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Installation and Configuration Manual — Alpitronic Hypercharger

Version:2023.5.2

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1. Introduction

These instructions are for configuring the following Alpitronic Hypercharger charging stations:

- Alpitronic web
- HYC300

1.1. Legal provisions

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

NOTICE

Hardware installation must be performed only by qualified electricians

You can find all Hypercharger installation instructions on Alpitronic GmbH's document management system — **Hyperdoc**.
Link to the Hyperdoc website

3. Configuration

3.1. Ethernet connection

After the electrical installation of the charging station, it must be connected to the customer network via the network interface (LAN) XF2 of the KF5 CRTL EXT control board.

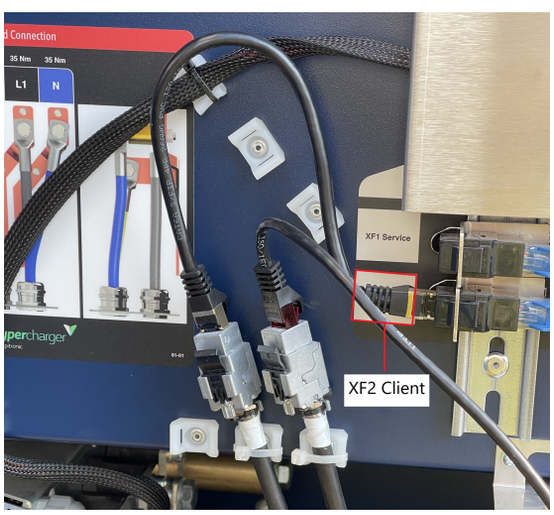


Image 1. Connection of the KF5 CRTL EXT network interface (LAN)

3.2. Access to the web interface

The EMS is configured by default to try to reach the charging station at the static IP address `192.168.1.100`.

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. **192.168.1.99**) in the network adapter settings.

1. Connect the KF5-CRTL-EXT control board to your device (here: notebook) via the RJ45 socket XF1, as shown below, to achieve this.

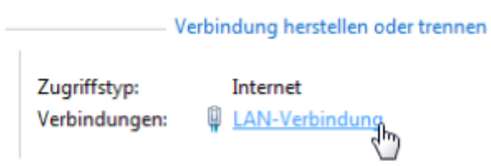


Image 2. Connecting the KF5-CRTL-EXT control board to the notebook

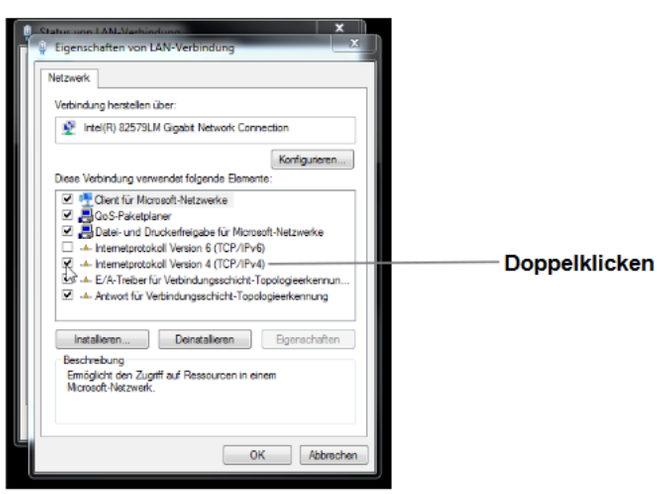
2. Open your web browser to access the web interface. Enter the following IP address: `191.168.1.100` to do this

If problems occur in step 2, proceed as follows:

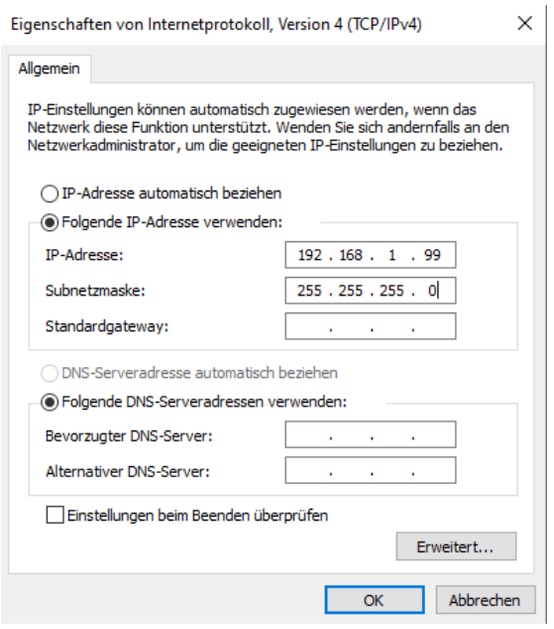
1. Open the "Network and Sharing Center" in the system settings of your PC.
2. Click on LAN connection.



3. In the new window that opens, click on Properties.
4. Double-click on "Internet Protocol Version 4 (TCP/IPv4)" in the new window (cf. 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: `192.168.1.99` 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.

The charging station can then be configured via the web interface. To do this, enter the IP address of the charging station (`192.168.1.100`) in the address bar of the browser.

You will be prompted to enter your user name and password. Enter the default values here:

User name: **admin**

Password: **admin123**

You will then be taken to the overview of the web interface as shown below.



