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# Арр

## What does the App allow me to do?

eSolutions Charging allows you to connect to the eProWallbox via Bluetooth and take full control of your charging sessions from anywhere. You can get access to core charging session control features such as:

- Start the charging sessions
- Stop, delay, and schedule charging sessions
- Monitor the status and progress of each charging session in real-time
- Receive notifications when charging sessions start and end

- Configure a static limit on the maximum charging power, by defining a power threshold

- Create power profiles. A power profile allows users to plan a charging session activation at certain times and days

- Enable the DPM function and configure the DPM peak connection power that all loads underneath shall not exceed

- Keep track of the charging session history, with time spent charging EVs and delivered energy

- Associate RFID cards to your own account and activate, suspend, or delete the cards associated to that account

### How do I pair the eProWallbox with the app?

Download eSolutions Charging from the App Store or Google Play and follow the instructions displayed on the App.

The app authenticates and pairs via a QR Code available on the charger's case, linking eProWallbox to your account. Such pairing enables all remote features, such as data collection, visualization, and analysis, as well as seamless customer support. It is possible to pair more than one eProWallbox, in fact, through the "Device List" menu you can manage all your Free2Move eSolutions wallboxes from a single page.







### How do I create a new account to access the app?

Download eSolutions Charging from the App Store or Google Play and follow the instructions displayed on the App.

At the first start-up, you are required to provide personal details to register and create a Free2Move eSolutions account. The registration can be both local or social (Facebook, Google, Apple). Personal data and settings of the profile can be changed in-app.

### How do I check my charging sessions' history?

You can check your charging sessions' history on the App by clicking on History, in the Charge at Home section

### What are the requirements to install the app on the smartphone?

the app can be installed on two operating systems:

- iOS versions: any version starting from iOS 12
- Android versions: any version starting with Lollipop (5.0, API 21)

## **Functionalities**

# How can I be sure that using eProWallbox does not continually trigger the utility meter?

eProWallbox can be optionally equipped with an external energy meter provided by Free2Move eSolutions that enables Dynamic Power Management, a function that regulates the use of the electricity available to recharge your vehicle. Dynamic Power Management sets the vehicle's maximum energy demand based on available home power at any given time. It should be noted that the minimum available energy required by the vehicle for recharging is approximately equal to 1.4kW. Below this level, charging stops until at least 1.4kW is available again.







# Installation

# How can I understand if I have the necessary requirements to install eProWallbox?

There aren't particular requirement as eProWallbox can be installed both in singlephase or tri-phase systems.

### Where can I install the eProWallbox?

eProWallbox can be installed both indoor and outdoor. In restricted and private access areas (e.g. closed box) installation is possible. As for the common areas of the condominium, installation is possible in places with restricted access, if provided for by the condominium rules and if an adequate electrical connection is available.

### What are the necessary precautions for an outside installation?

eProWallbox is a device with IP55 protection rating and is therefore suitable for installation in an external environment in an area. In general, atmospheric agents do not constitute a limit to use. All plastics are in a specific polycarbonate for outdoor installations. It is not recommended to install the device under direct sunlight or exposed to rain, if necessary, install a canopy to protect the product. ProWallbox is resistant to sunlight, however, during charging, heat is generated inside the wallbox and may lead to overheating beyond the maximum operating temperatures. eProWallbox is however equipped with a safety system that reduces the charging current when the maximum temperatures are exceeded.

### Can anyone install the eProWallbox?

With a permanent connection to the electrical network, the installation requires the intervention of qualified personnel for the design and construction of a dedicated, state-of-the-art electrical power system and to certify the domestic electrical system in compliance local regulations and the energy supply contract. This work should be done by a certified electrician because any modification to the electrical panel, still requires recertification by qualified personnel.







### Can I increase the power of the eProWallbox?

eProWallbox maximum output is 22 kW. During the installation phase the qualified personnel has to set the required type of input power supply (single-phase or three-phase) and the maximum power the wallbox will deliver, according to the contractual power of your dwelling. You can not change on your own that parameter after the installation. If necessary you can contact our Customer Support and ask for the intervention of qualified personnel.

### What should I do if I want to disassemble the eProWallbox?

Only qualified personnel can disassemble eProWallbox. If necessary please contact our Customer Support without intervening on the device.

