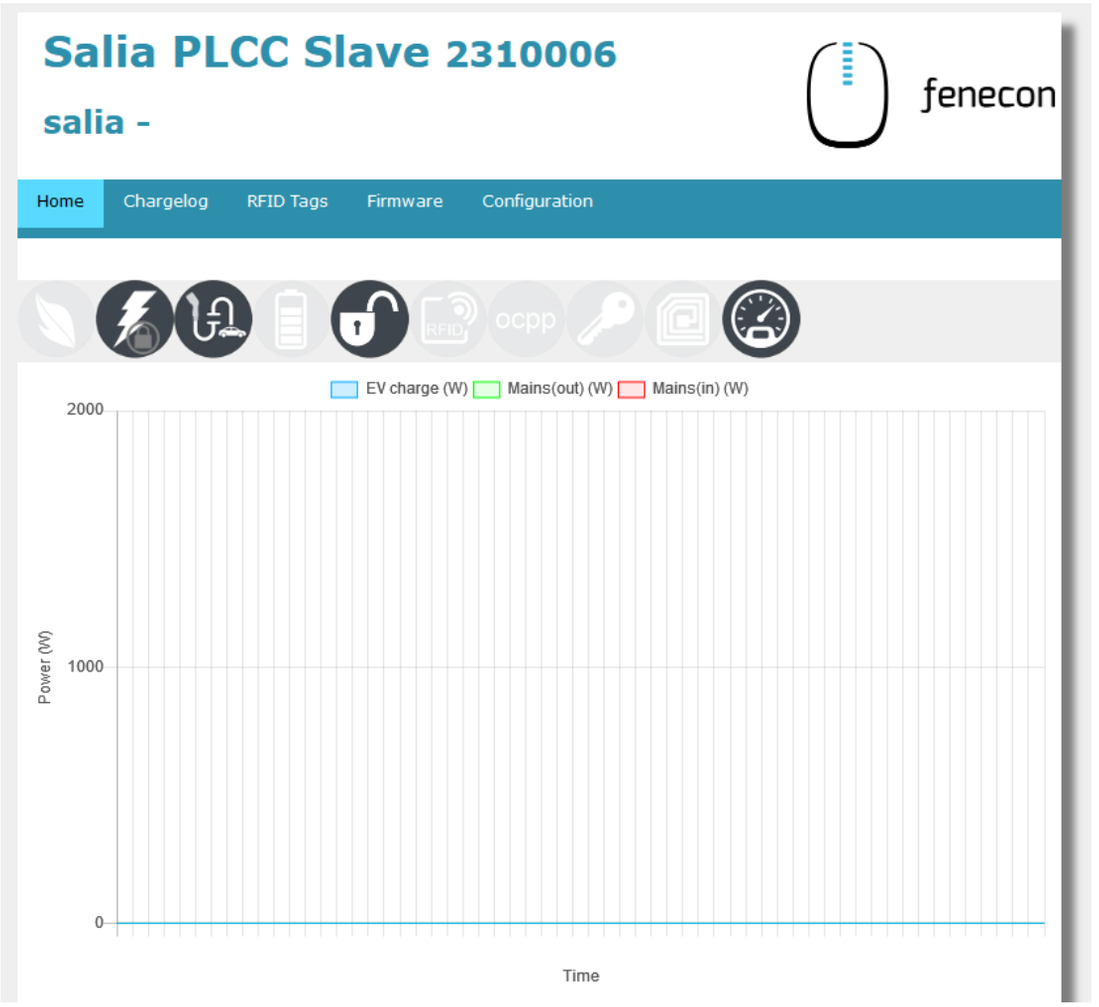



Image 6. Web interface

The network settings can be checked here:

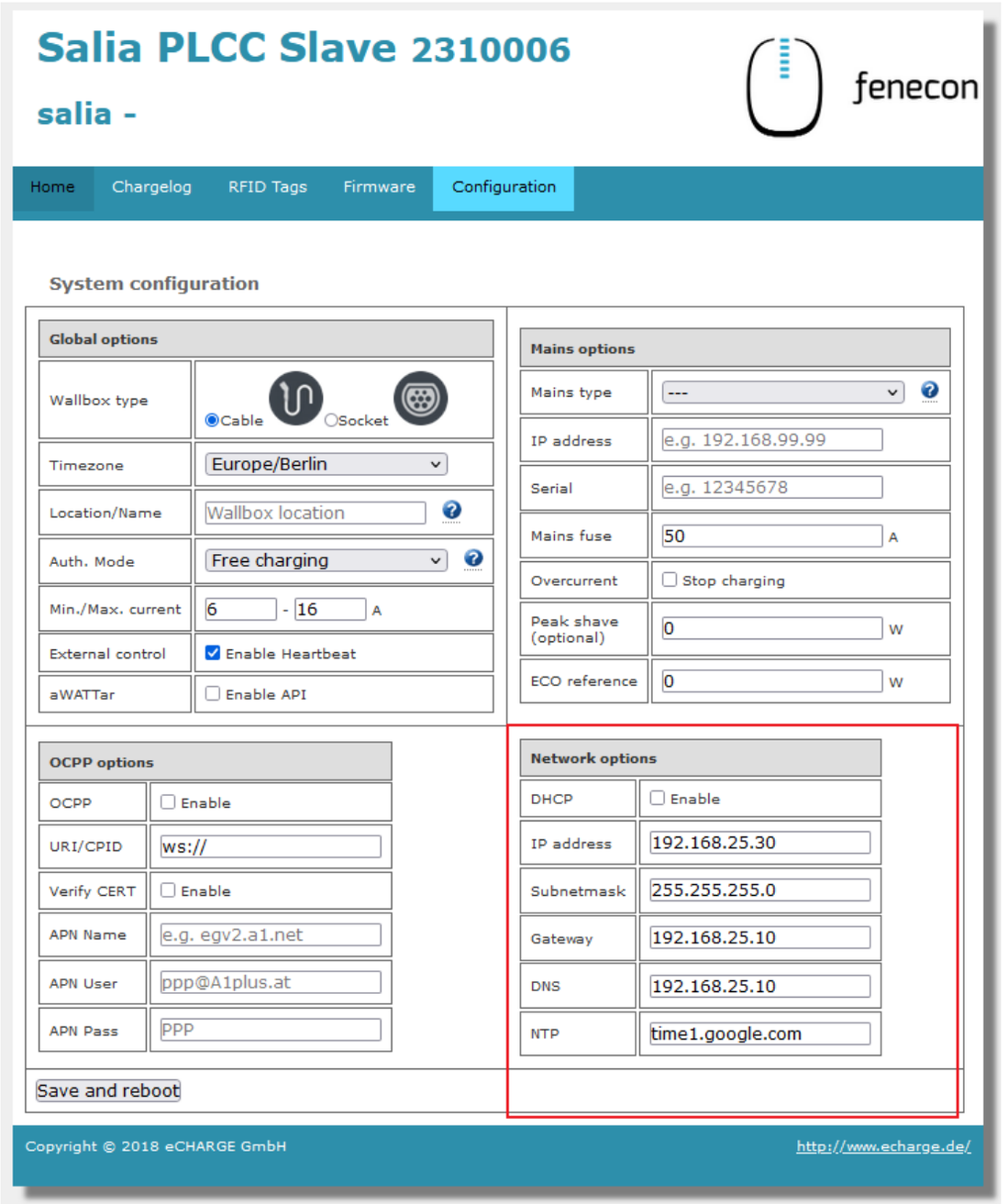



Image 7. Network settings

## 3.3. Configuration of the meter

It must be ensured that the meter is activated:

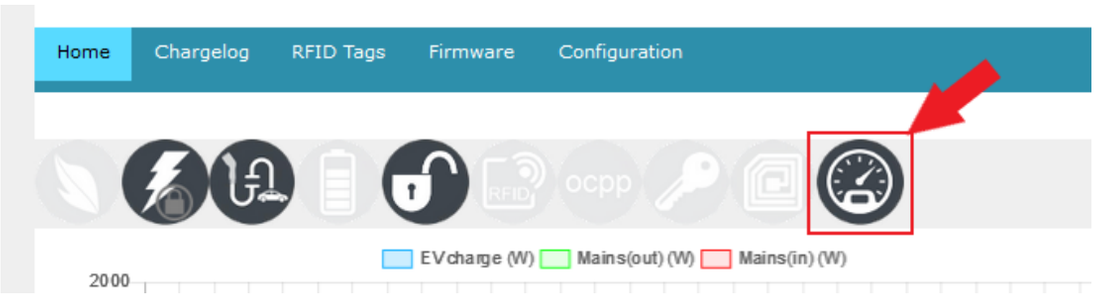



Image 8. Meter

If this is not the case (grayed out symbol), it must be activated manually. To do this, double-click in the free area next to *System configuration*:

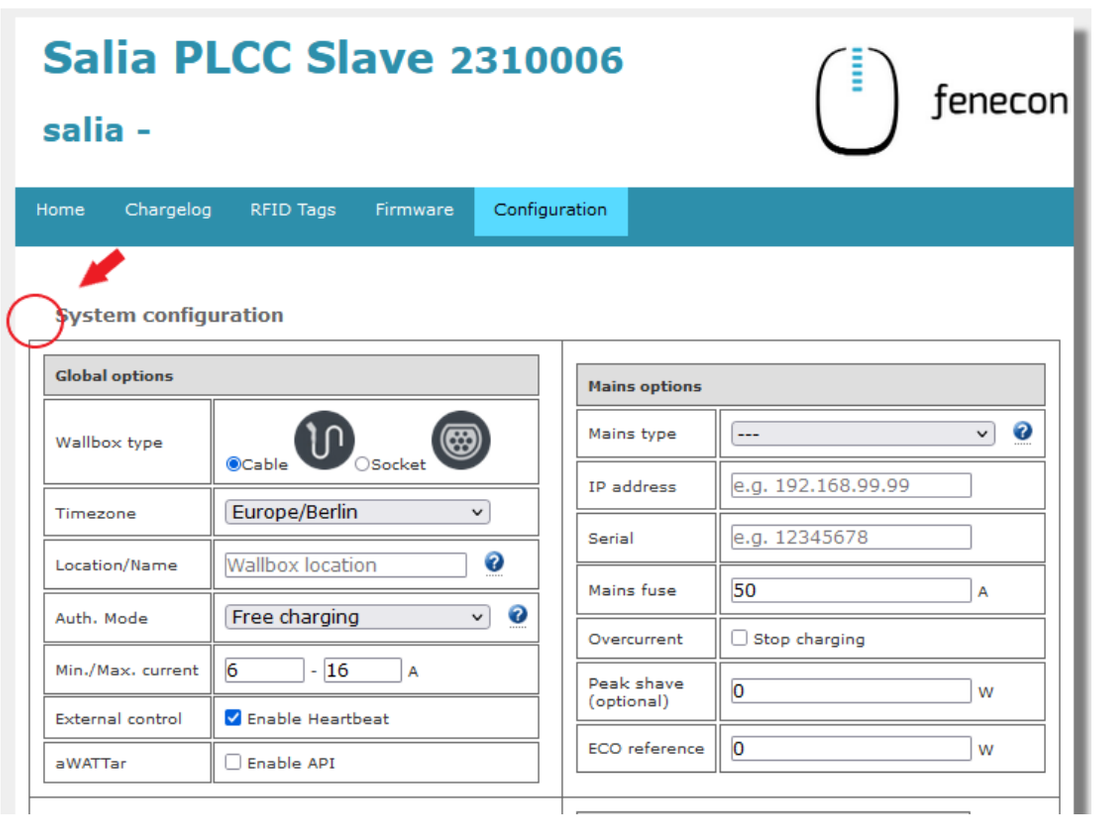



Image 9. Hidden menu

An extended view with further configuration options then opens. The meter can be activated under *Advanced Options*:

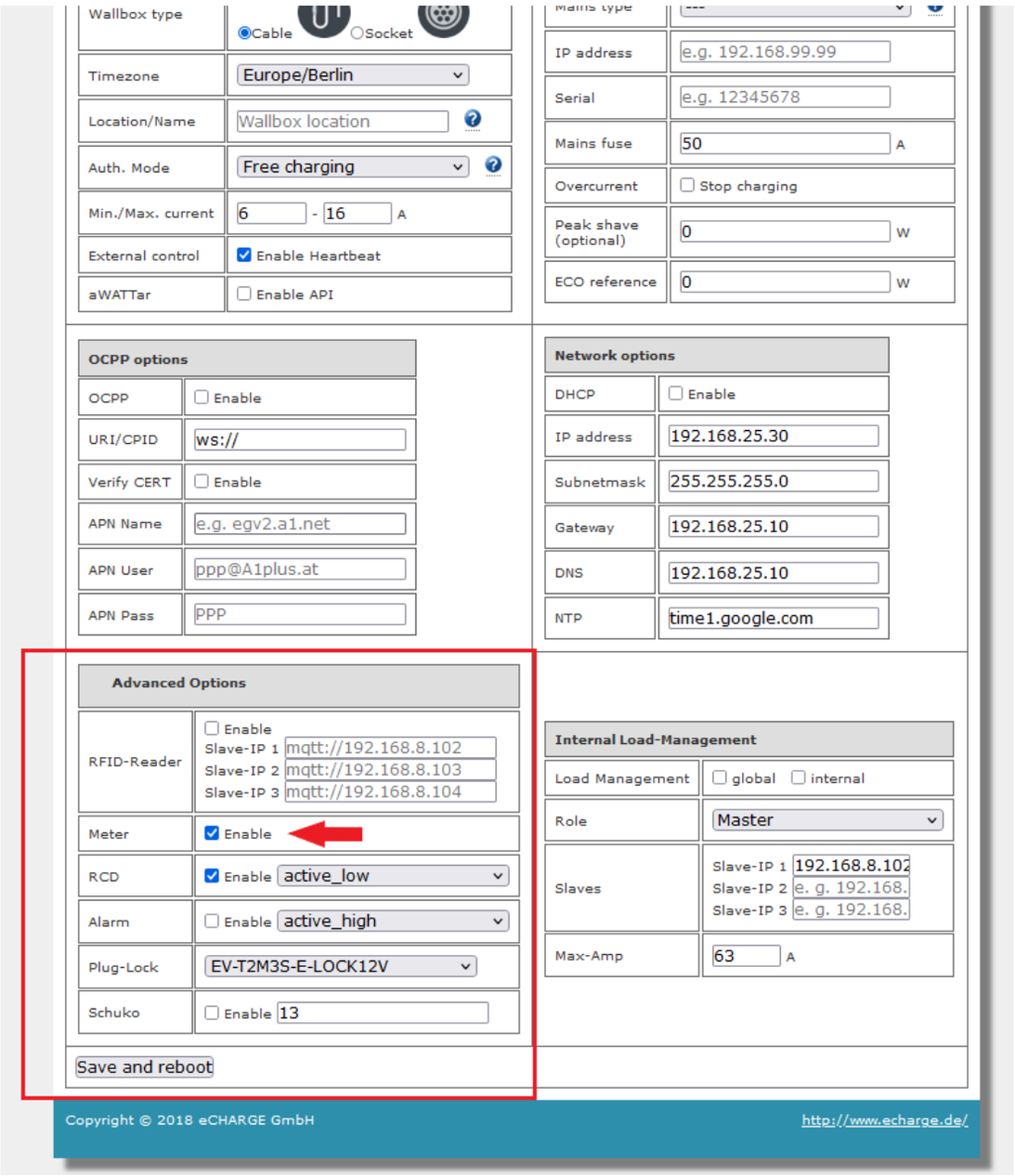



Image 10. Meter activation

If no meter values are displayed in the FEMS Online Monitoring, please check whether the correct meter has been selected.

Double-click on the cogwheel next to *Advanced Options* to do so:

## 3.3. Configuration of the meter

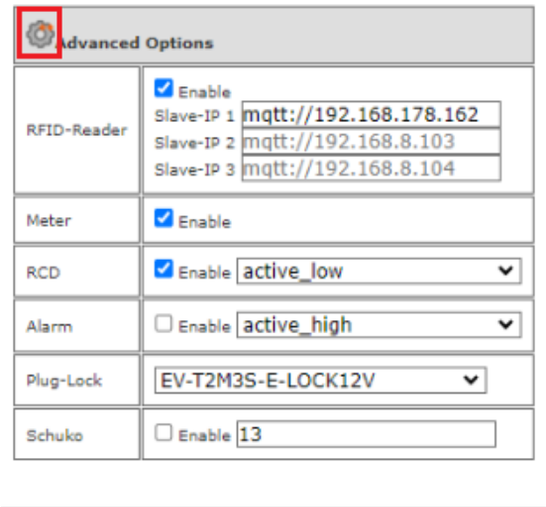



Image 11. Advanced options

An extended view then opens with further configuration options for meters and RFID cards.

Please check that the correct meter has been selected under *Advanced Meter Options* under *Protocol*.