We recommend that you change your user name and password after the first use. Use the "Password Configuration" button to do this

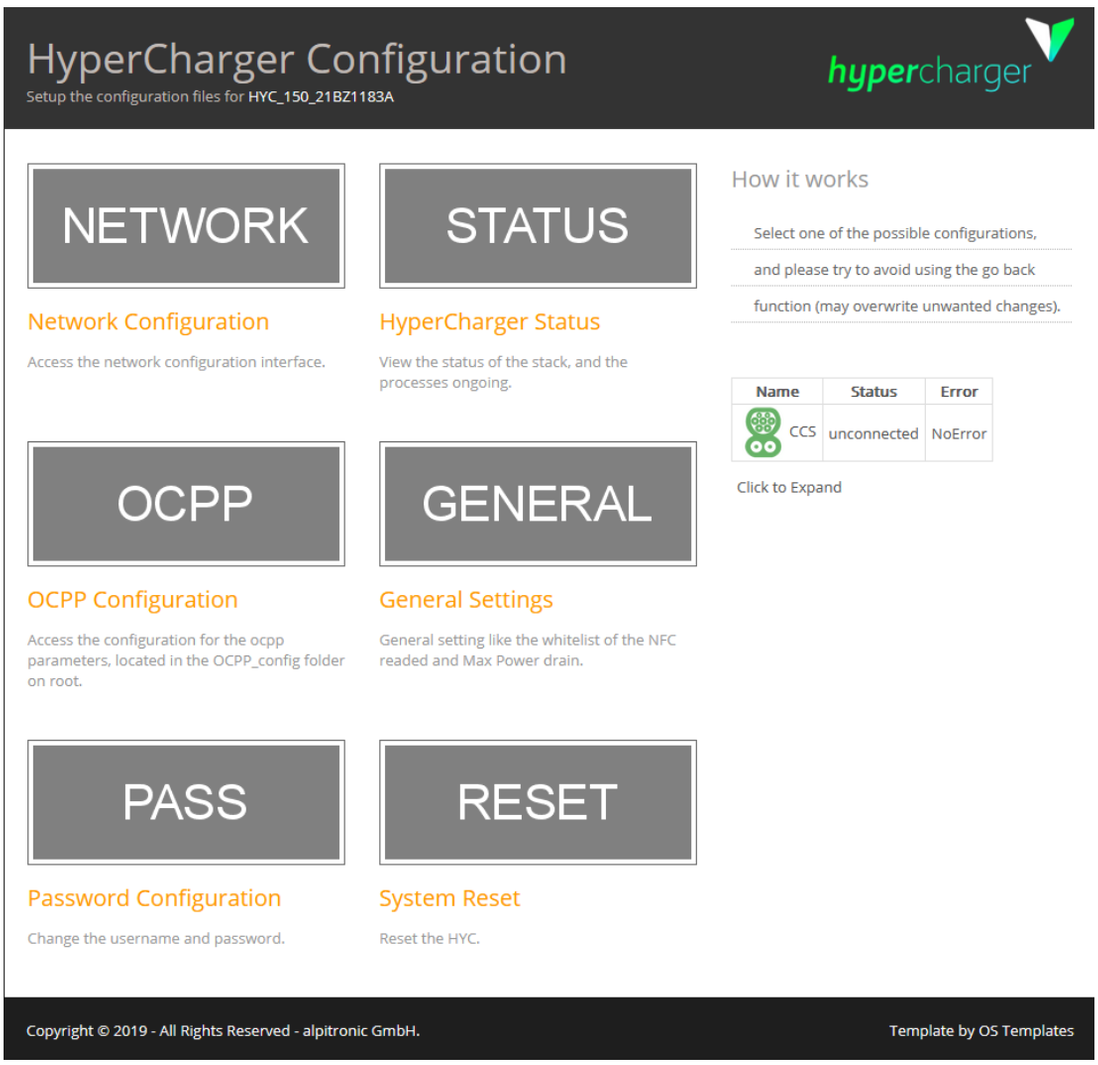


Image 3. Web interface

3.3. Configuration web interface

Only the "GENERAL" (G) and "NETWORK" (N) buttons are relevant for configuring the Hypercharger. All other settings should remain unchanged to ensure functionality.

