



Star Charge

Installation & Commissioning of Aurora 7/11kW

Agenda

- Installation Workflow
- Commissioning Workflow



Installation Workflow

Tools required



Percussion drill

Bit type:
Ø8.0mm



Electric screwdriver

Screw Bit type:
PH2 & T30



Measuring tape



Marking pen



Hammer



Knife



Wire crimpers



Adjustable
wrench

Installation Workflow

Tap expansion bolts into the wall



Use the positioning board (included in the charger package) to mark the mounting hole on the wall



Drill four holes in the wall with

- diameter of 8mm
- depth of 62mm



Tap the expansion bolts into the hole.
(The expansion bolts are not included in the charger package and need to be prepared by user)

Installation Workflow

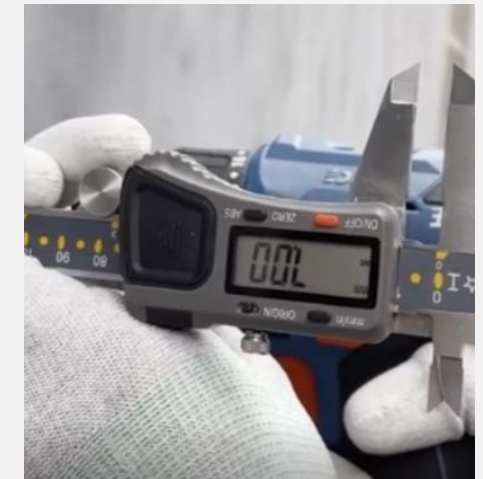
Install mounting bracket



Fix the mounting bracket to the lower screw holes



Insert screws into the upper screw holes (expose 7mm of the screw head.)



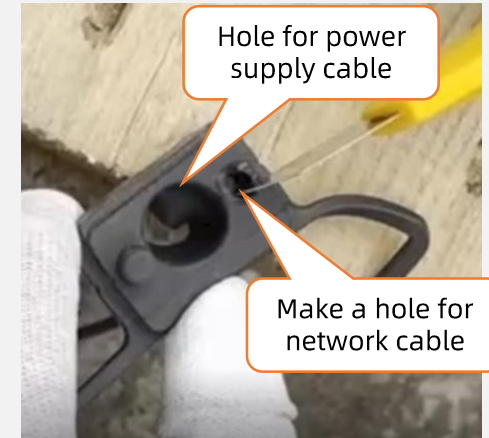
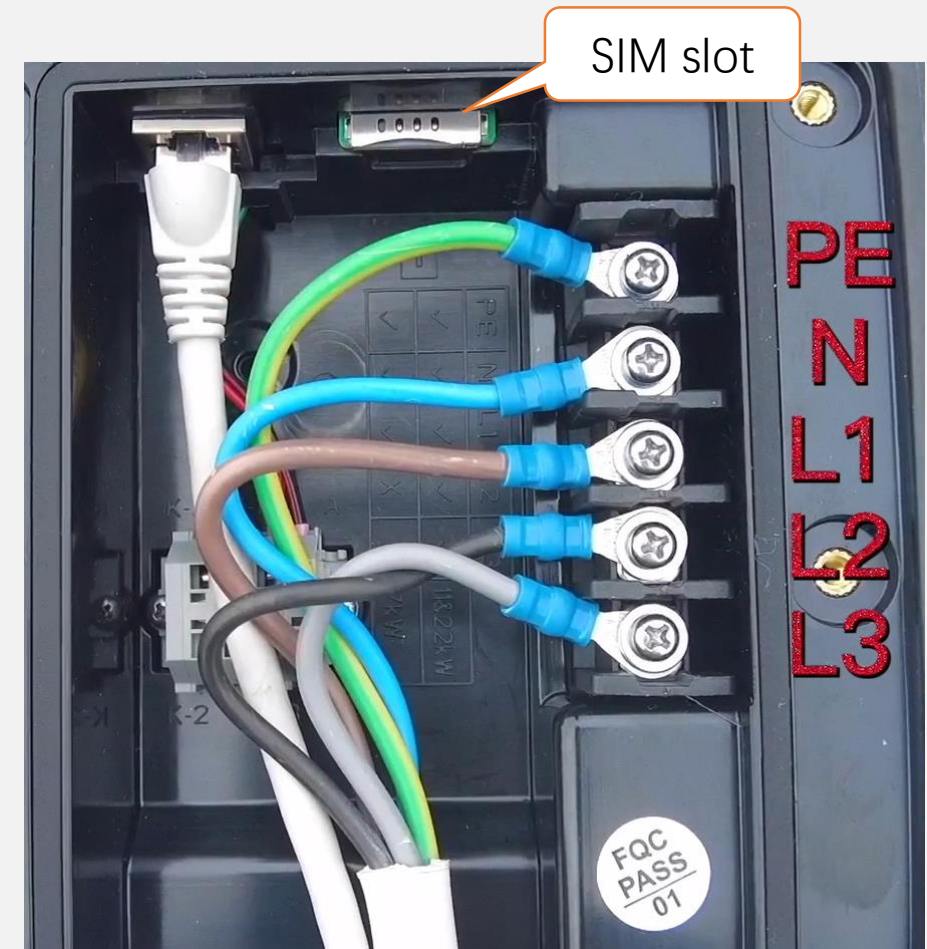
Installation Workflow

Connect input power supply cable
Connect network cable (optional)
Insert sim card (optional)

Connect the power supply cable to charger. Please pay attention to the cable sequence (PE,N,L1,L2&L3) .The screw locking torque is 1.2 ~ 1.4 nm

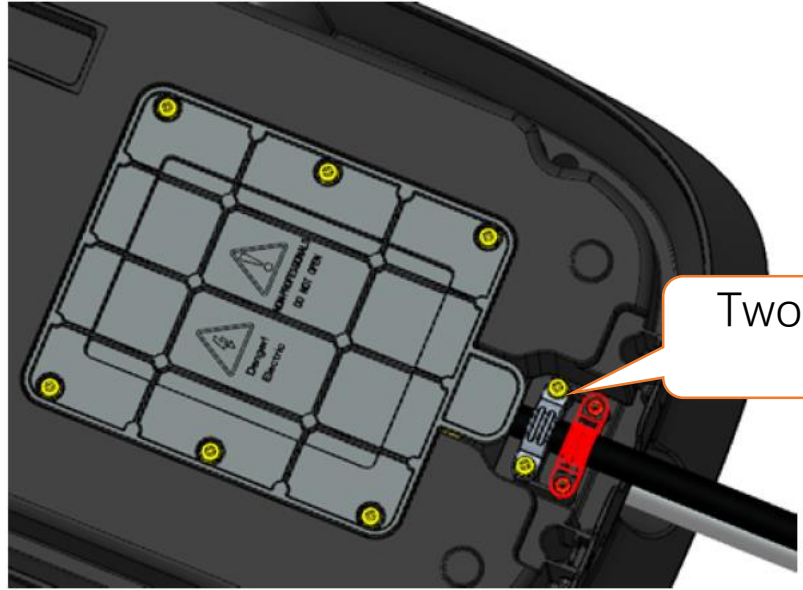
If SIM card is used for internet connection, insert the SIM card in the sim card slot.