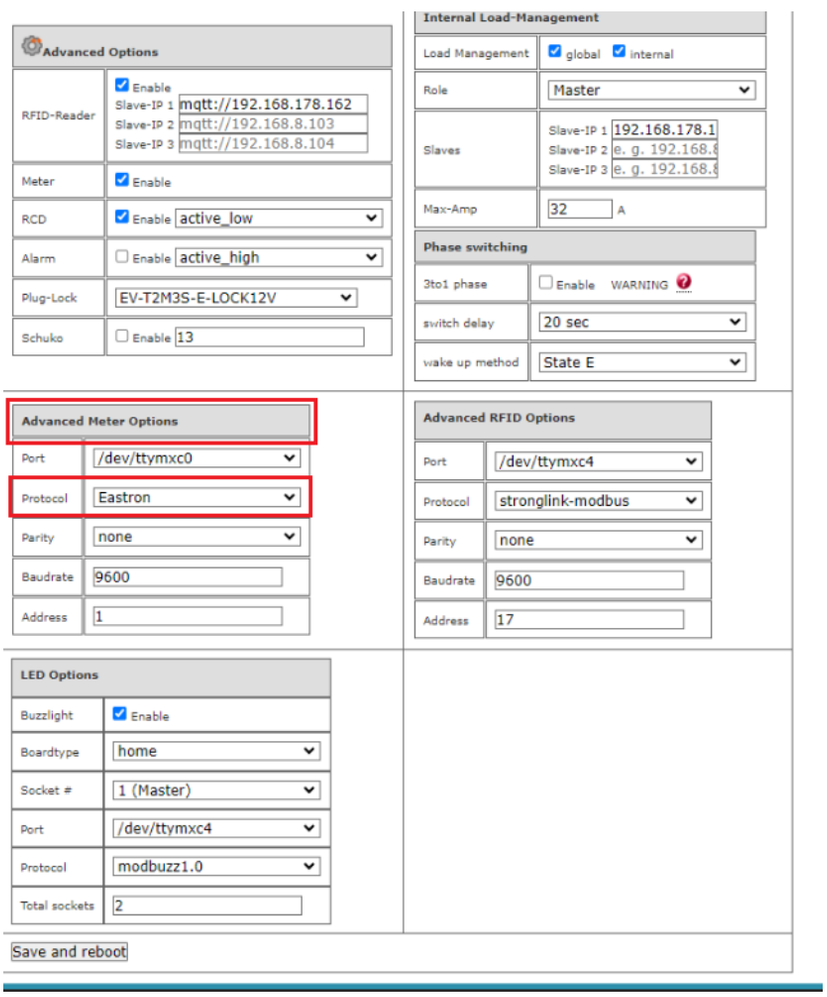



Image 12. Meter installed (here: Eastron)

In this example, an "Eastron" meter is selected.

## 3.4. Saving the changes

To apply your changes, click on *Save and reboot*

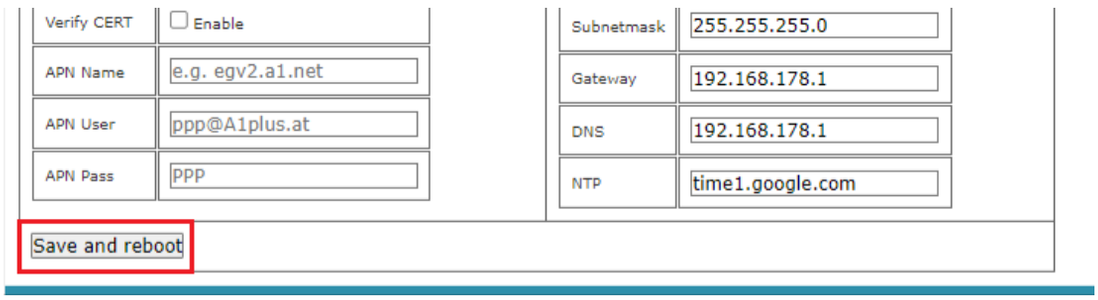



Image 13. Save and reboot

We recommend that you always use the latest firmware to ensure that all the latest functions of the charging station can be used.

## 3.5. RFID authorization

We are currently working on compatibility with Hardy Barth RFID authorization.

> Please note the following software requirements for RFID authorization of your Hardy Barth eCharger cPµ2 Pro.

| **Compatibility with FENECON energy management system** | |
|---|---|
| Hardy Barth eCharger | Requires software version *2.2.0* or newer. |

To enable RFID authorization on a trial basis, please follow the steps below.