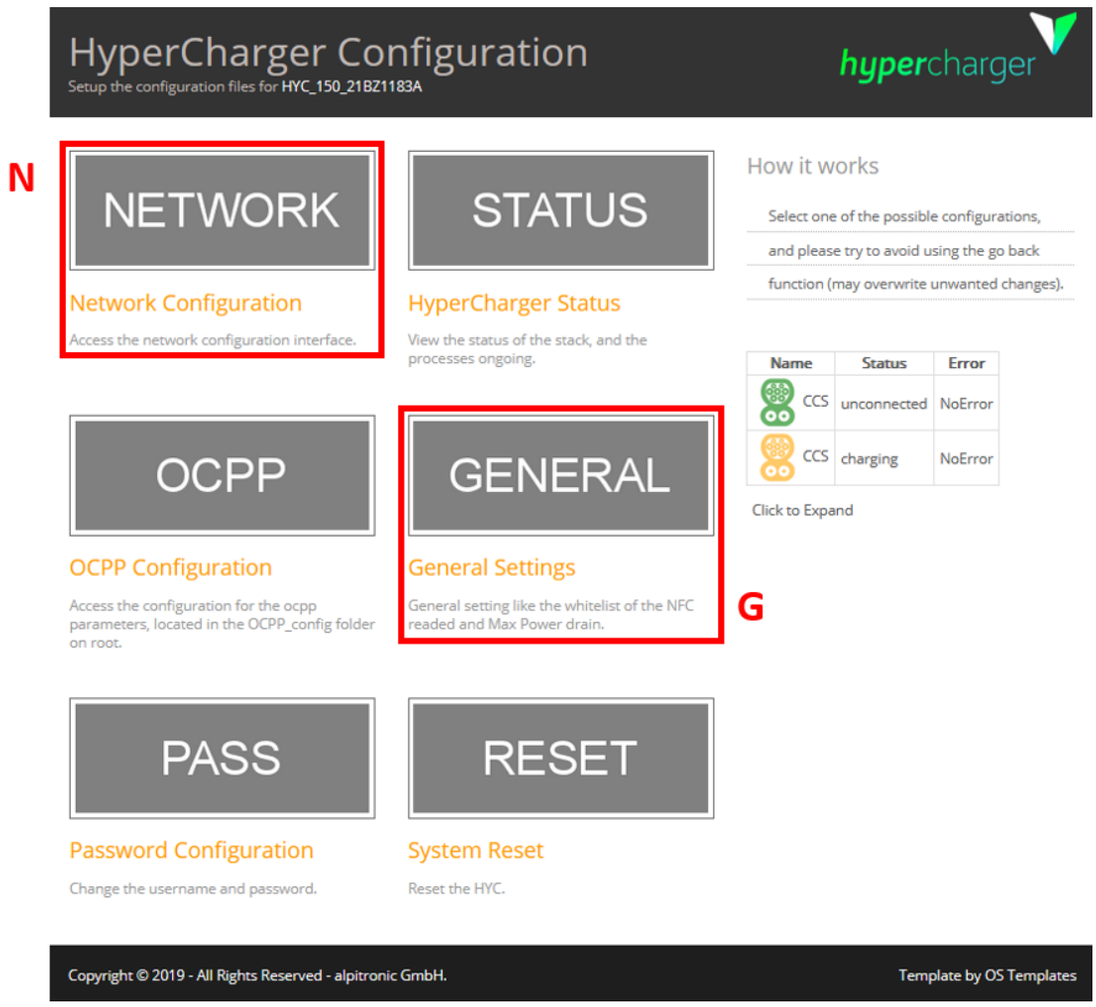


Image 4. Web interface

3.4. General settings (GENERAL)

3.4.1. Power settings

1. Under the "Power" button (1), set the "ModBus Enabled" setting (2) to "True" to enable communication between the charging station and the EMS.