If network cable is used for internet connection, connect the Ethernet cable to the corresponding socket. To thread the network cable into charger, you need to cut the rubber bulge and make an additional hole for network cable.



Installation Workflow

Install the back cover and crimp the cables



Two crimping ferrule are available for use

For the commissioning the technician needs to connect the charger with laptop via network cable to configure some charger parameters. So, before you install the back cover, you can first follow commissioning steps to finish the software configuration.

Use six M4*12 screws to install the back cover two M4*12 screws to tighten the crimping ferrule. Note: there are two positions for the crimping ferrule, depending on the thickness of the input cable (upper one for thin cable, lower one for thick cable)

Installation Workflow

Mounting charger on the wall



Hang Aurora on two upper screws



Press charger down to fix the screw in the slot



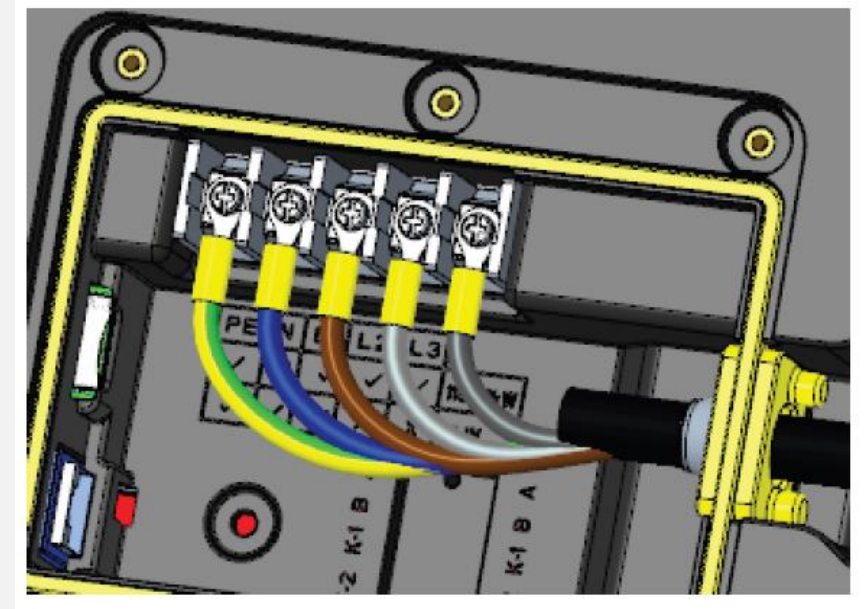
Fix the mounting bracket with charger

Installation Workflow

Mounting charger on pole (optional)

Beside mounting on wall, Aurora can be also installed on a pole.

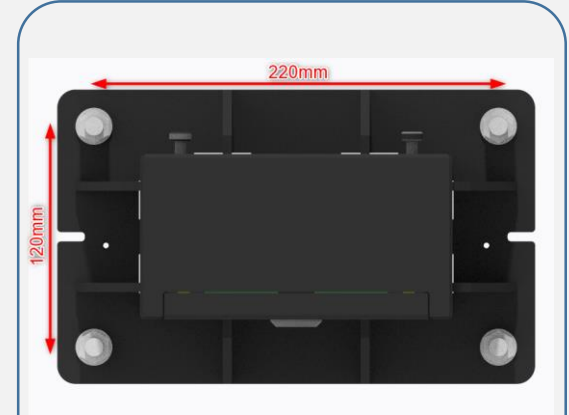
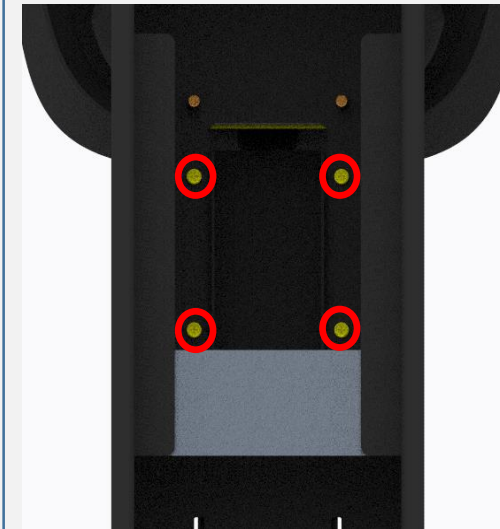
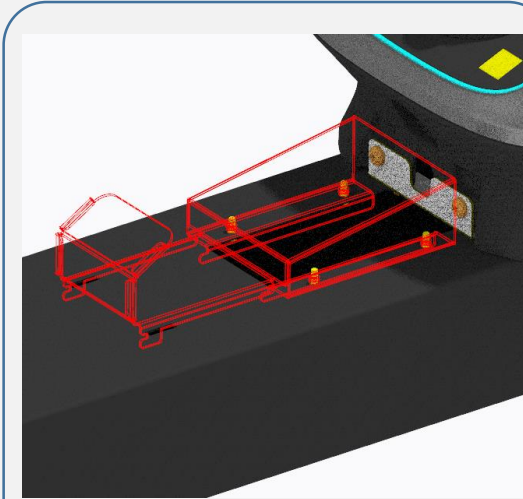
1. Lay the column on the ground.
2. Thread the power supply cable through the hole at bottom into pole.
3. Connect the power supply cable to the charger.
4. Mount charger to the pole.