1. To do this, open the SALIA web interface.




Image 14. SALIA web interface

2. Go to the *Configuration* tab.

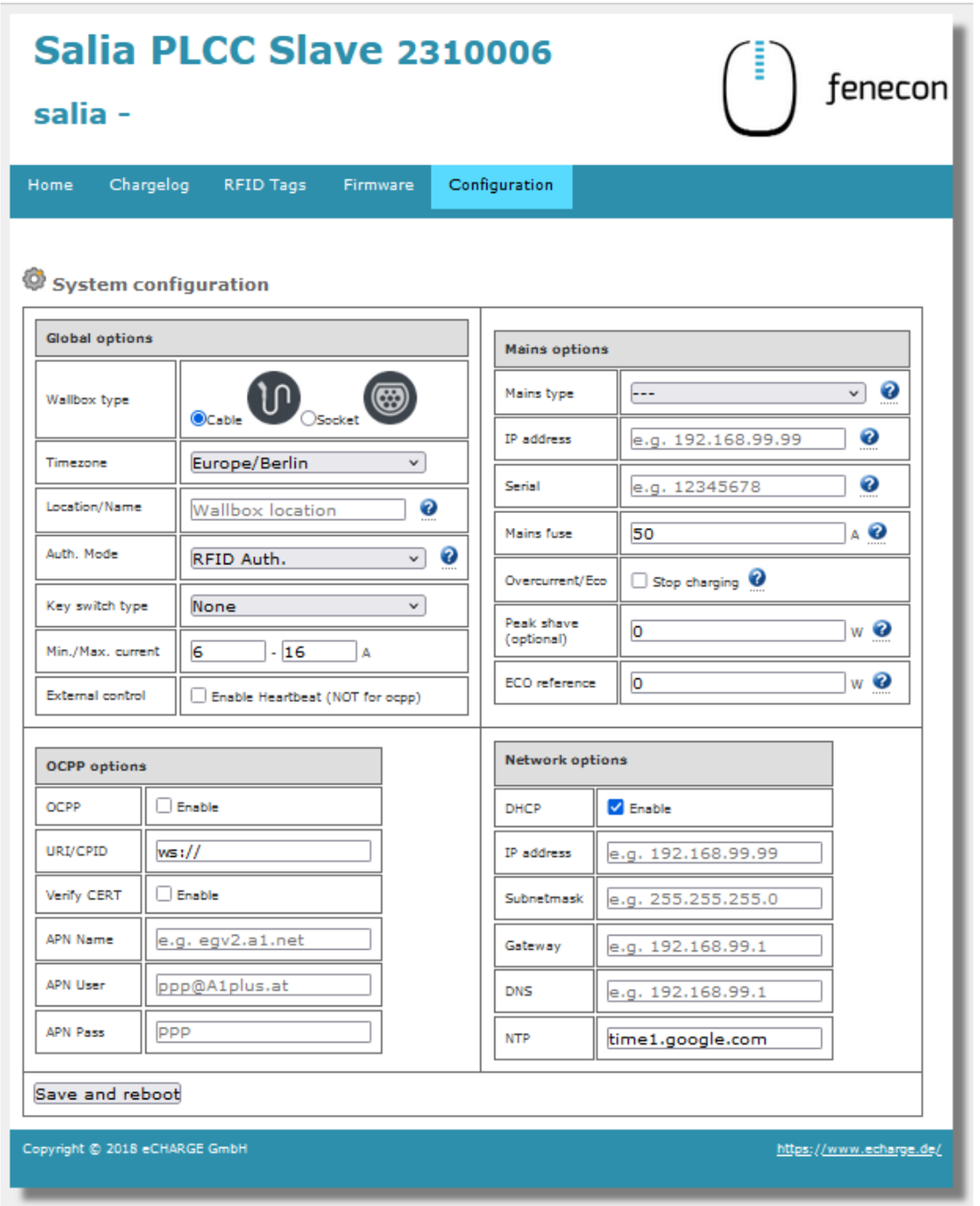



Image 15. Network settings

3. In the *Global Options* section, set the Authorization Mode from **Free Charging** to **RFID Authorization**.

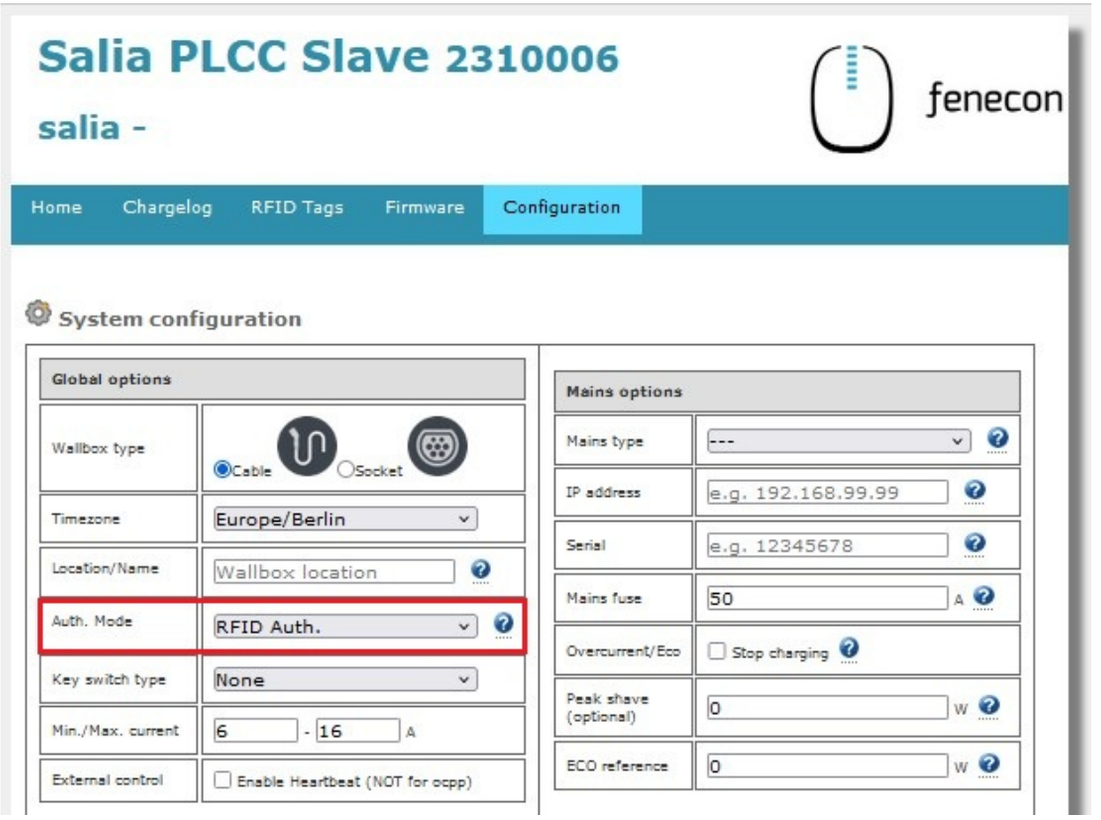



Image 16. Change authorization

4. To complete the configuration, please click **Save and Reboot**.

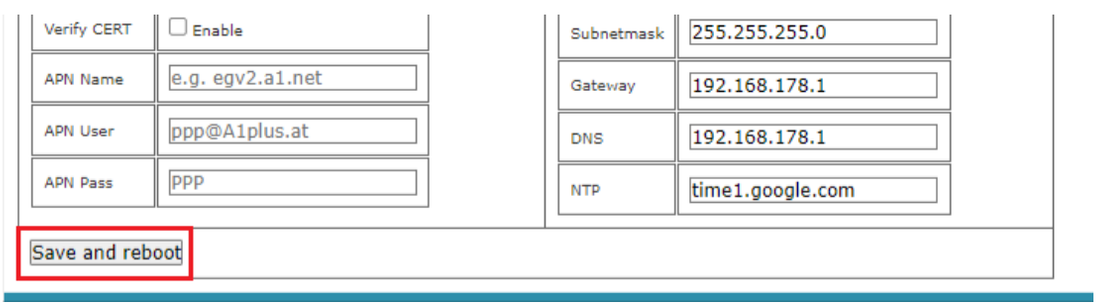



Image 17. Save and reboot

5. The RFID authorization icon should now appear on the home page of your SALIA web interface.




Please note that you can only change the RFID authorization for your Hardy Barth eCharger cPµ2 Pro through the SALIA web interface.

To disable RFID authorization for your Hardy Barth eCharger cPµ2 Pro, follow steps 1 through 5.

## 3.5. RFID authorization

Important: In Step 3, under *Global Options*, set the Authorization Mode from **RFID Authorization** to **Free Charging**.

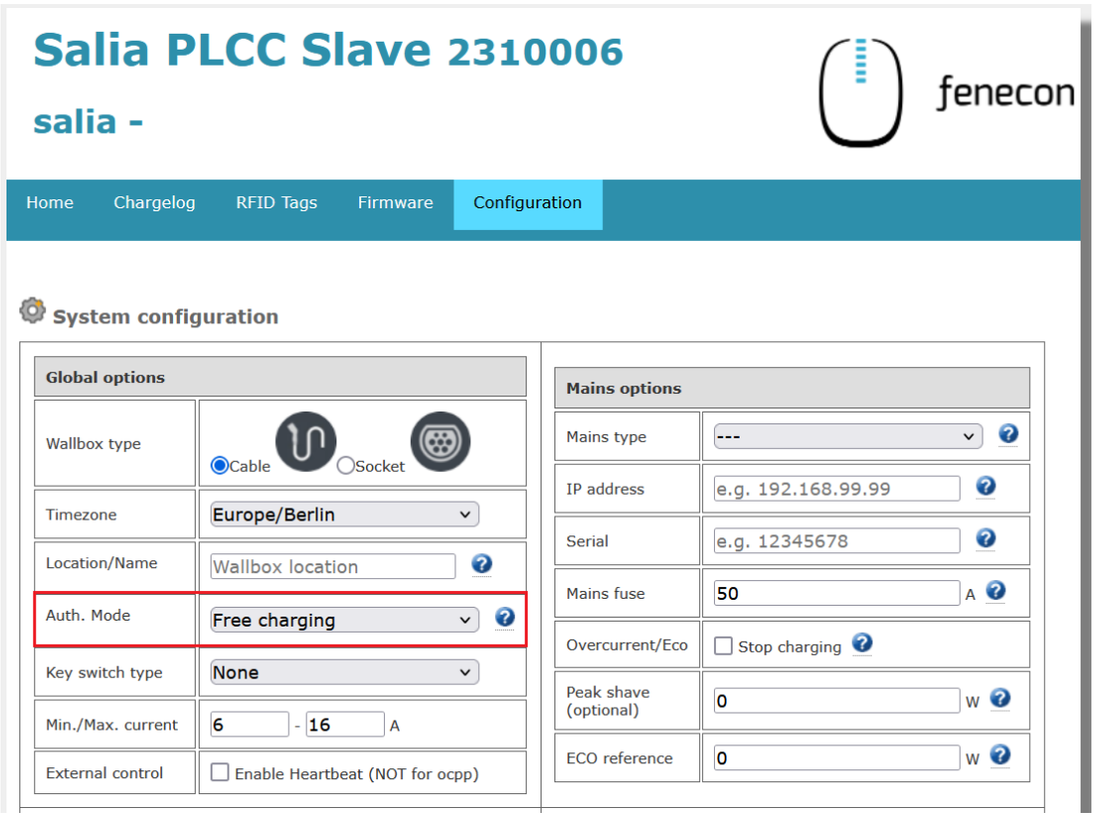



Image 18. Change authorization

On the home page of your SALIA web interface, the RFID authorization icon should now be grayed out.




Please note that no authorization is required in **Free Charging** mode. Therefore, set your Hardy Barth eCharger cPµ2 Pro to **OFF** via the FEMS AC charging station app when you will be away for an extended period.

## 3.6. Updating the charging station firmware

We recommend always using the latest firmware to ensure that all the latest functions of the charg-

ing station can be used.

It can be obtained from the eCharge Hardy Barth manufacturer's website or directly via the link below:
Salia eCharge Firmware

The firmware can then be updated via the web interface of the charging station (see Web interface — Charging station).