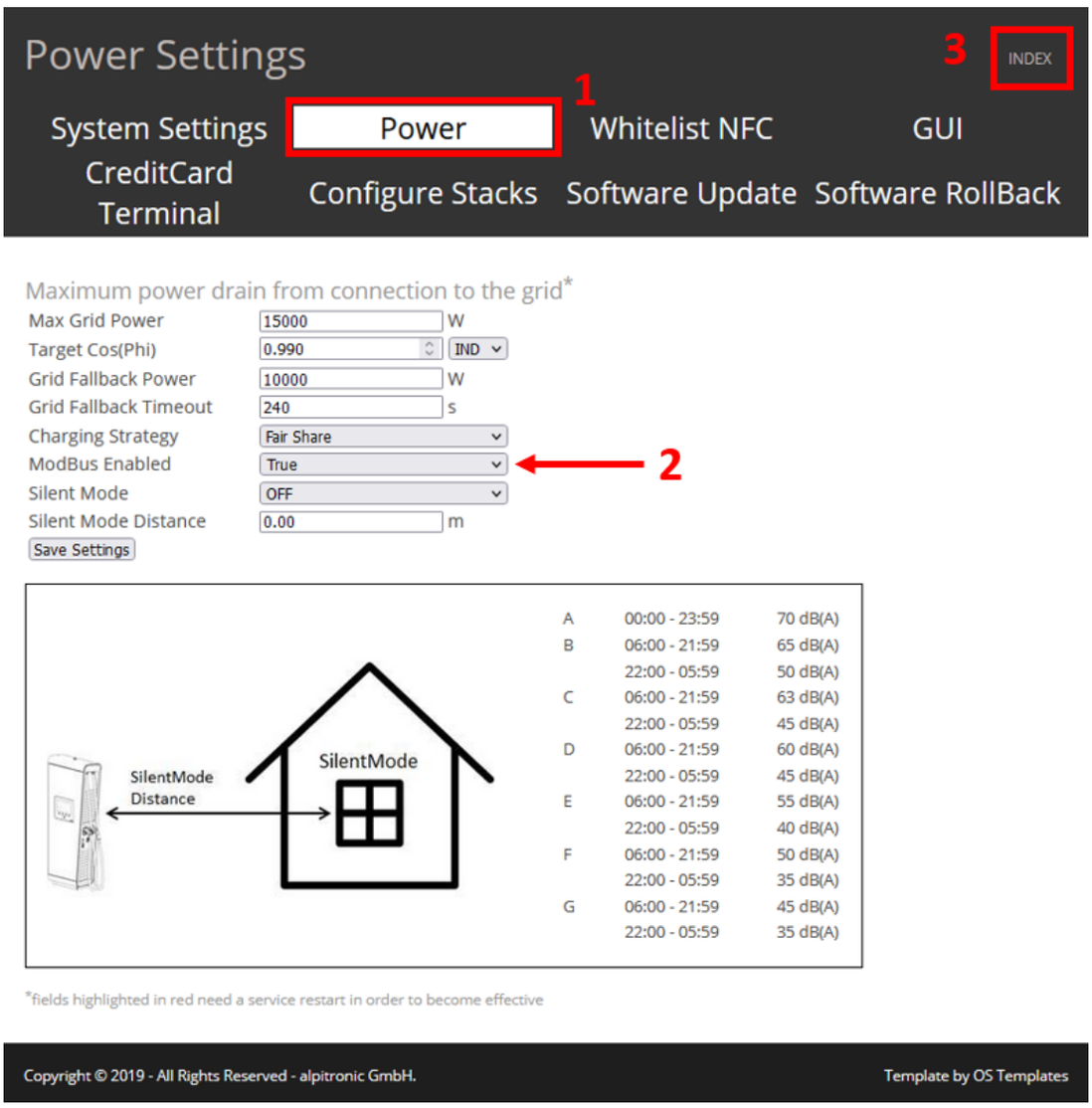


Image 5. Power settings

The following settings can be configured here, among others:

- Silent Mode_: When "Silent Mode" is activated, the Hypercharger reduces the charging power to reduce sound emissions.
- *Grid Fallback Power*: Maximum grid fallback power of the charging station as soon as the connection to load management is interrupted.



If *Grid Fallback Power* is configured, this must also be done in the "OCCP Configuration" interface.

You can access this via the button of the same name, as shown below:

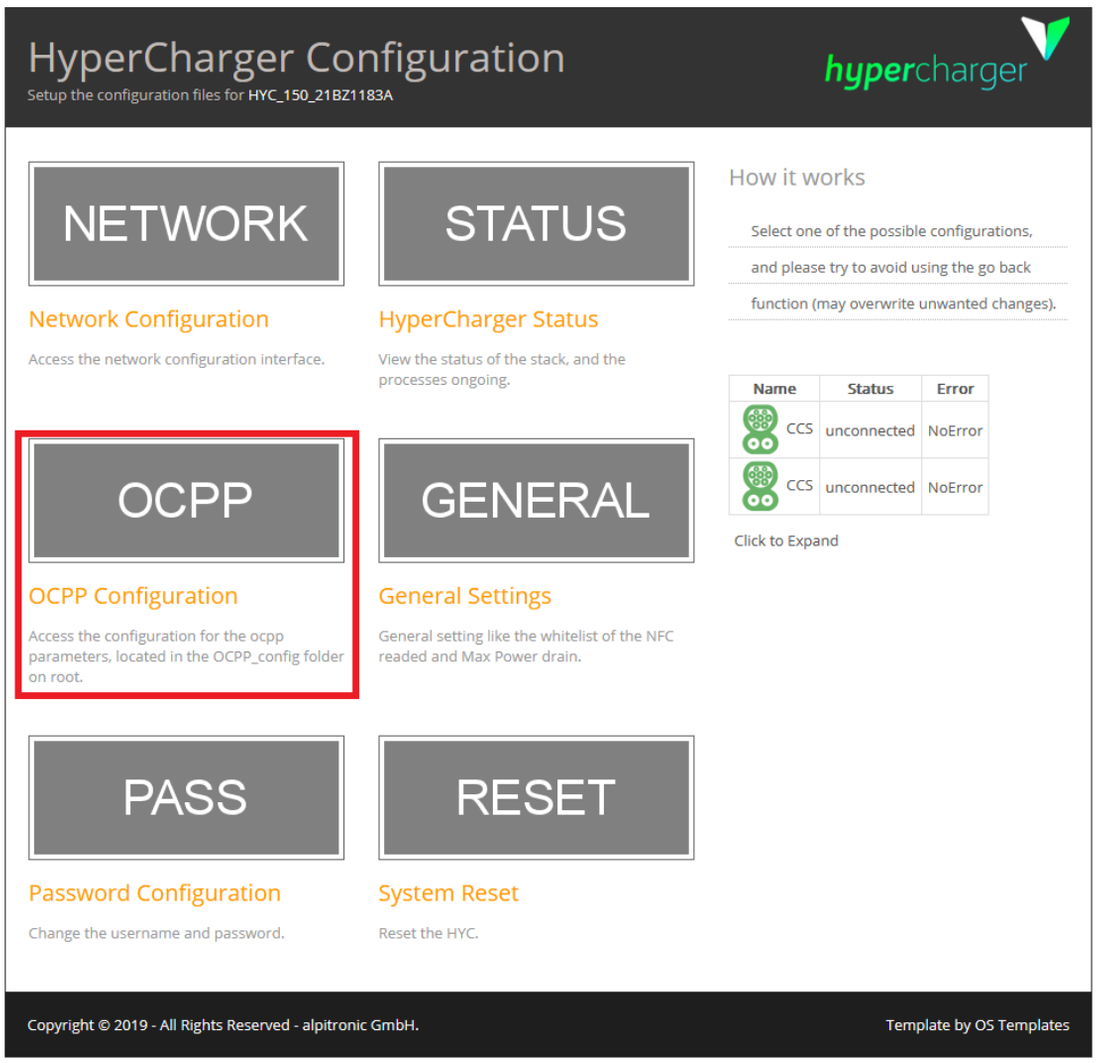


Image 6. OCCP Configuration

Scroll down to the "Power settings", as shown in the illustration below:

TransactionMessageAttempts	720	How often the Charge Point should try to submit a transaction-related message when the Central System fails to process it.
TransactionMessageRetryInterval	60	How long the Charge Point should wait before resubmitting a transaction-related message that the Central System failed to process.
UnlockConnectorOnEVSideDisconnect	true	When set to true, the Charge Point SHALL unlock the cable on Charge Point side when the cable is unplugged at the EV.
WebSocketPingInterval	60	0 disables client side websocket Ping/Pong. In this case there is either no ping/pong or the server initiates the ping and client responds with Pong. Positive values are interpreted as number of seconds between pings. Negative values are not allowed.
ChargePointMaxProfileEnabled	false	Enable use of ChargePointMaxProfile.
ConnectorPowerLimit	50000, 50000	Connectors Power Limit.
GridFallbackPower	10000	Power limit to fall back to in case communication to load management system gets interrupted
GridFallbackTimeout	240	Timout intervall to consider communication to load management systemt interrupted
AutoCharge	false	Allows charging session to start with Vehicle MAC Address
ChargePointModelLagacyMode	true	Allows for Model Legacy Boot Notification
RemoteTxStoppableLocally	false	When set to true, remote transactions can be stopped locally via GUI
KioskModeWhenOffline	false	Change to KioskMode when Charger is offline

Adjust the corresponding entries according to the settings made under "Power".

- *ConnectorPowerLimit*: Max. Charging power per charging point, e. g. 50000, 50000 to limit the maximum charging power of both charging points to 50 kW each.
- GridFallbackPower_: Max. Charging power as fallback value as soon as the connection to the load management is interrupted, e. g. 10000 to limit the maximum charging power to 10 kW.

Use the "INDEX" button (3) to return to the overview of the web interface.

3.4.2. Settings with restart

Input fields colored red (see figure below) always require a restart of the charging station.

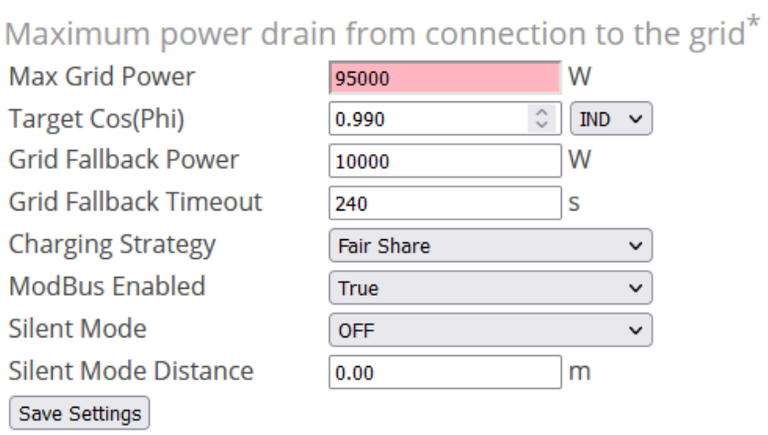
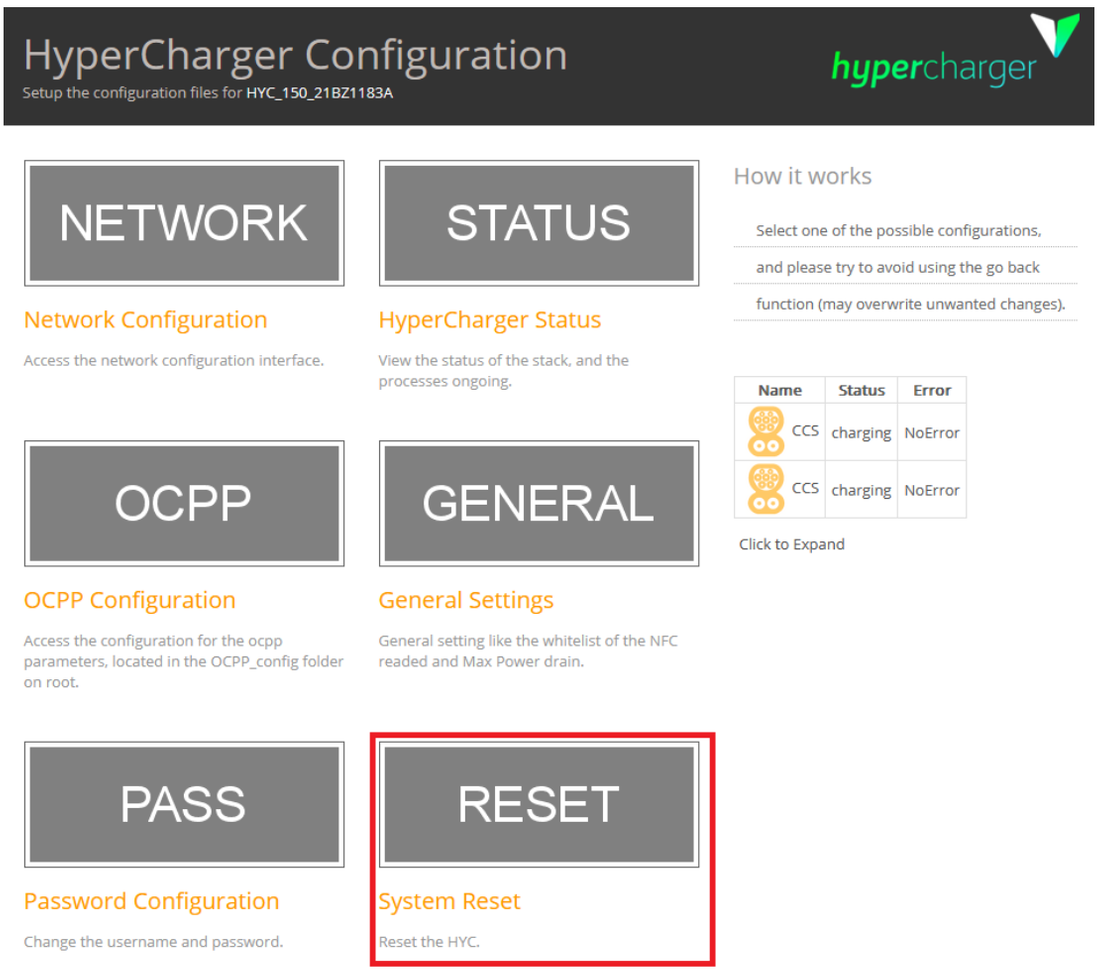