Installation Workflow





Mounting charger on pole (optional)

5. Mount the cable hook and install the back cover
6. Fix pole on the ground with 4 expansion bolts
(bolts are not included in pole package)



Commissioning Workflow

Tools required

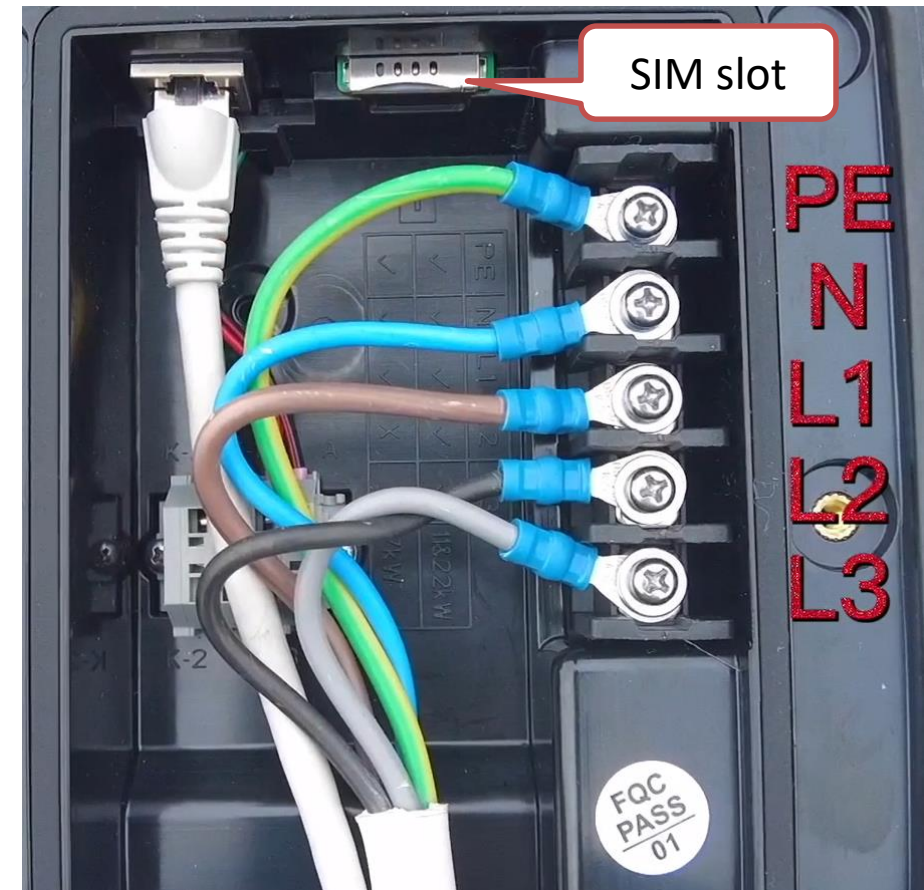
| No | Description | Picture |
|----|----------------|---|
| 1 | Laptop |  |
| 2 | Ethernet Cable |  |
| 3 | Adapter |  |
| 4 | Screw drivers |  |

Commissioning Workflow

Preparation

To configure the software parameter, please connect Aurora with a laptop via network cable.

If SIM card is used for internet connection, please insert the SIM card in the SIM slot

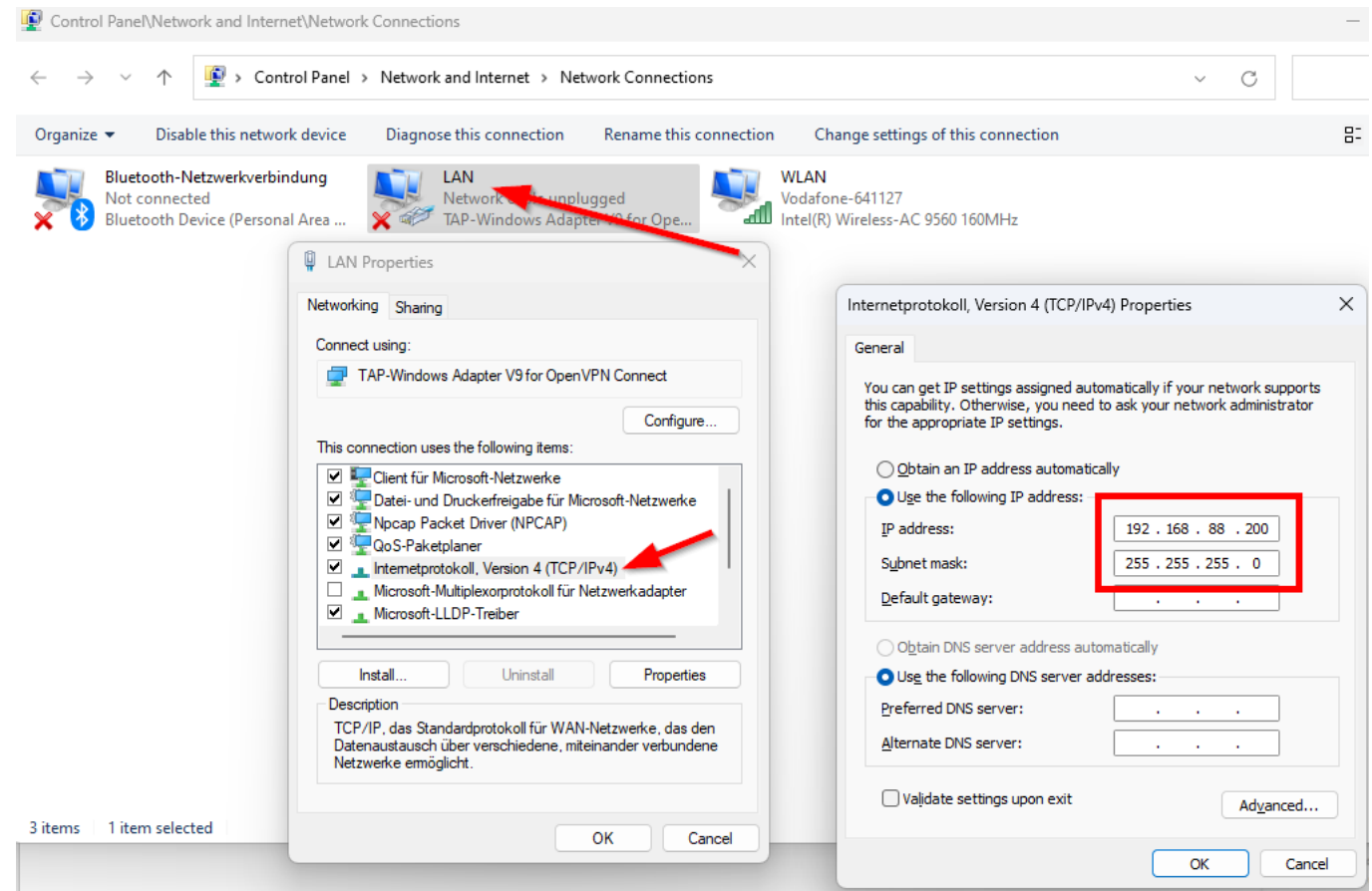


Commissioning Workflow

Preparation

To access the web panel, you need to first configure the IP address of your laptop:

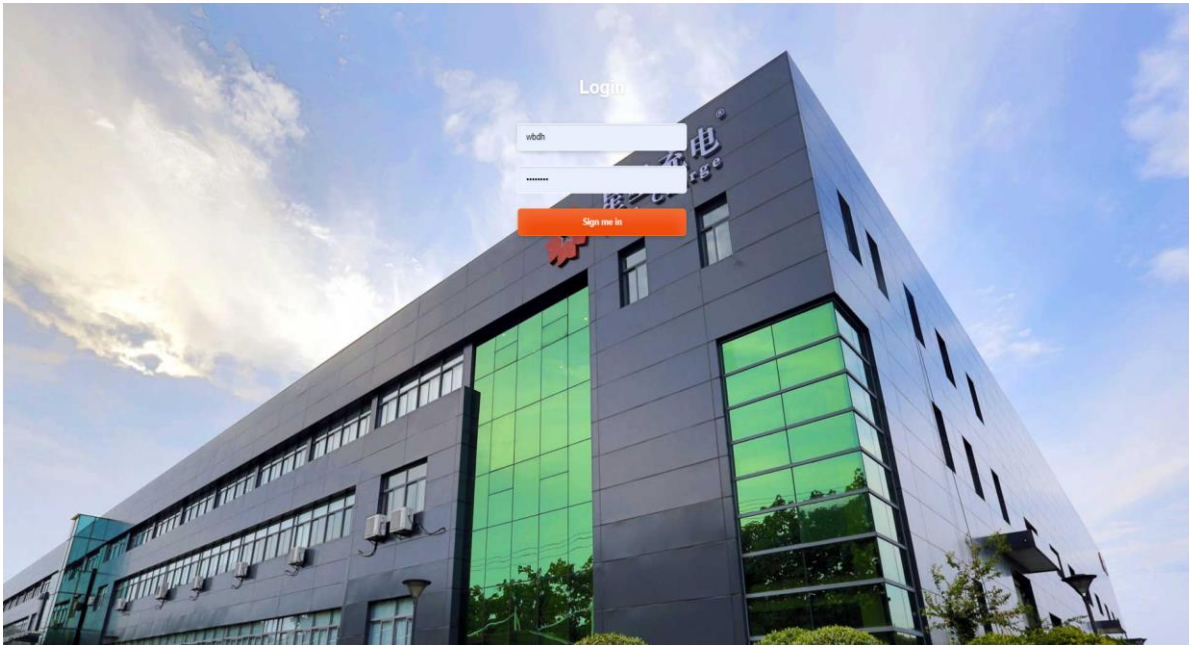
- In Windows → Control Panel\Network and Internet\Network Connections
- Select the adaptor you are using and set the IP address to 192.168.88.200 and subnet mask to 255.255.255.0 as below:



Commissioning Workflow

Log into web panel

- Open a browser (Chrome or Edge)
- Enter IP address 192.168.88.206
- User account
 - Username : xxcd
 - Password : 28912891

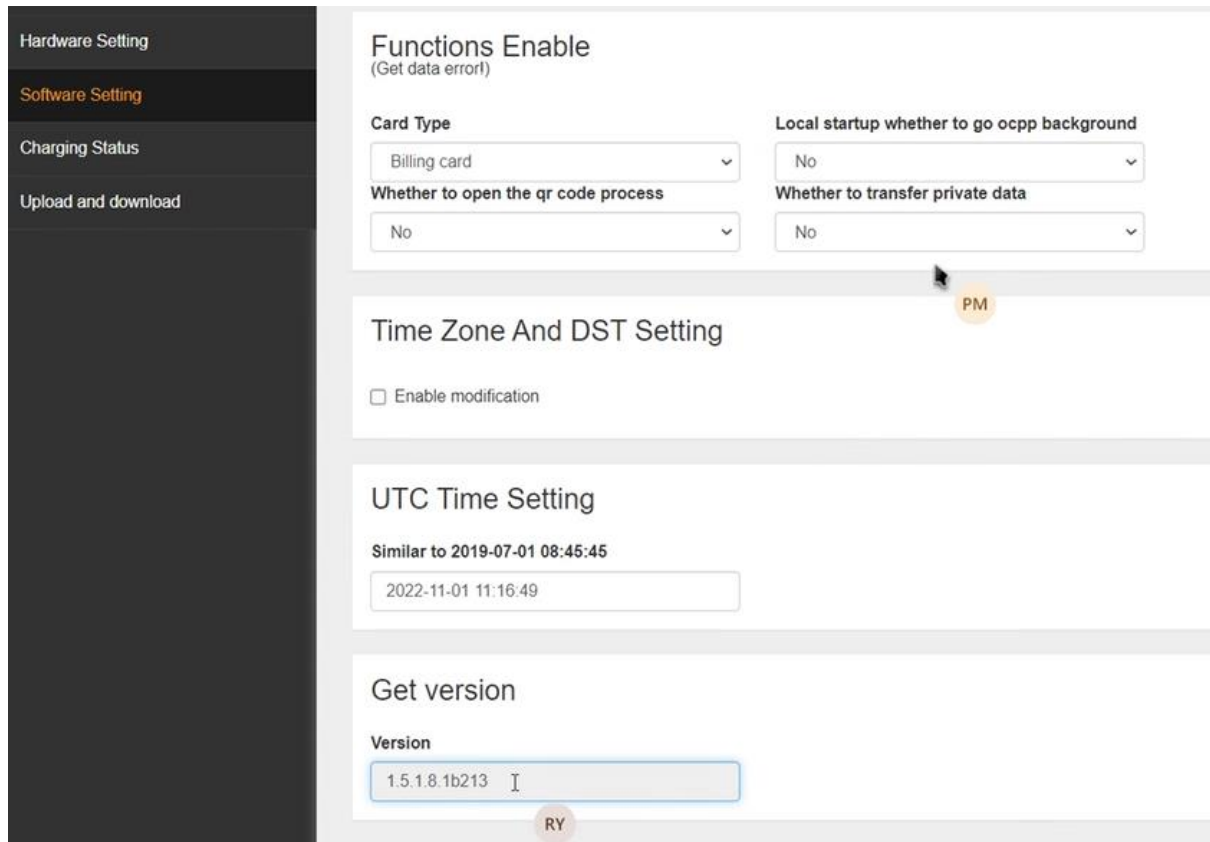


Commissioning Workflow

Check and update firmware

Before the parameter configuration, first you need to check the firmware version in the charger. If the charger is produced long time ago, the firmware inside could be outdate and needs to be update to avoid known software issues.

Click “Software setting ” and check the version in “Get version ”



Hardware Setting

Software Setting

Charging Status

Upload and download

Functions Enable

(Get data error!)