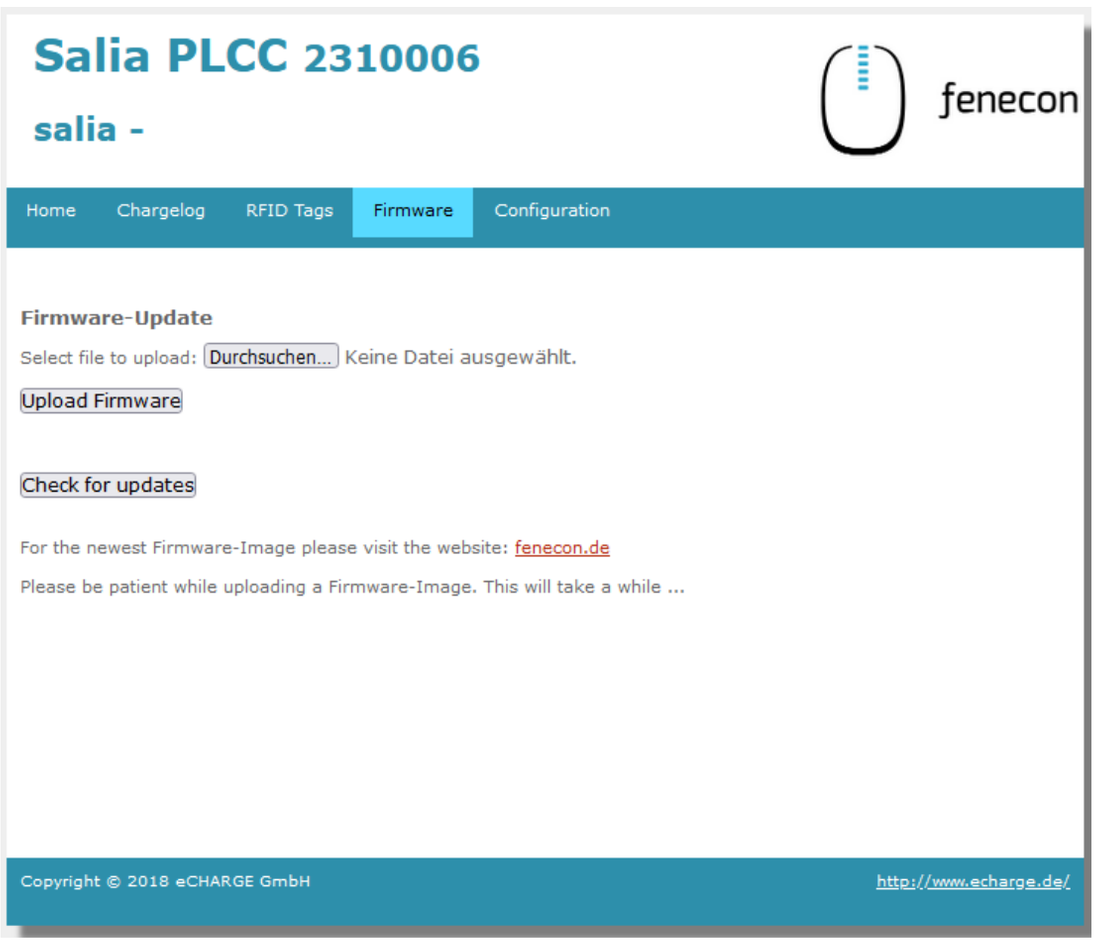



Image 19. Web interface — Charging station

Then proceed as follows:

1. Open the *Firmware* tab.
2. Select the previously downloaded firmware file with *Browse...*.
3. Click on *Upload Firmware*.

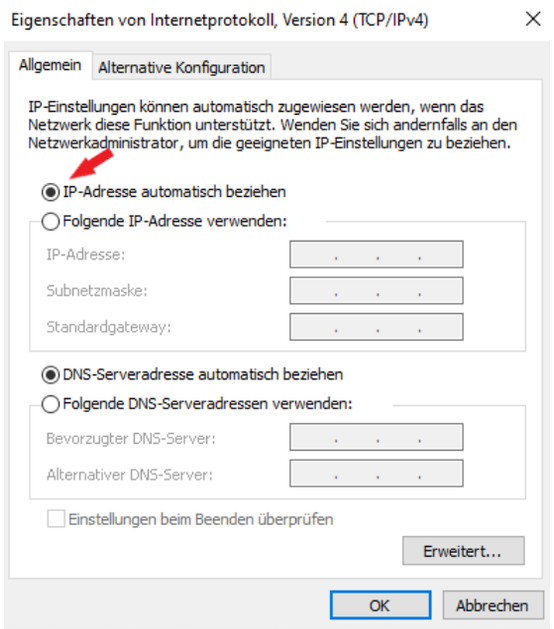
The *Check for updates* function is only available from version 1.50.0 and up.

The software update has now been completed.

Remember to remove the static default after completing the configuration. Otherwise, FEMS

Online Monitoring will not be accessible and connection problems to the internet may occur.

To do this, reset the setting to "Obtain IP address automatically", as shown below:




To ensure that all current functions are supported on your FEMS, an update must be carried out. Please contact our service team using the contact details below.

The configuration is now complete.

# 4. Install FEMS App eCharge Hardy Barth cPµ2 Pro Charging Station

In the FEMS App Center you will find all installable FEMS Apps — such as the FEMS App eCharge Hardy Barth cPµ2 Pro Charging Station.

The user manual FEMS App Center provides detailed instructions on how to use the FEMS App Center. It also explains how to register and redeem a license key.

Then follow the instructions in the FEMS App installation wizard on your Hardy Barth eCharger cPµ2 Pro.

## 4.1. Installation wizard

You will then be taken to the installation wizard for FEMS App eCharge Hardy Barth cPµ2 Pro Charging Station.

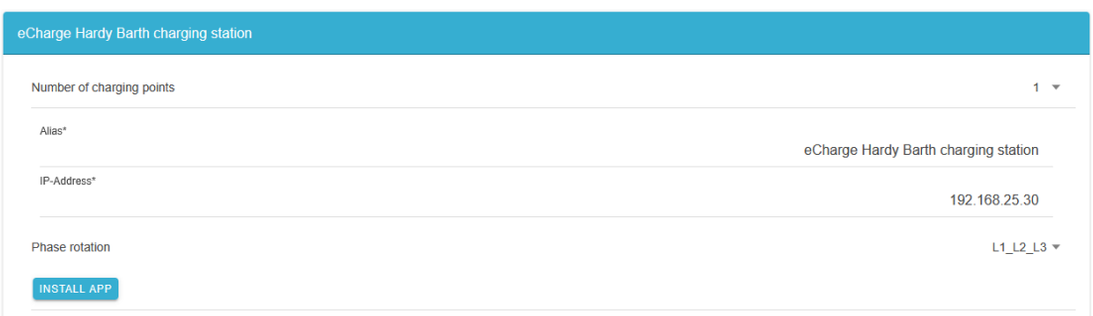



Image 20. App installation — Variant 2: Step 7

Some of the input fields are pre-filled. Nevertheless, enter your data if it differs from the default values (e. g. IP address). Otherwise, the default values can be retained (e. g. port, Modbus unit ID).

Mandatory fields are marked with *

Check your entries and make sure that they are correct. Otherwise the respective app will not work properly!

For the Hardy Barth eCharger cPµ2 Pro, please select "1" for the number of charging points.

In the next step, you can set a phase rotation.

Please note that phase rotation is only included from FEMS release 2024.11.2 or later.

The phase connection L1_L2_L3 is selected as standard.




Image 21. App installation — Phase rotation: Step 1

If your phase connection differs from this, you can select a different phase connection using the drop-down button.

If you switch from the Write Access app version to the Read Access version, your wallbox requires a restart.

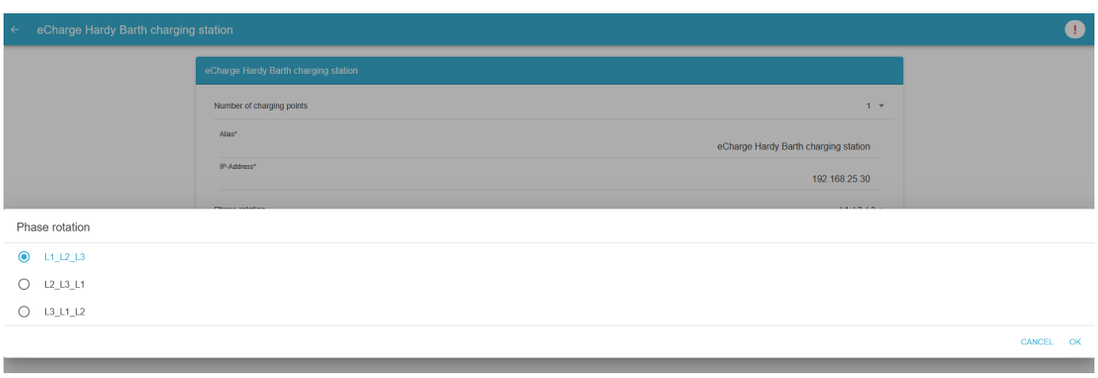



Image 22. App installation — Phase rotation 2: Step 2

Confirm with "OK".

Then click on "Install app".