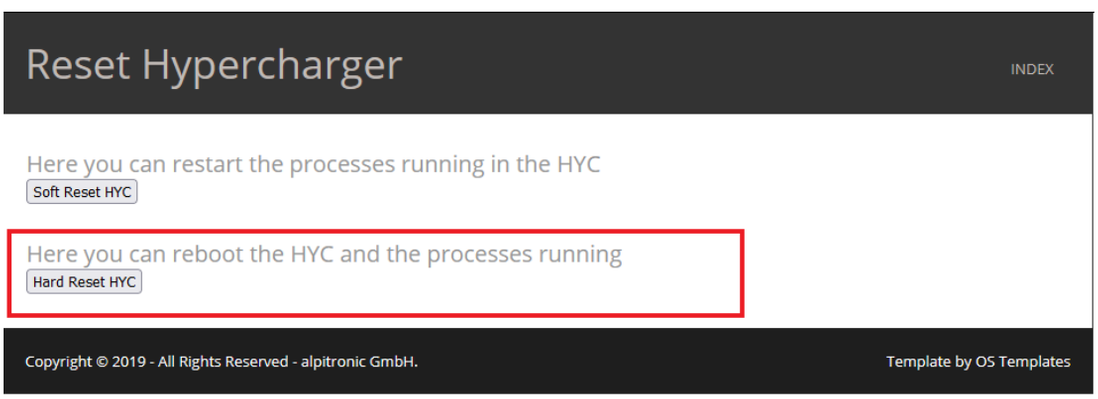
Image 7. Example of settings that require the charging station to be restarted

Proceed as follows:

1. Save the entries using the "Save Settings" button.
2. Use the "INDEX" button to return to the web interface overview.
3. Click on the "RESET" button as shown below.



4. Click on the "Hard Reset HYC" button to restart the charging station, as shown in the illustration below:



5. Wait until the charging station has restarted and is accessible again.
6. Check whether the settings you have made have been accepted.

3.4.3. Software update

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

Firmware updates can be obtained and downloaded from the manufacturer's website at here.



An account is required to download firmware updates.
If you do not yet have an account, you can create one using the link above.

Save the downloaded firmware on your device (e. g. notebook).

New firmware updates can be uploaded using the "Software update" button (1).

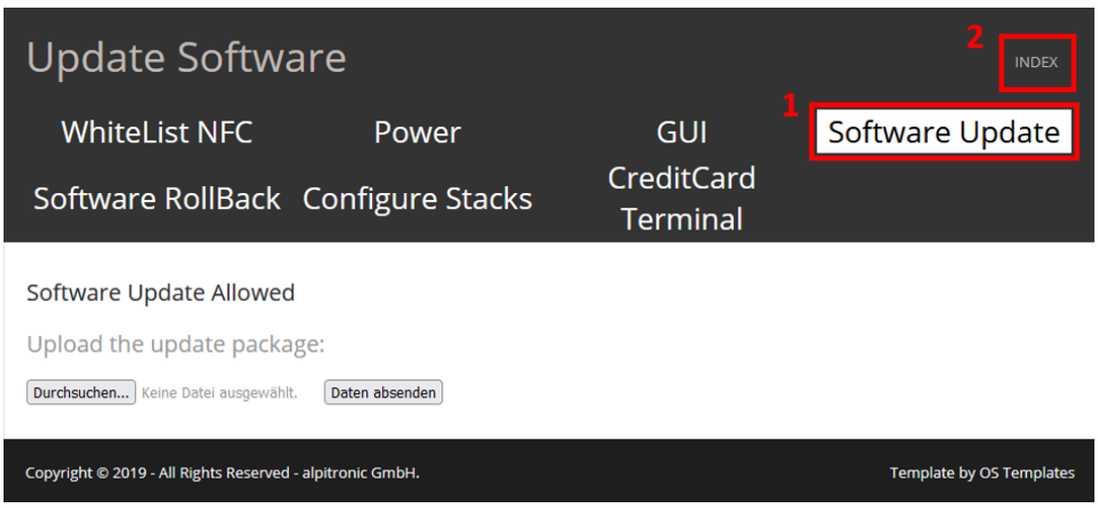


Image 8. Web interface software update

Proceed as follows:

1. Call up the *Software Update* tab
2. Select previously downloaded firmware file with _Browse... _
3. Click on *Send data*

Use the "INDEX" button (2) to return to the overview of the web interface.