Opening eProWallbox may lead to damages to the product or electrical shock and makes the warranty void. Any damage reported to eProWallbox for this operation will not be covered by the warranty. Installation

# Are the maximum power levels for charging different depending on the country of installation?

According to local regulations the maximum power level can change. Installation

#### Can I buy an energy meter for the DPM function?

Yes, but the energy meters provided by Free2Move eSolutions are the only compatible ones. The use of an energy meter not provided by Free2Move eSolutions does not guarantee the correct functioning of the functionality and voids the warranty. Furthermore, the installation of the DPM meter must be carried out by qualified personnel.







Support

## Where can I find technical documentation and manuals?

eProWallbox technical documentation and user manual can be downloaded at the link https://www.esolutions.free2move.com/low-power-charging-solutions/eProWallbox-series2/

## What can I do if the unit is not working?

If restart and normal troubleshootings did not solve the problem, please contact our Customer Service through the website: **https://www.esolutions.free2move.com/** contacts/

## **Usage & Specs**

## Are there different ways the eProWallbox starts the charge?

Different operating mode are available on eProWallbox, each one can be selected using the App:

1. Autostart connected (default value from Factory): Connected to Free2Move Charging Point Management System (CPMS) allows charging without using any RFID or Remote start from the App

2. Autostart not connected: Not connected to CPMS and charging without using any RFID card or Remote Start from the App

3. Authentication connected: Connected to Free2Move CPMS, charging using authorized RFID card or Remote Start from the App

4. Authentication not connected: Not connected to Free2Move CPMS, charging using authorized RFID card or Remote Start from the App

### What are the average charging times with eProWallbox?

It is possible to simply calculate the charging times using the formula: EV Battery capacity (kWh) / Wallbox charging power set (kW)

For example a Jeep Renegade with a Battery capacity of 11.4kWh is fully recharged in approximately 3 hours, using a wallbox with a charging power set at 3.7kW and in a hour and twenty minutes at 7.4kW.







### How can I check the status of my eProWallbox?

Thanks to its touch display, eProWallbox can provide information in real-time about connectivity status, charging session details, errors. All these informations are also available on the App eSolutions Charging.

### What car models can I recharge with the eProWallbox?

The device can be used to recharge fully electric or plug-in hybrid vehicles compatible with Type 2 connectors; eProWallbox does not conform to other types of vehicles

# Can I charge single-phase vehicles with eProWallbox installed in three-phase configuration?

Yes, it is possible.

# What is the minimum power required for the eProWallbox to charge my car?

The minimum power for charging an electric vehicle is usually 1.4 kW.

### How do I start a charging session?

If eProWallbox is configured by default with Autostart Operating Mode, the following operations must be perfomed:

1. The display of the wallbox is in "Idle Mode" – ready for charging

2. Insert the plug of the charging cable into the available socket on the device,until it is fully engaged

- 3. Insert the plug of the Type2 cable in the Charge Port of the electric vehicle
- 4. The device will lock the cable during the entire charging phase

5. The charging sessions begins and on the display charging information will be shown

If eProWallbox is configured as Authentication Operating Mode it will be possible to start a charging session through RFID card swipe or via app:

1. Proceed as in the previous flow until the cable is inserted (step 3).

- 2. Pass the user RFID card over the designated area or start remotely via App.
- 3. Proceed with charging the vehicle.







### How do I stop a charging session?

If eProWallbox is configured by default with Autostart Operating Mode, the following operations must be performed:

When charging is complete or it is needed to stop the charging process, press the "Stop" button on the Wallbox touch display,

now is possible to remove the charging cable from the device and from the electric vehicle.

The product returns to its initial state, ready for a new charging session.

If eProWallbox is configured as Authentication Operating Mode:

When charging is complete or it is needed to stop the charging process, you can press the "Stop" button on the Wallbox touch display or swipe the RFID user card over the designated area to allow the socket in use to be unlocked and in any case end the charging session.

Now is possible to remove the charging cable from the device and from the electric vehicle

The product returns to its initial state, ready for a new charging session. For both operating Modes is possible to stop the charging process throught the App.

### How do I reboot the charging station?

You can perform a "soft" reboot via App. In case this is not enough you can perform an hard reboot by turning off the wallbox from the main switch (MCB) in the fuse box, and then turning it back on.

### How big is the eProWallbox?

403x336x190 mm (without the connector inserted)

### Where can I find the eProWallbox QR code?

The QR code of the eProWallbox, necessary to pair your smartphone with the eProWallbox via the user application, is located under the removable external cover (the white one) of the eProWallbox and on the back of the device along with the Part Number and Serial Number







### Can I manually adjust the power delivered by the eProWallbox?

You cannot increase the power as the eProWallbox is set up for the specific installation. You can set throught he app a User Limit lower than the Safety Limit specified during installation

### Can I schedule a charging session?

At the moment the scheduling function is not yet available.