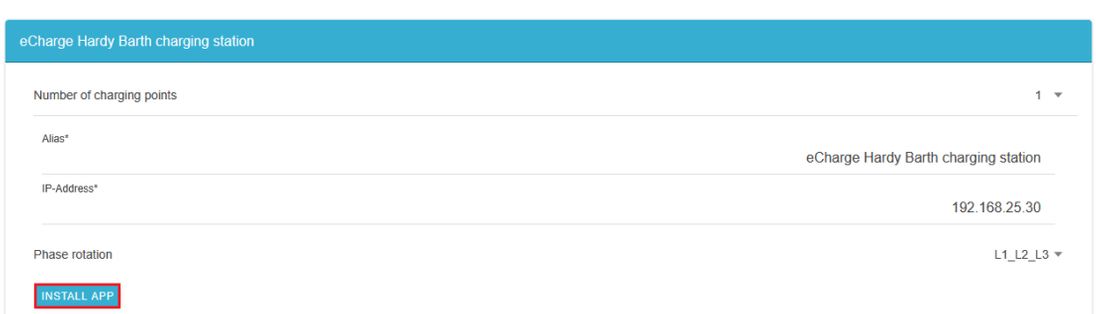



Image 23. App installation — Variant 2: Step 8

Once the installation process is complete, the new app appears in the overview of the FEMS App Center in the "Installed" category.

The FEMS App eCharge Hardy Barth cPµ2 Pro Charging Station has been successfully installed.

## 4.2. Interactions with other EMSs

It is possible that an energy management system (EMS) that was preinstalled on the wallbox is active.

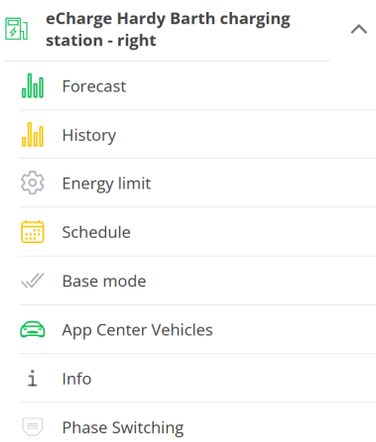
> Please note that unwanted interactions may occur if another EMS is installed in addition to FEMS. General Information

# 5. How to Use Installation and Configuration Manual — eCharge Hardy Barth cPµ2 Pro

## 5.1. Charging stating main window

A charging station is displayed in FEMS at Consumption.

Click or tap in the menu to open the main window for your charging station. This window displays various pieces of information, e. g. the current charging mode, charging power, etc.




Depending on the submenu item selected, the main window displays different information and settings:

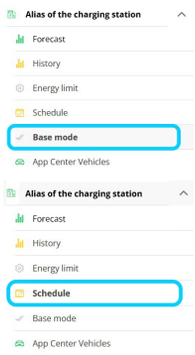


| | |
|---|---|
| Base Mode | Off |
| Actual Mode | Off |
| State | Vehicle not connected |
| Power | 0 W |
| Energy since the last charge start | 0 Wh |

The highlighted area below displays custom tasks (schedule).

## 5.1. Charging stating main window

In addition, the modes currently active — **Base Mode** and **Active Mode** — are displayed to the right of the charging station.

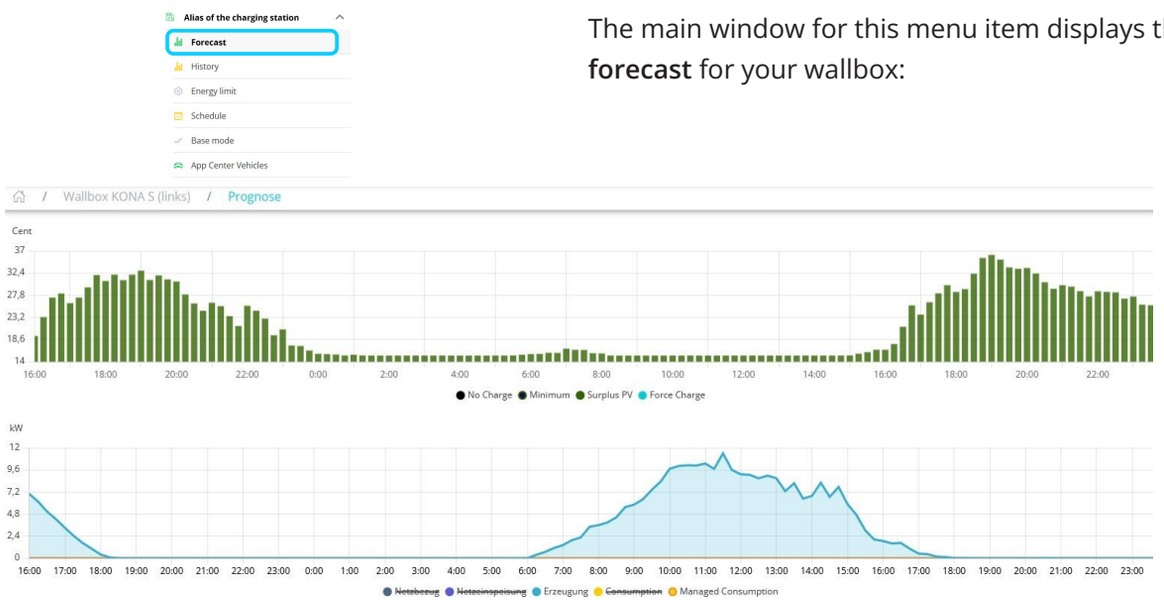



The **Base Mode** can be set via the submenu item {charging-station-base-mode-xref}.

**Active Mode** can be set via the submenu item {charging-station-task-scheduling-xref}.

Table 2. Explanation — Basic Mode and Active Mode

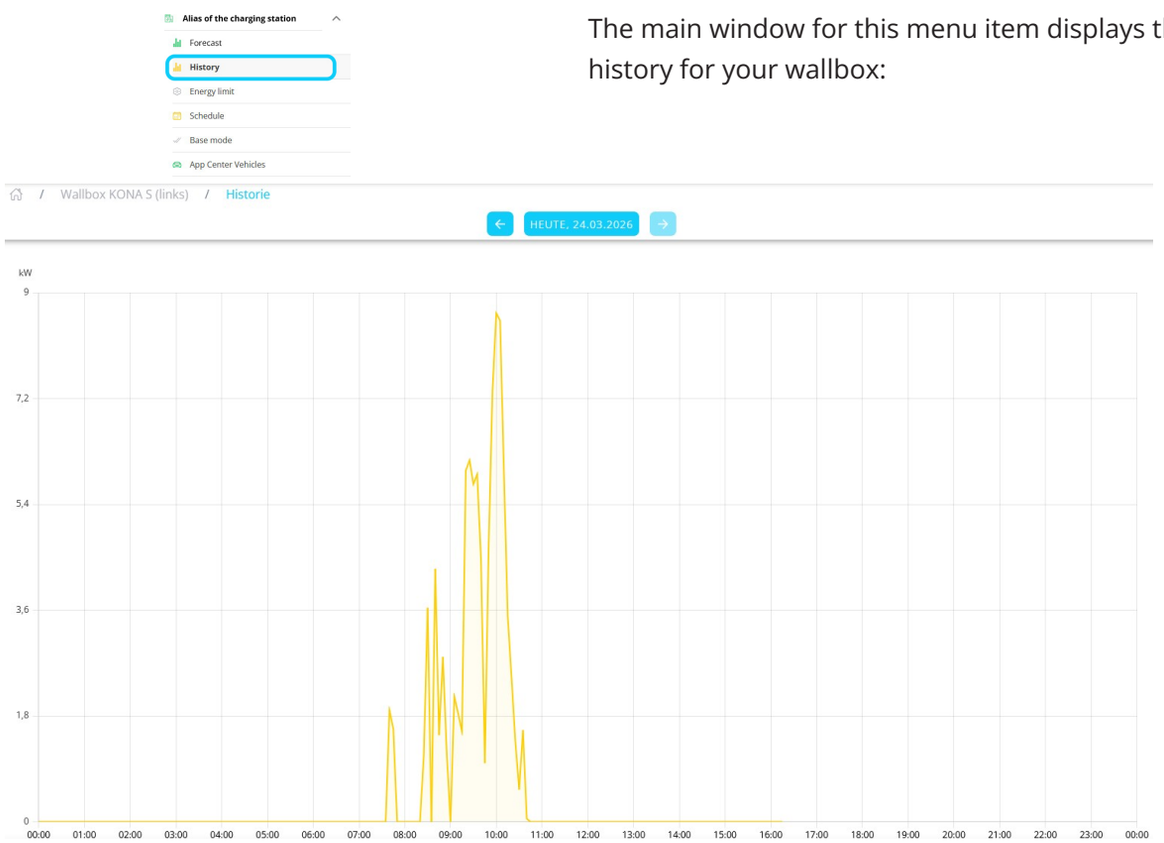
## 5.2. Forecast




The main window for this menu item displays the **forecast** for your wallbox:

Table 3. Explanation — Forecast

## 5.3. History




The main window for this menu item displays the history for your wallbox:

Table 4. Explanation — History

## 5.4. Energy limit

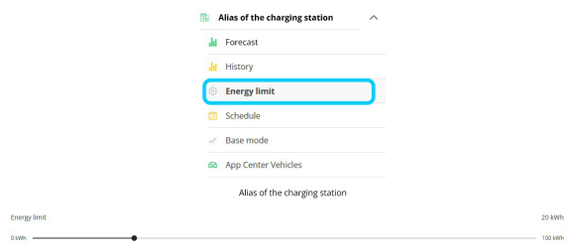
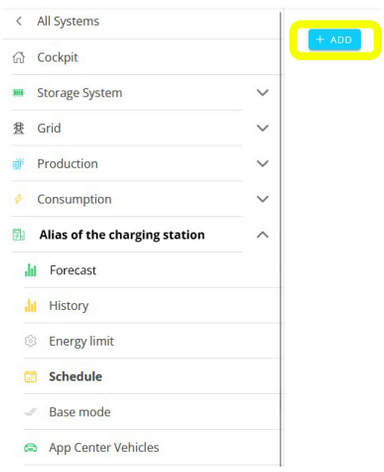
| | |
|---|---|
|  | Use this menu item to set an **energy limit** for charging your vehicle.<br><br>There is a slider for this in the corresponding main window.<br><br>• Energy limit **0**: The vehicle will continue charging without restriction until its battery is fully charged or **Base Mode** is set to *Off*.<br>• Energy limit **20**: The battery is charged up to a maximum of 20 kWh during each charging cycle.<br><br>etc.<br><br>Confirm the setting using the ☑ in the lower-right corner of the main window. |

Table 5. Explanation — Energy limit

## 5.5. Schedule (Active Mode)

Klicken oder tippen Sie auf die Menüoption *Zeitplan*, um einen **Aktiven Modus** einzustellen. Dieser Modus überschreibt den Grundmodus der Ladestation mit benutzerdefinierten Aufgaben.



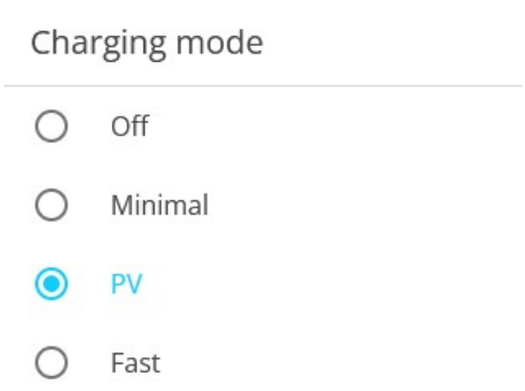

In the main window, click or tap **[ + ADD ]** to create a new task.

Now you can configure settings for your task:




### Charging Mode

Select the desired charging mode for the task. The following options are available:




### No charging

Completely disables the charging station.

**Excess solar power with guaranteed charging**

The *PV Surplus with Guaranteed Charging* mode **guarantees a minimum charging status for the vehicle**. If there is sufficient PV surplus, it is used. If there is no PV surplus, the vehicle is charged using grid withdrawal up to the minimum charging power.

**Excess solar power**

In *PV Surplus* mode, EV charging is dynamically adjusted to the excess electrical energy.

**Fast charging**

In *Fast Charging* mode, the vehicle charges as quickly as possible.

**Wiederholung und Start-/Endzeiten**

Stellen Sie dann den **Wiederholungsintervall** ein und definieren Sie eine **Start- und Endzeit** für die Aufgabe.

Using **[ + ACCEPT ]** saves the task and displays it in the overview of your charging station in the main window.

**Edit Task**

This main window displays your custom tasks (schedule).

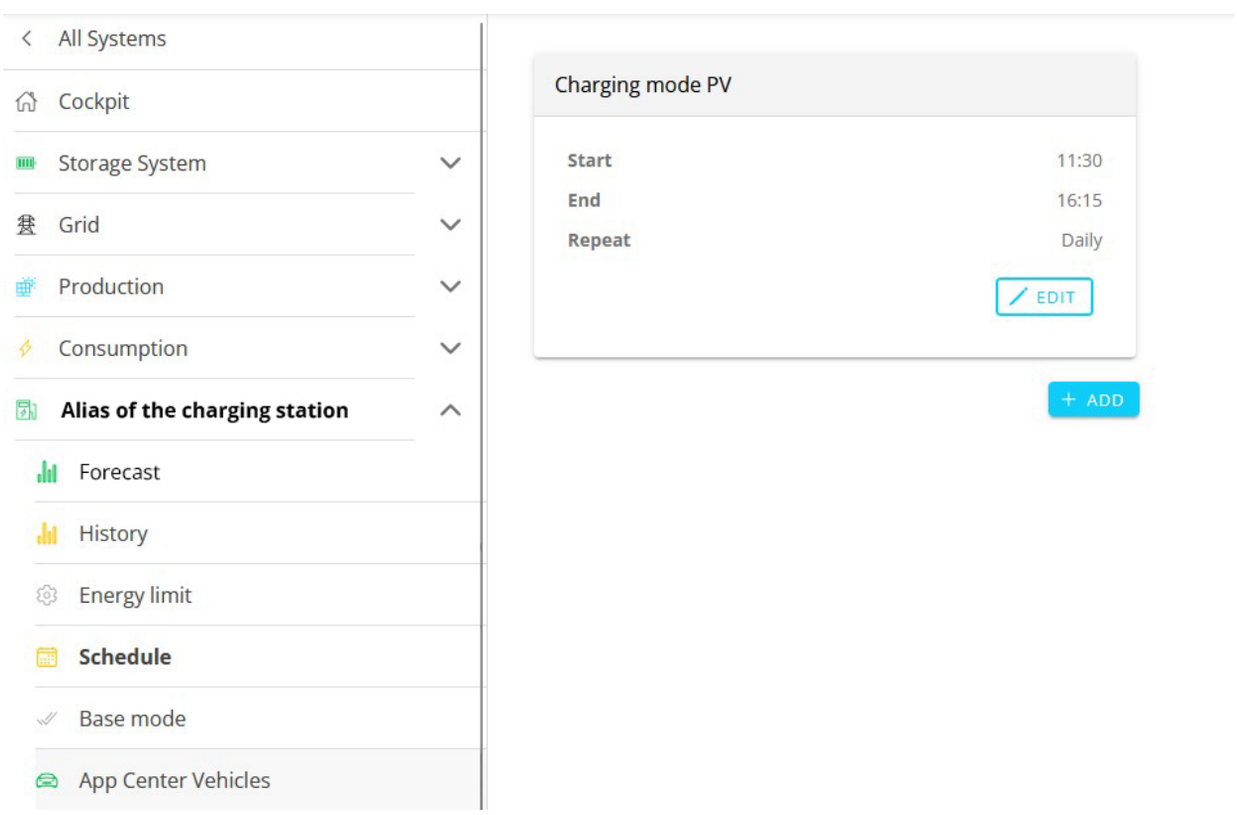



Image 24. Overview — Schedule with a created task

If you already have a task in the list, you can *EDIT* it to, e. g. adjust the time period or the charg-

ing mode during that time period.




Use **[ ACCEPT ]** to save your changes to the task.

Click/tap DELETE to delete the task.

## 5.6. Base mode

Click or tap the *Base Mode* menu item to open the following main window:

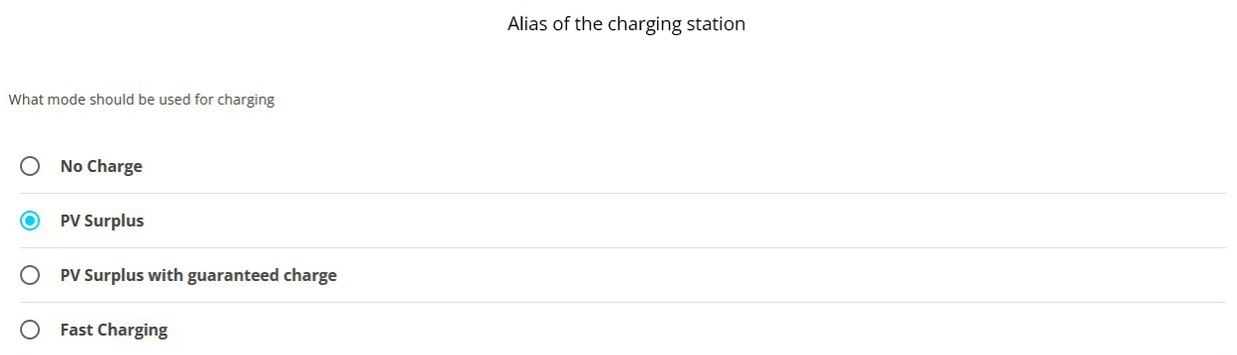



Image 25. Example — Overview — Base Modes

### No charging

Completely disables the charging station.