3.5. Network settings (NETWORK)

The charging station is preconfigured at the factory with the IP address: `192.168.1.100`, as shown in the graphic below under the "Ethernet Configuration" tab:

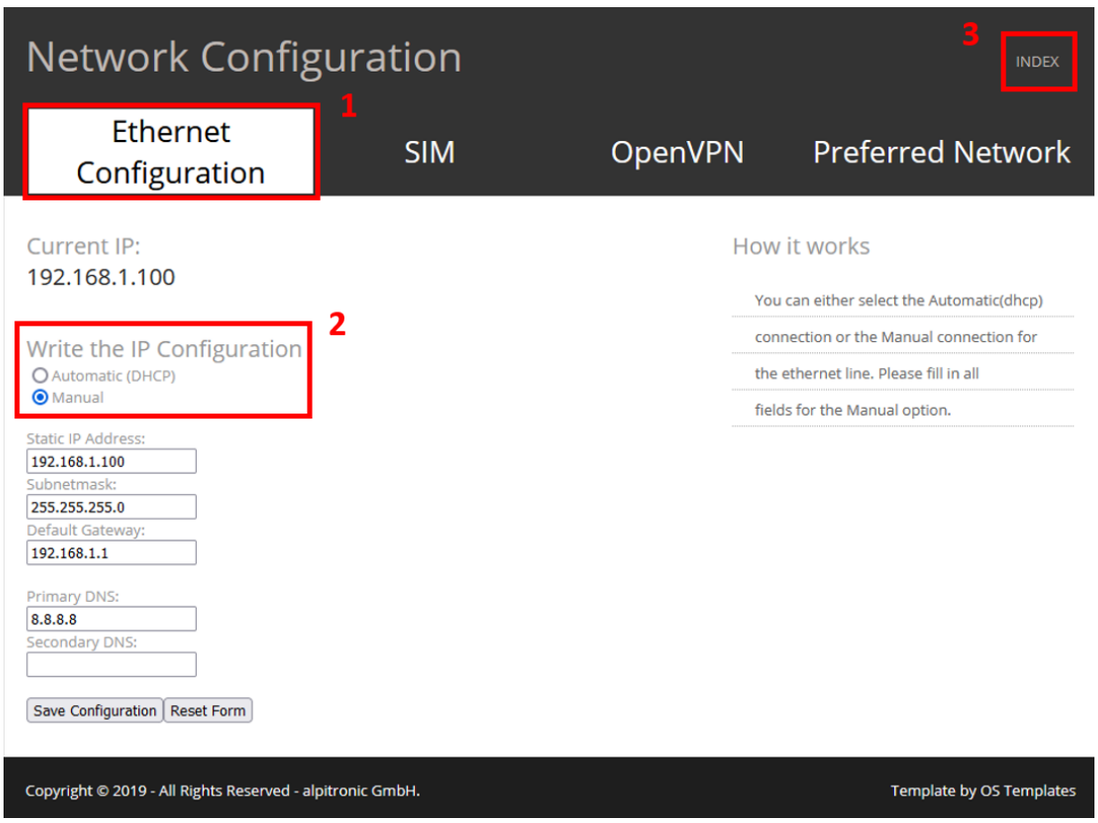


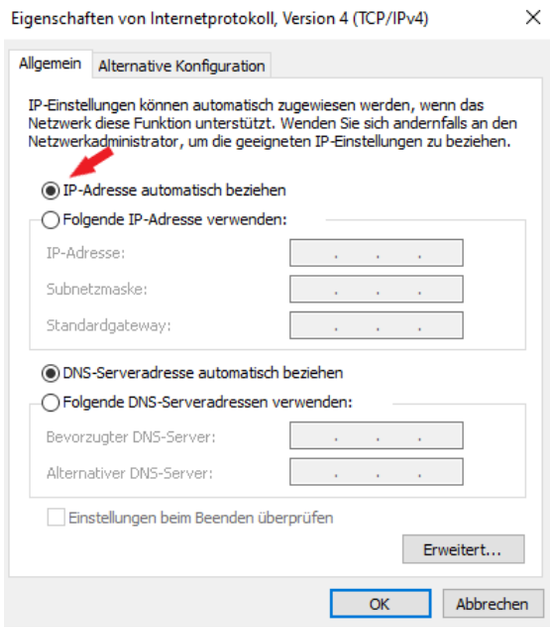
Image 9. Network settings

If several Hyperchargers are operated in a network, the "Write the IP Configuration" item (2) must be set to "Automatic (DHCP)". This assigns a dynamic IP address to the Hypercharger. This IP address must be determined in the DHCP server, e. g. the router, or via a network scan. It will be needed later to install the EMS app. From now on, the Hypercharger's web interface can be accessed under the newly assigned IP address.

Use the "INDEX" button (3) to return to the overview of the web interface.

Remember to remove the static default after completing the configuration. Otherwise, Online Monitoring will not be accessible and connection problems to the internet may occur.

To do this, reset the settings to "Obtain IP address automatically", as illustrated below:



The configuration is now complete.

4. Install FEMS App Alpitronic Hypercharger

In the FEMS App Center you will find all installable FEMS Apps — such as the FEMS App Alpitronic Hypercharger.

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 {box-name}.

4.1. Installation wizard

You will then be taken to the installation wizard for FEMS App Alpitronic Hypercharger.

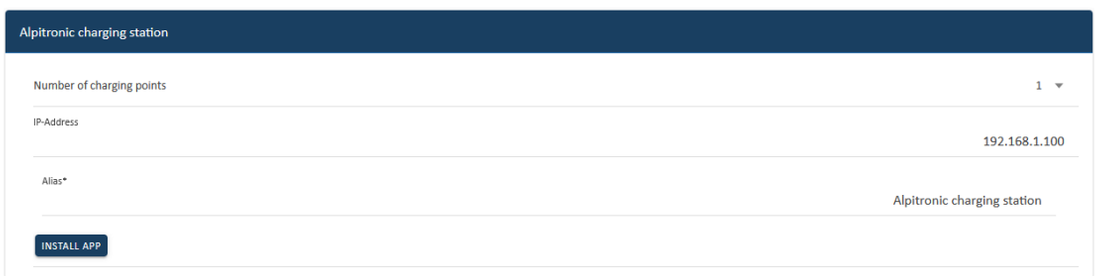


Image 10. App installation — Variant 2: Step 7

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 Alpitronic Hypercharger HYC150 or HYC300, please select "2" for the number of charging points.