Card Type: Billing card

Local startup whether to go ocpp background: No

Whether to open the qr code process: No

Whether to transfer private data: No

Time Zone And DST Setting

☐ Enable modification

UTC Time Setting

Similar to 2019-07-01 08:45:45

2022-11-01 11:16:49

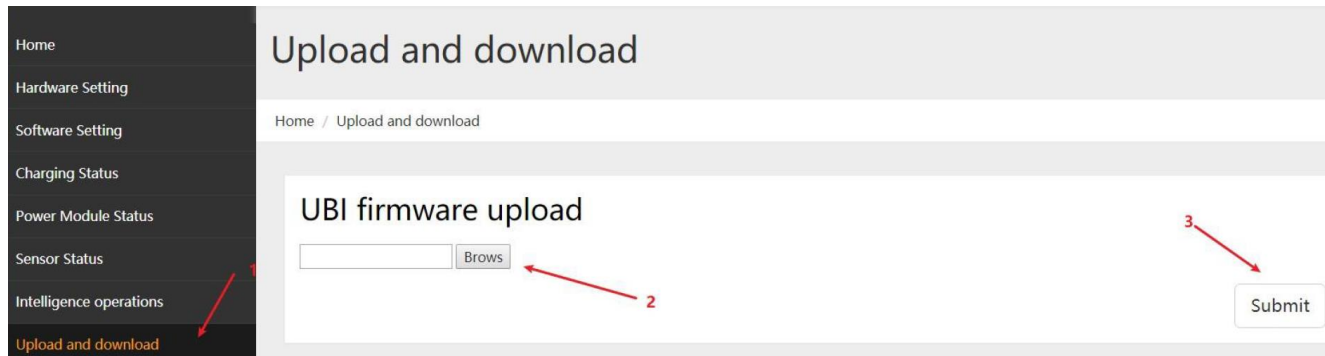
Get version

Version: 1.5.1.8.1b213

Commissioning Workflow

Check and update firmware

If the firmware version is not the newest version (StarCharge engineer will inform you the release info), please click “Upload and download ” → UBI firmware update. Then upload the firmware file provided by StarCharge.



Home / Upload and download

UBI firmware upload

1 2 3

> This PC > Work (D:) > Firmware > Aurora > 1.1.2.1.6b107_C_001-20230202 >

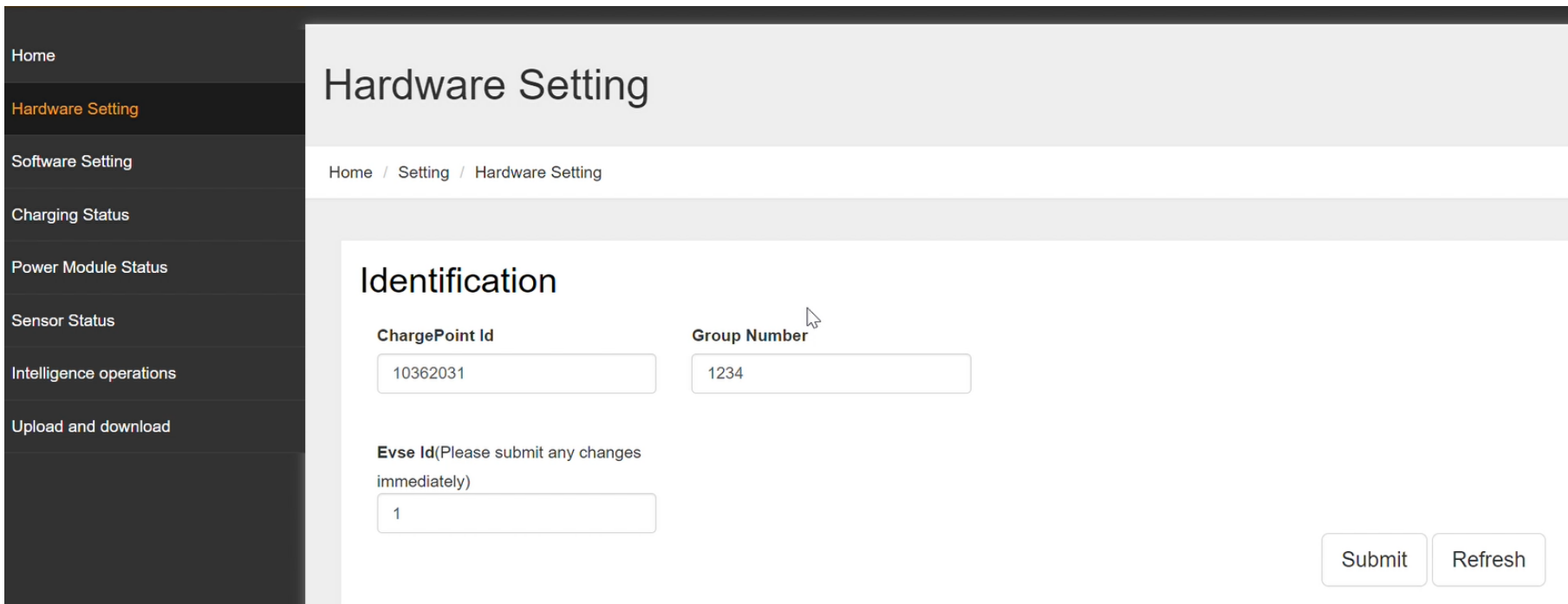
| Name | Date modified | Type | Size |
|--------------------------|-------------------|---------------------|-----------|
| ChangeLog.txt | 3/20/2023 6:12 PM | Textdokument | 1 KB |
| V1.1.2.1.6b107_C_001.zip | 3/20/2023 6:12 PM | Compressed (zipp... | 13,543 KB |

Upload this file

Commissioning Workflow

Configure the hardware setting

- Click “Hardware Setting”
- ChargePoint Id: if the charger needs to be connected to a backend platform, please enter here the charger ID.
- Others is default setting



The screenshot shows the 'Hardware Setting' page in the Star Charge system. On the left is a dark sidebar with navigation links: Home, Hardware Setting (highlighted), Software Setting, Charging Status, Power Module Status, Sensor Status, Intelligence operations, and Upload and download. The main content area has a header 'Hardware Setting' and a breadcrumb trail 'Home / Setting / Hardware Setting'. Below this is the 'Identification' section with three input fields: 'ChargePoint Id' (containing '10362031'), 'Group Number' (containing '1234'), and 'Evse Id' (containing '1'). The 'Evse Id' field has a note '(Please submit any changes immediately)'. At the bottom right are 'Submit' and 'Refresh' buttons.