### Excess solar power

In *PV Surplus* mode, EV charging is dynamically adjusted to the excess electrical energy.

### Excess solar power with guaranteed charging

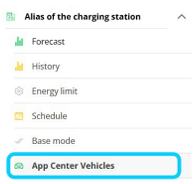
The *PV Surplus with Guaranteed Charging* mode **guarantees a minimum charging status for the vehicle**. If there is sufficient PV surplus, it is used. If there is no PV surplus, the vehicle is charged using grid withdrawal up to the minimum charging power.

### Fast charging

In *Fast Charging* mode, the vehicle charges as quickly as possible.

Confirm the setting using the ☑ in the lower-right corner of the main window.

## 5.7. App Center Vehicles




Use this menu item to configure vehicle-specific settings.

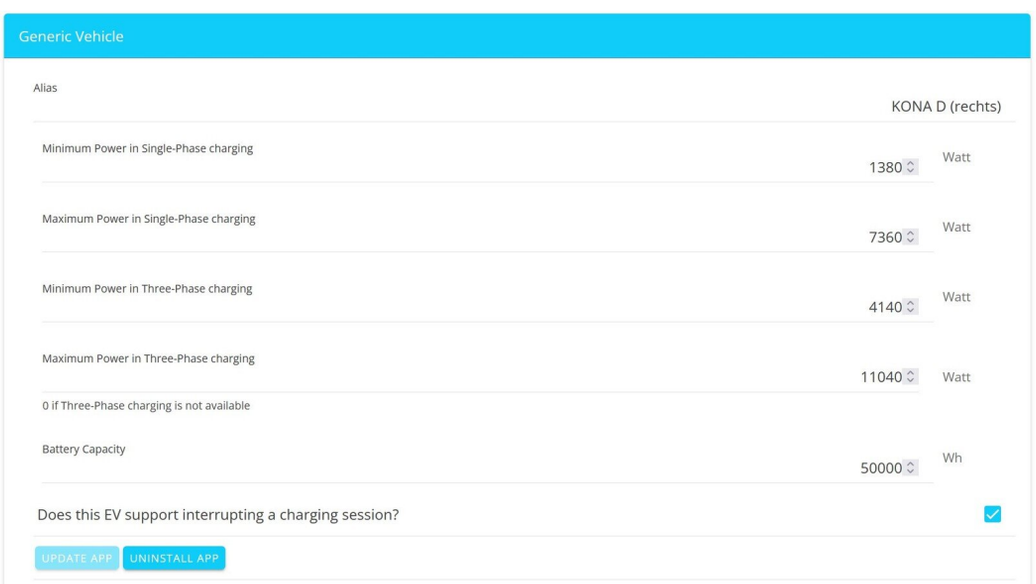
The main window displays the settings for the *Generic Vehicle* app.

The *Generic Vehicle* app is automatically installed when you install FEMS App eCharge Hardy Barth cPµ2 Pro Charging Station.

*Generic Vehicle* means:

- The **primary vehicle** that is charged at this charging station by default.
- We recommend that you provide the correct model name of the vehicle.
- You can also define more than one vehicle.

The following settings are available for the connected Generic Vehicle:

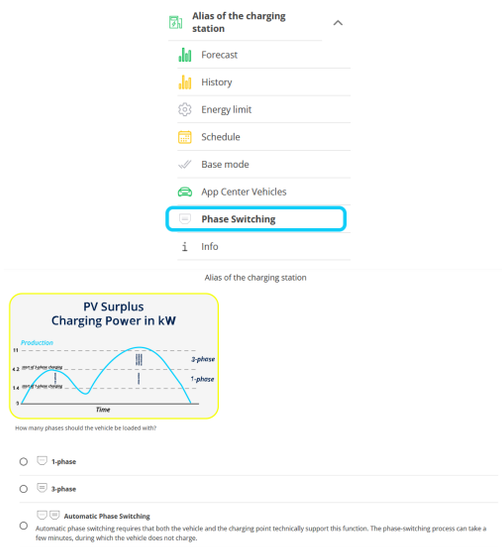



Once you have made the desired changes, save them by clicking **[ UPDATE APP ]**.

These settings provide FEMS with more precise vehicle data, making the charging forecast for your vehicle more accurate. You can also enter your vehicle's model name here so that it appears in the app.

## 5.8. Phase Switching

If a PV charging mode (*PV Surplus* or *PV Surplus with guaranteed charging*) is selected for your charging station, you can manually switch from 1-phase to 3-phase charging in the submenu using the *Phase Switching* option:

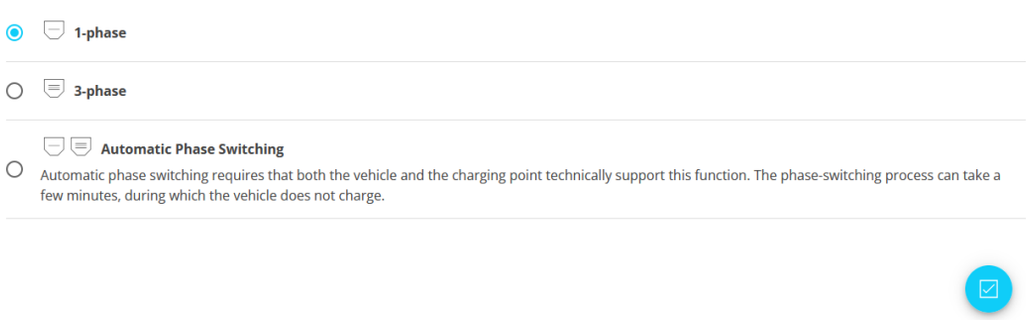



Tap or click the submenu item to access the following main screen.

The following options are available here:

- Manual Phase Switching, 1- or 3-phase
- Automatic Phase Switching

### 5.8.1. Manual Phase Switching




Use Case

One scenario would be to use the limited PV production to charge the vehicle anyway by manually switching to single-phase charging.

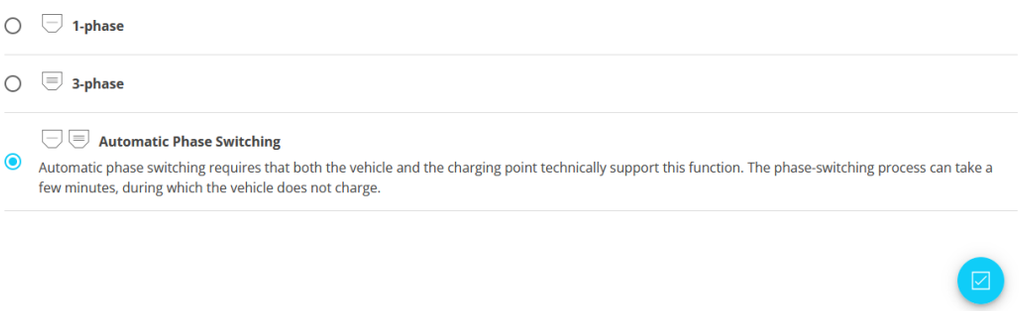
**Switching During Charging**:
When manually switching from single-phase to three-phase and vice versa, the hardware undergoes a 30-second switching process each time.

- Please wait during this switchover.
- During these 30 seconds, the charging power is reduced to 0 kW, and then the switchover occurs.

- When performing phase switching, vehicles behave differently depending on the model.
- Your vehicle must support phase switching.

### 5.8.2. Automatic Phase Switching

In addition to the Manual Phase Switching (1- or 3-phase), there is the option of Automatic Phase Switching:




The phases are automatically switched based on the charging power. This allows even a small amount of excess PV power to be utilized.

- The *Fast Charge* mode always uses 3 phases.
- Your vehicle must support dynamic phase switching.

- The switching times depend on the wallbox and its internal logic.
- The phase change may take a few minutes.

## 6. Contact us

For support, please contact:

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Gewerbepark 6
94547 Iggensbach

Phone — Service: +49 (0) 9903 6280 0
E-mail — Service: service@fenecon.de

# 7. Directories

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