Functionalities for NA product

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Contents

Authorization

There is possibility to turn ON/OFF authorization for TeltoCharge.

When authorization is ON, user have to authorize every time he wants to start charging process. Authorization can be done in two different ways:

- By swiping the Slider in main menu;
- By using NFC card;

By default authorization status is set to OFF, user can set this status during the first set-up wizard.

Load balancing

It is possible to set maximum amperage at which charger can operate. User can change current from 6 Amps to the maximum value, which was set by the Installer inside the Installer Settings.

By default this setting is set to 10 Amps

NFC

For personalized authorization, there is possibility to add and use NFC cards. Just press "Add new card", name your card and then touch the NFC card to the side of the charger. It should say "Card added successfully".

More information about NFC cards pairing can be found here.

By default, NFC cards whitelist is empty.

Schedule

For the time periods when the car should not be charged, select Peak hours. For time periods when the car should be charged, select Schedule.

Randomized delay

Randomized delay function - protection for the grid overloading. If this function is turned on, up to 10 minutes of delay will be applied in the following cases:

- *Vehicle is connected and trying to initiate charging process for the first time;*
- *Every time at the beginning of scheduled charging;*
- *After TeltoCharge has been restarted, rebooted, or turned off.*

When OCPP is turned on, this feature will not work.

Errors and warnings

If TeltoCharge is not working correctly and giving errors or warnings, you will now be able to see more information in the app. All errors and warnings will be sent to the app in real-time.

Live data

Live data from TeltoCharge. It will be possible to see such data as:

- *Charging type*
- *Phase used*

- *Temperature*
- *Max allowed current*
- *Phase voltages (input and output)*

Connectivity

In the connectivity tab user can connect TeltoCharge to internet via Wi-Fi, Ethernet cable or GSM card (if it is selected as product option).

In this section, it is also possible to connect charging station to internet server for remote management (OCPP).

WiFi

To connect Teltocharge to Wi-Fi, just follow these steps:

- Open Wi-Fi tab;
- Enable it with the slider;
- Select your network from provided list;
- Insert password and press save;
- Wait until product is connected successfully;

OCPP

Open Charge Point Protocol 1.6 is used to connect TeltoCharge to 3rd party Cloud servers. At the moment charger is able to achieve "*Core*" and "*Local auth list management*" functions.

Before connecting TeltoCharge to any 3rd party Charge point management server, firstly check if server is compatible with OCPP 1.6 JSON.

If server provider supports this OCPP version, to connect, user needs to type in server URL address and Charge point identity. After all settings are set, enable OCPP with a slider and press Save at the bottom of the screen. User also can see status if charger was connected successfully or not.

More information anout OCPP you can find here.

Ethernet

To connect TeltoCharge with Ethernet just plug in the cable and all needed settings should be set automatically.

In order to be able to type configuration manually, user have to disable DHCP setting beforehand. DHCP slider can be found in the same Ethernet parameters window.

Date & Time

In this tab user can set date and time according to the region in which product is going to be used. It is recommended to synchronize time with phone (button for this action is provided).

Device info

In this tab user/installer can see all the HW information about charger, maximum current set by installer (inside installer menu) and real-time temperature.

Also there is a possibility to restore default settings. With this function TeltoCharge restore all settings to default values except from the Installer Menu ones.

After pressing **Check for updates**, new window pops up, where user/installer can see information about current FW and update it.

Installer menu

This is the menu for installer to reach configuration settings.

After every installation installer must open this menu and set required parameters.

To open installer menu, it is needed to insert *Installer code*. You can find this code on the sticker, which is placed on the middle plate (under the front plate).

<u>*Installer menu is **only** for installers or personnel with relevant qualifications.*</u>

Max power from grid

Use this value to set maximum current, which charger can use. This value should be calculated according to the possible load, that other appliances can be using, by subtracting it from the maximal current which is provided to the grid. That said, in this situation, current should not be higher than 16 amperes (If 11 kW charger is installed) or 32 amperes (if 7,4 or 22 kW chargers is installed).

By default this setting is set to 10 Amps

Supply voltage

- Installer can change supply voltage (*voltage between phase and neutral wires*)
- Different regions can have different supply voltages, so installer can set this value accordingly to the used voltage in the individual site;

By default this setting is set to 120 V

Upper voltage tolerance

There is a possibility to change the tolerance limit for upper voltage threshold. This can be used in the sites where voltage fluctuation is recurring.

By default this setting is set to 10 %

Lower voltage tolerance

There is possibility to change the tolerance limit for lower voltage threshold. This can be used in the sites where voltage fluctuation is big.

By default this setting is set to 10 %

Connection type

This function let user to select how theirs power input is wired - in Star network or Delta network style.

By default this setting is marked as Delta

Use neutral as phase

This function allows user to use electrical network without Neutral wire. L1 then must be connected to N(L1) pin in input terminal.

By default this setting is turned ON

Allow simplified charging sequence

There are electrical vehicles which do not use B state to start charging process and charging states goes directly from A to C. For that it requires simplified charging sequence enabled. If this option is turned OFF, TeltoCharge will not start charging with this type of EV connected.

By default this setting is turned OFF

Charging location is ventilated

There are electrical vehicles which requires ventilation (charging is done on state D), because they use lead batteries and it is of great importance to ventilate them.

If EV sends signal to go to state D, but charger is not installed outside and this parameter is set to „NO"- charging will not be started.

If TeltoCharge is installed outside, set this setting to *YES.*

By default this setting is set to NO

Temperature warning

There is a possibility to increase temperature warning level. When charger reaches this temperature level, it starts to ventilate itself by decreasing charging power. If Charger reaches 80°*C* it turns off

relays and stops charging process.

By default this setting is set to 60 °C

Factory default settings

By using this setting installer can restore Factory default settings. This function restores all settings which were set in the Installer menu as well as in the Main menu.

After this reset yellow LEDs starts blinking which means that charger requires to set-up Installer menu again.

Reboot device

There is a possibility to reboot charger through the Teltonika Energy app.