### How do I connect the eProWallbox to WiFi/Internet

eProWallbox is delivered with a SIM card for internet connection through 4G, already installed. If you decide to activate a subscription, the internet connection via 4G will be automatic if the area where the wallbox is installed is reached by a sufficiently strong signal. To setup the WiFi connection on the wallbox, check that the signal is sufficient and follow the step on the App.

#### Does eProWallbox works also without an internet connection?

Yes, it works but without access to WiFi or data both configuration and management must be done via Bluetooth of Ethernet cable.

### How do I register the RFID card and how do I link it to my account? What can I do with my RFID card?

All users can associate RFID cards to their own account via the app: the card can be scanned via the phone camera or by manually inputting the card identifier found on the back of the card. Through the dedicated section of the app, it is possible to activate, suspend, or delete the cards associated to the account. You can use your RFID card to start or stop a charging session

### What does the touchscreen allow me to do?

You can interrupt a charging session pressing on the Stop button, or navigate through the windows during the charging session.







# What does the Charge Point Management System (CPMS) allow me to do?

The Charge Point Management System is a cloud-based platform with a web-based interface that boasts a stable connection with Free2Move eSolutions charging devices. Charging stations are connected to CPMS via mobile internet connectivity (using SIM cards) or Wi-Fi networks. The Platform enables management of the connected assets in terms of controlling overall exchanges via OCPP standards such as:

- Configuration
- Monitoring
- Remote intervention on charging stations and charging events
- Software upgrades
- Reports generation.

#### You can use your RFID card to start or stop a charging session

You can use your RFID card to start or stop a charging session

#### How do I update the Firmware of the eProWallbox?

It is possible to authorize the Firmware update through the App or from the Charge Point Management System platform

### What's the difference between the eProWallbox Charge Point Management System and eProWallbox App?

The Charge Point Management System is a cloud-based platform with a web-based interface to be used by fleet managers to control a group of wallboxes such as the ones installed in common areas of a condominium or in office buildings. A private user can interact with his own wallbox only through the App.







## Software Update

### Software 2.9.3

If your eProWallbox needs to be updated to version 2.9.3, an automatic message will appear on the eSolutions Charging App connected to your eProWallbox if it is already on or when you turn it on for the first time. The update will be realized over the air and the wallbox will restart automatically, ready to start a new charging session.

In case your eProWallbox shows the "Software Update" message on the screen for more than 10 minutes, use your eSolutions Charging App to restart the unit.

In the case your eProWallbox Move remains in "Software Update" status (yellow pulsing LED light) for more than 10 minutes, use your eSolutions Charging App to restart the unit.

The software update from 2.9.1 to 2.9.3 will allow your eProWallbox to access these new features:

**ERROR MANAGEMENT**: The new features introduce more evident messages when charging is interrupted.

-eProWallbox: In case of error during charging, Wait for unplug and ERR code screen will be displayed together with an alert icon  $\triangle$  on the top bar

-e**ProWallbox Move**: In case of error during charging, a **red LED** will remain fixed until unplug

### Software 2.9.1

If your eProWallbox (not valid for eProWallbox Move) needs to be updated **to version 2.9.1**, an automatic message will appear on the touch-screen of your eProWallbox if it is already on or when you turn it on for the first time. The update will be realized over the air and the wallbox will restart automatically, ready to start a new charging session.

The software update from 2.8 to 2.9.1 will allow your eProWallbox to access these new features:

-**Master&Slave Function** (only possible with 2 eProWallboxes): If you have installed 2 eProWallbox, the Master&Slave functionality gives the capability to one wallbox to control another one. What does it mean? That the eProWallbox considered as Master can control the maximum power available and equally distribute it within the two wallboxes.







-**Charging in Authentication Not-Connected Mode**: You can start the charging session using your RFID card even when eProWallbox is connected in Bluetooth mode and not connected to 4G or Wi-Fi.

-**Third-party backends connection**: With this new update, eProWallbox can be configured to be also connected to third-party backends (using OCCPP 1.6 JSON protocol via 4G LTE, a third-party SIM or via Wi-Fi) and not only to the eSolutions Control Platform (CPMS).