Home

Hardware Setting

Software Setting

Charging Status

Power Module Status

Sensor Status

Intelligence operations

Upload and download

Hardware Setting

Home / Setting / Hardware Setting

Identification

ChargePoint Id

10362031

Group Number

1234

Evse Id(Please submit any changes immediately)

1

Submit Refresh

Commissioning Workflow

Configure the hardware setting

- AC Current: if you want to limit the output power of Aurora, you can reduce the value.
 - For Aurora 7kW, the max value is 3200 (each power phase 32A)
 - For Aurora 11kW, the max value is 1600 (each power phase 16A)

AC Current

EVSE 1

Conn 1

Max Current(0.01A)

3200

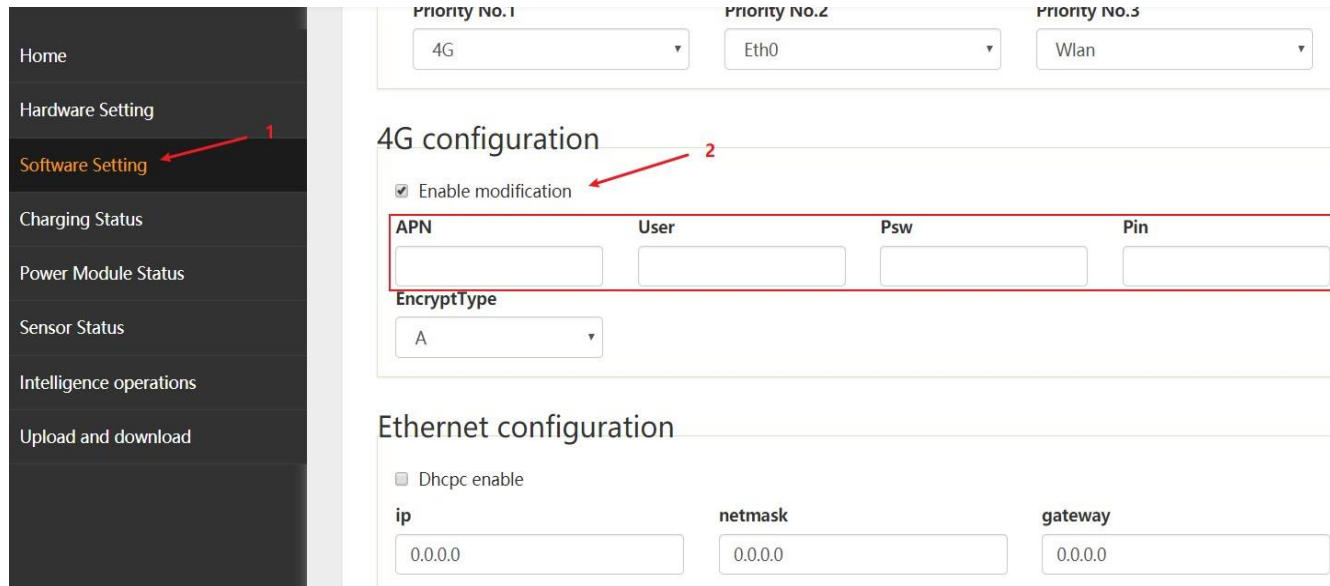
Submit

Refresh

Commissioning Workflow

Configure the software setting

- Click “Software Setting”
- 4G configuration: If SIM is used for internet connection, please enter the APN, USER, PSW and PIN of the SIM card.
- Beside 4G, Aurora also support Ethernet and WIFI for the internet connection. In this page, you can find corresponding settings.



Priority No.1: 4G, Priority No.2: Eth0, Priority No.3: Wlan

4G configuration

☒ Enable modification

| APN | User | Psw | Pin |
|-----|------|-----|-----|
| | | | |

EncryptType: A

Ethernet configuration

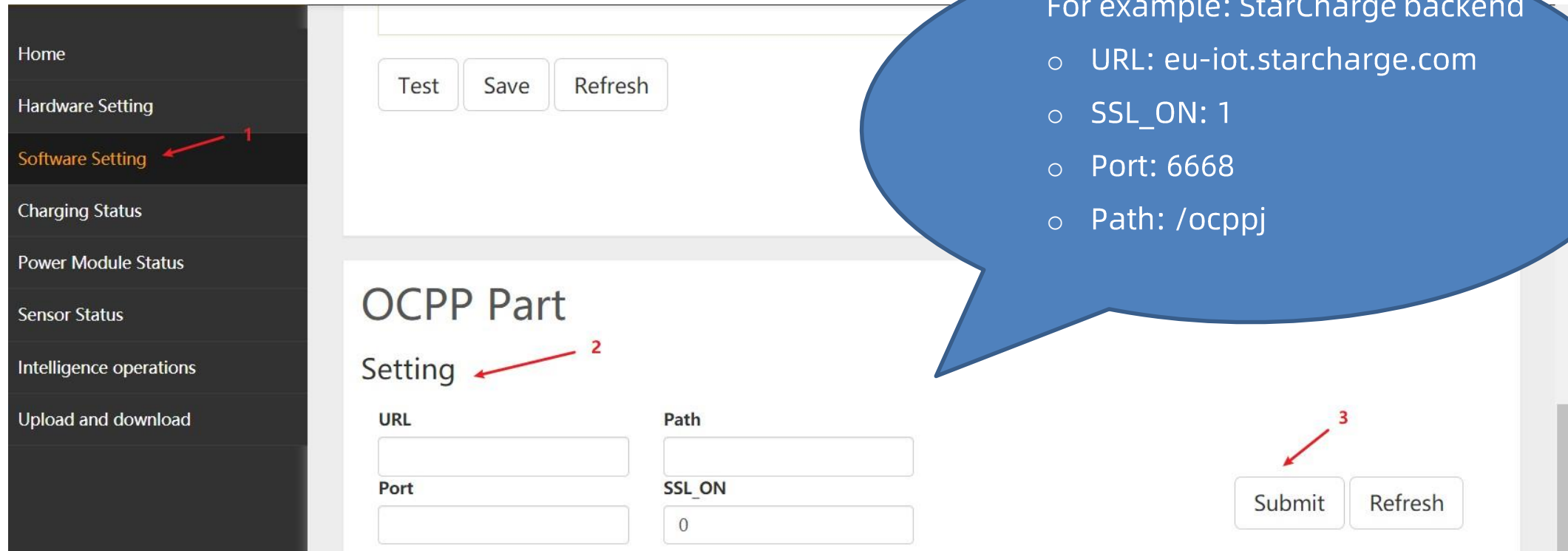
☐ Dhcp enable

ip: 0.0.0.0, netmask: 0.0.0.0, gateway: 0.0.0.0

Commissioning Workflow

Configure the software setting

- OCPP: If the charger needs to be connected to a backend platform, please enter the URL of the backend platform.