Use the drop-down menu to select the number of charging points.



Image 11. App installation — Variant 2: Step 8

Confirm with "OK".

Please note that the IP addresses for the right and left charging points of the Alpitronic Hypercharger HYC150 or HYC300 must be entered separately.

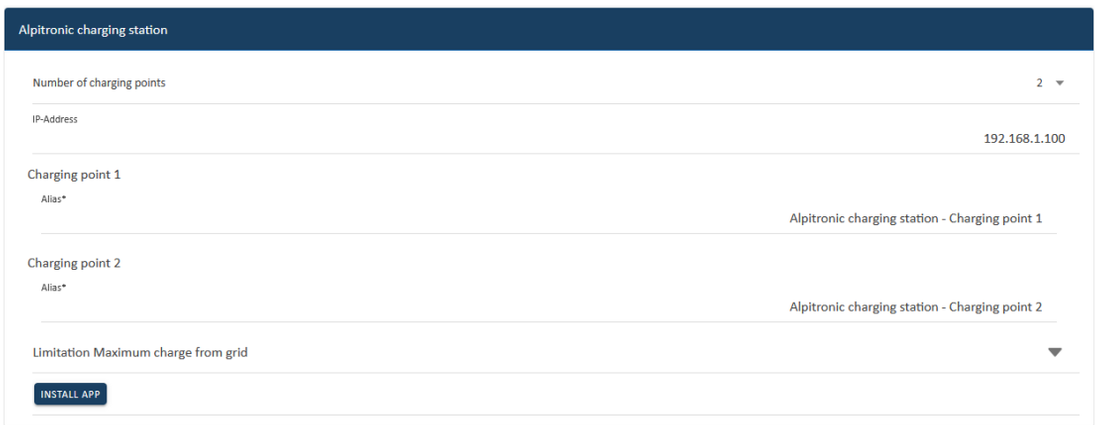


Image 12. App installation — Variant 2: Step 9

From the second charging point, a limitation of the maximum grid consumption in watts must be set.

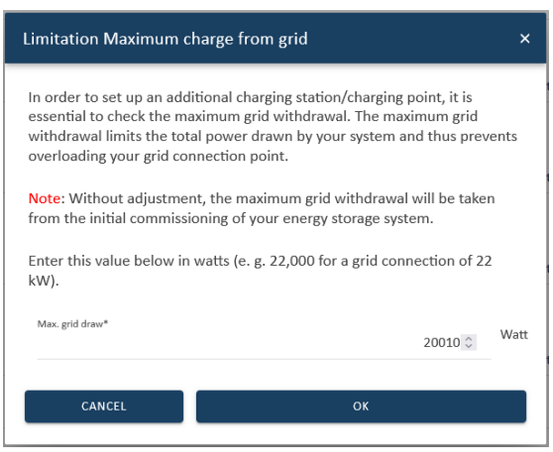


Image 13. App installation — Variant 2: Step 10

Please confirm that you have read the note and filled in the value correctly.

Confirm with "OK".

Then click on "Install app".

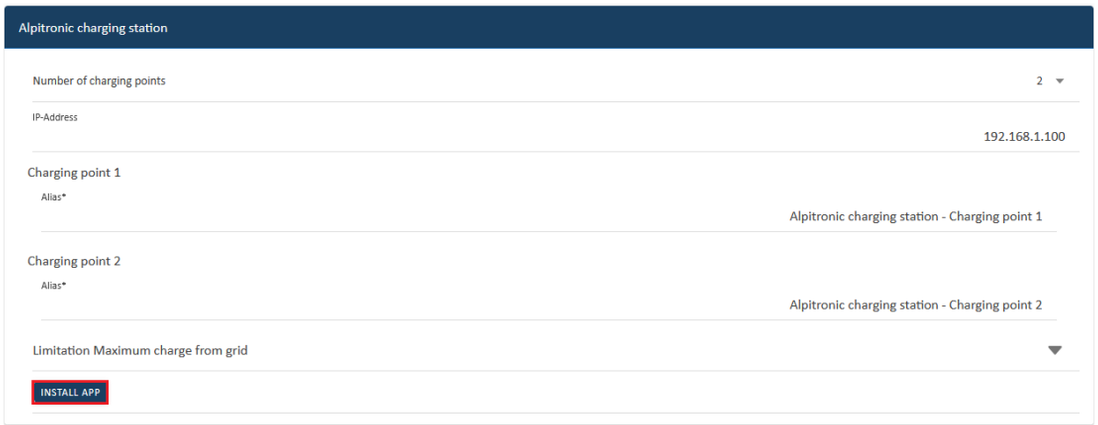


Image 14. App installation — Variant 2: Step 11

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 Alpitronic Hypercharger has been successfully installed.

5. Contact us

For support, please contact:

Symphon-E Service

Service phone: +49 (0) 371 45 85 68 - 100

E-mail service: symphon-e@heckert-solar.com

6. Directories

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