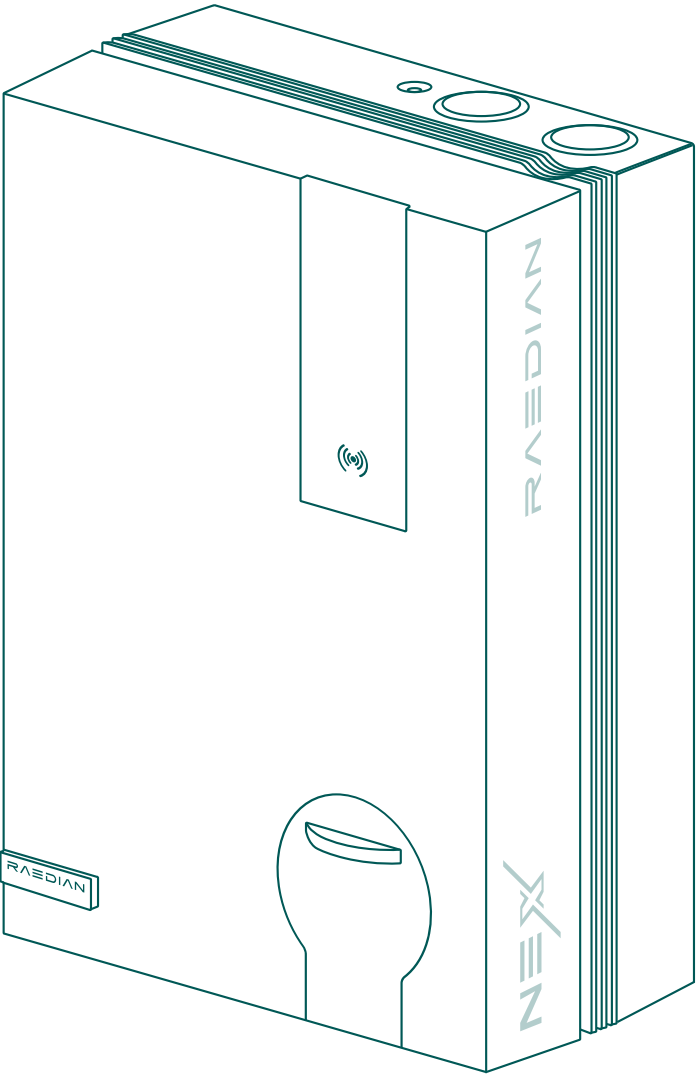


# NEX

CPO Manual



COMMERCIAL & INDUSTRIAL  
CHARGING SOLUTION



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# 1.Disclaimer and safety warning

## 1.1 Disclaimer

The information in this document is for information purpose only, is provided as is, and may be subject to change without notice. Although RAEDIAN has made its best efforts to keep the document as precise and up-to-date as possible, RAEDIAN including its subsidiaries doesn't assume any liability for the correctness or completeness of the document and is not liable or responsible for the defects and damages resulting from the use of the information contained herein.



### NOTE

This document is subject to updates and changes. Errors and omissions are exceptional.

Any deviation to RAEDIAN's assembled products, including but not limited to, specific modifications to the product, such as stickers and its place, or application of different colors (collectively referred to as "Customization"), may affect the product, its experience, appearance, quality, and/or lifespan (Customized Product). RAEDIAN is not liable for any damage to, or caused by, the Customized Product if this damage is due to applied Customization.

RAEDIAN waives all liability and claims for compensation such as any type of damage, warranty of the product and the accessories in the following cases:

- Failure to comply with the general instructions and specific operating conditions in this manual.
- Improper use.
- External damage.
- Failures from the grid or the 4G service provider.
- Installation, commission, activation, or faulty repair or maintenance performed by unqualified person.
- Modification or configuration of the product or accessories without the knowledge of RAEDIAN.
- Use of the charging station outside the operational conditions specified in this manual.
- Use of spare parts not approved or produced by RAEDIAN.
- Events beyond RAEDIAN's control (force majeure).
- Malfunction of an open charge point back office.
- Damage to the electrical vehicle.

## 1.2 Improper use

The charging station is safe when used as intended. Any other use or modifications to the charging station are considered improper use and therefore not allowed.

Operators, owners, or qualified technicians are responsible for any personal injury or material damage caused by improper use.

## 1.3 Copyright

The reproduction, distribution, and application of this document, as well as the communication of its contents to other parties without explicit authorization from RAEDIAN or any of its affiliates, are strictly prohibited. Any permitted use shall always be done in accordance with good practice and ensure that no harm may be caused to RAEDIAN or by misleading the consumer.

## 1.4 Trademarks

RAEDIAN® is trademark registered by RAEDIAN. Any unauthorized use of this trademark is, therefore, illegal.