The screenshot shows the 'Software Setting' page in the Star Charge interface. The left sidebar contains a menu with 'Software Setting' highlighted by a red arrow labeled '1'. The main content area has a header with 'Test', 'Save', and 'Refresh' buttons. Below this is the 'OCPP Part Setting' section, indicated by a red arrow labeled '2'. This section contains four input fields: 'URL', 'Path', 'Port', and 'SSL_ON'. The 'SSL_ON' field has the value '0'. At the bottom right, there are 'Submit' and 'Refresh' buttons, with a red arrow labeled '3' pointing to the 'Submit' button. A blue speech bubble on the right side of the screen provides an example configuration for the Star Charge backend.

For example: StarCharge backend

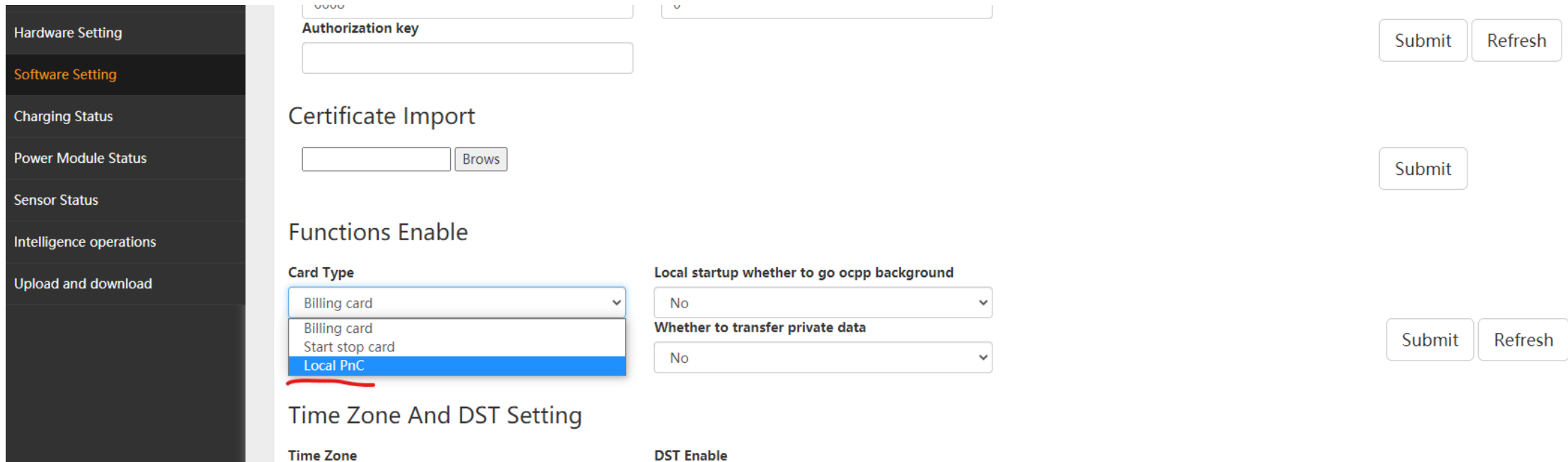
- URL: eu-iot.starcharge.com
- SSL_ON: 1
- Port: 6668
- Path: /ocppj

Commissioning Workflow

Configure the software setting

Select the card type:

- Billing card: Use authenticated IC card to start charging session card. The IC card must be whitelisted in backend platform and EVSE must always connect to the backend. This is for backend.
- Start stop card: Use the IC cards from charger accessories to start charging session. No authentication.
- Local PnC: Once plug in the charger connector, the charging session automatically begins without any authentication.



The screenshot displays the 'Software Setting' page of the Star Charge system. On the left, a dark sidebar contains navigation links: 'Hardware Setting', 'Software Setting' (highlighted in orange), 'Charging Status', 'Power Module Status', 'Sensor Status', 'Intelligence operations', and 'Upload and download'. The main content area is divided into several sections:

- Authorization key:** Includes a text input field and a 'Submit' button.
- Certificate Import:** Includes a file selection input and a 'Brows' button.
- Functions Enable:**
 - Card Type:** A dropdown menu with 'Billing card' selected. The options are 'Billing card', 'Start stop card', and 'Local PnC' (which is underlined in red).
 - Local startup whether to go ocpp background:** A dropdown menu with 'No' selected.
 - Whether to transfer private data:** A dropdown menu with 'No' selected.
- Time Zone And DST Setting:** Includes a 'Time Zone' label and a 'DST Enable' label.

On the right side of the interface, there are three buttons: 'Submit' and 'Refresh' at the top, and a single 'Submit' button in the middle.

Commissioning Workflow

Check the connection status

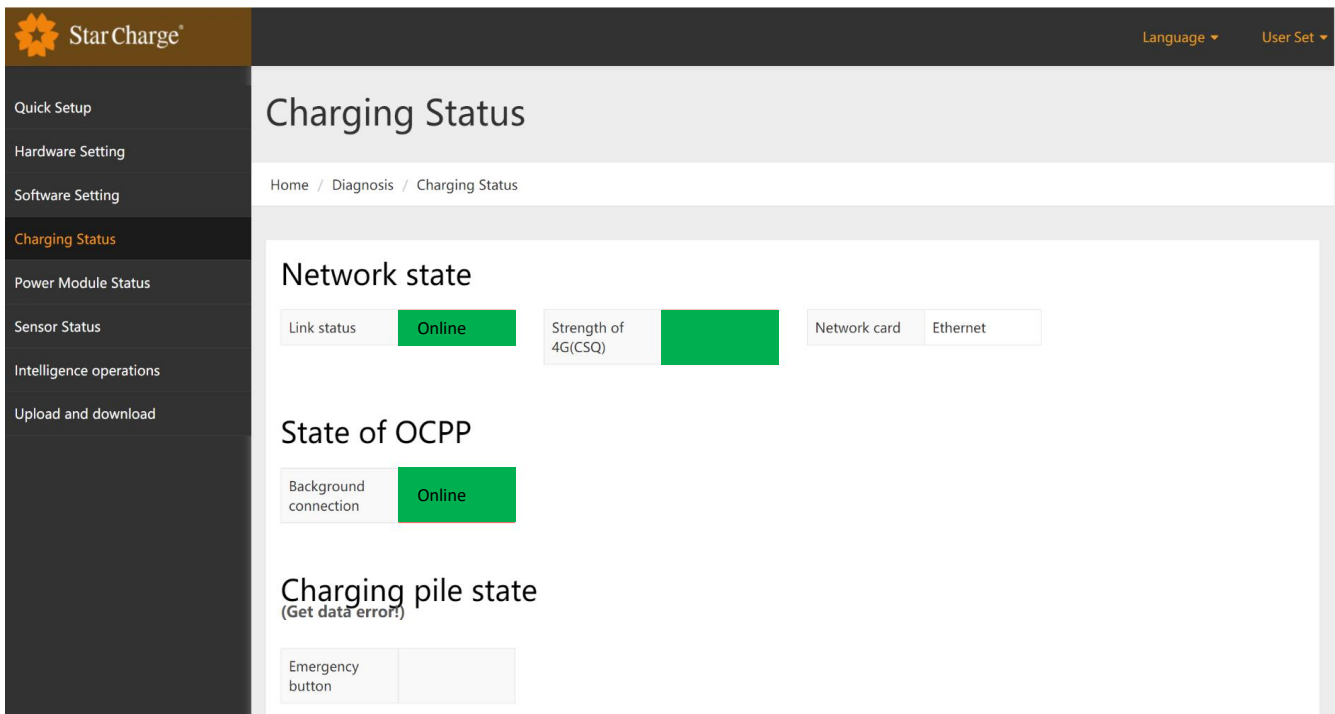
Click “Charging Status” , observe the connection status.

Link status: internet connection

Strength of 4G: LTE signal quality

Network card: which connection method is used, 4G, Ethernet or Wifi

Background connection: connection with the backend platform

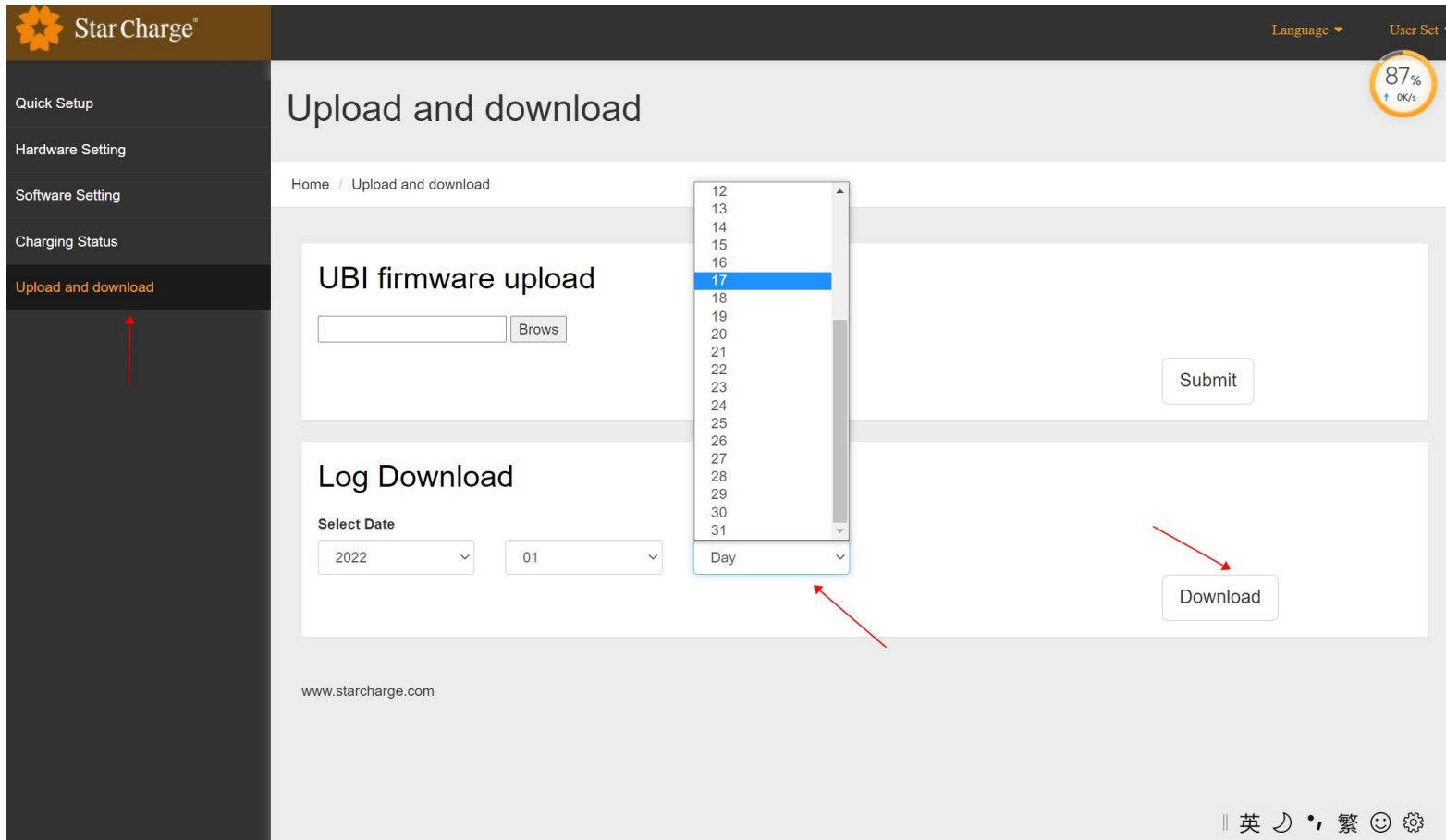


The screenshot displays the Star Charge web interface. The top navigation bar includes the Star Charge logo, a language dropdown, and a user set dropdown. The left sidebar lists various settings: Quick Setup, Hardware Setting, Software Setting, Charging Status (highlighted), Power Module Status, Sensor Status, Intelligence operations, and Upload and download. The main content area is titled 'Charging Status' and shows a breadcrumb trail: Home / Diagnosis / Charging Status. The 'Network state' section includes three status indicators: 'Link status' (Online), 'Strength of 4G(CSQ)' (represented by a green bar), and 'Network card' (Ethernet). The 'State of OCPP' section shows 'Background connection' (Online). The 'Charging pile state' section has a '(Get data error!)' message and an 'Emergency button' status indicator.

Download Log file

If any charger issue happens, please provide log file to service.europe@starcharge.com

You can download log in “Upload and download” → “Log Download” → select date and download .



Star Charge®

Language ▼ User Set ▼

87%
↑ OK/s

Upload and download

Home / Upload and download

Quick Setup

Hardware Setting

Software Setting

Charging Status

Upload and download

UBI firmware upload

Brows

Submit

Log Download

Select Date

2022 ▼ 01 ▼

Day ▼

12
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Thank U