## 1.5 Languages

The English version of this document is the original source. Documentation in other languages are translations of this source. If any ambiguity or deviation among different languages, it shall be subject to English version.

## 1.6 Purpose and intended audience

This manual is applicable to NEX produced by RAEDIAN. NEX is intended exclusively for charging electric vehicles and, when installed correctly, may be used by untrained individuals. Follow this manual to install and commission the charging station correctly.

Installation, commissioning and maintenance of this charging station must only be carried out by a qualified electrician. It is essential that the qualified technician has: Expertise on all relevant general and specific rules regarding safety and incident prevention.

Comprehensive knowledge of applicable electrical regulations.

The ability to identify risks and avoid potential hazards. Received and read these installation and operation instructions.

## 1.7 Explanation of text instructions used

The safety warnings and precautions in this document are as follows:



### DANGER

Signal word used to indicate an imminent or serious injury.



### WARNING

Signal word used to indicate a potentially hazardous situation which, if not avoided, could cause death or serious injury.



### CAUTION

Signal word used to indicate a potentially hazardous situation which, if not avoided, could cause minor or moderate injury.



### NOTE

Signal word used to provide additional information or information on possible product damage.

# 1. Disclaimer and safety warning

## 1.8 Safety symbols

The following warning pictograms are attached to (parts of) the charging station:



**Dangerous voltage**



**Protective earth**

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## 1.9 General safety

When installing or using the charging station, please follow below safety regulations:



### **DANGER**

Do not install or use the charging station near explosive or highly flammable materials.



### **DANGER**

Do not use the charging station if it is partially submerged in water.



### **DANGER**

Do not install or use the charging station if it is damaged, or if the plugs and cables are defective. Contact the charge point operator to repair any defects immediately.



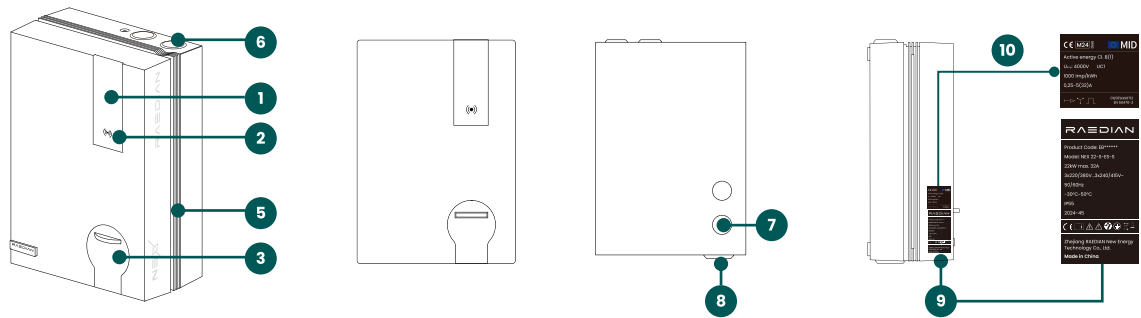
### **DANGER**

Keep children and individuals who are unable to assess the risks associated with using this product away.

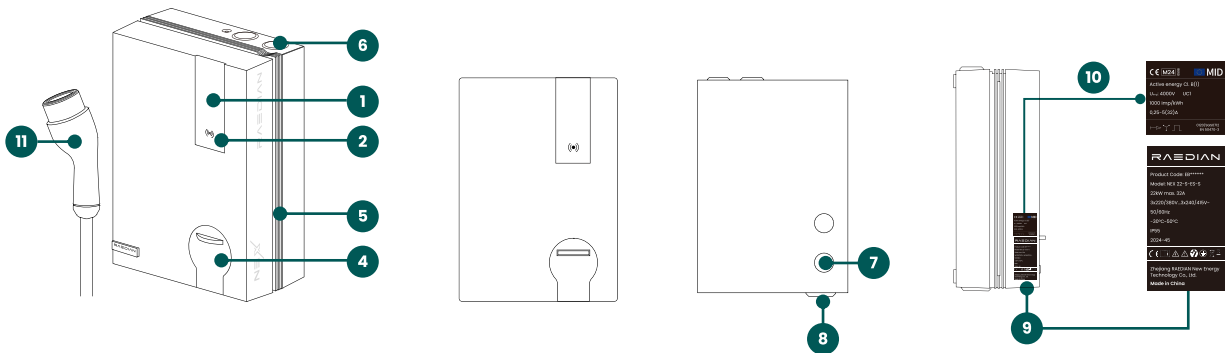
More extensive safety information can be found in the relevant sections of this document.



## 2. Product overview



**Socket Variant**








**Cable Variant**

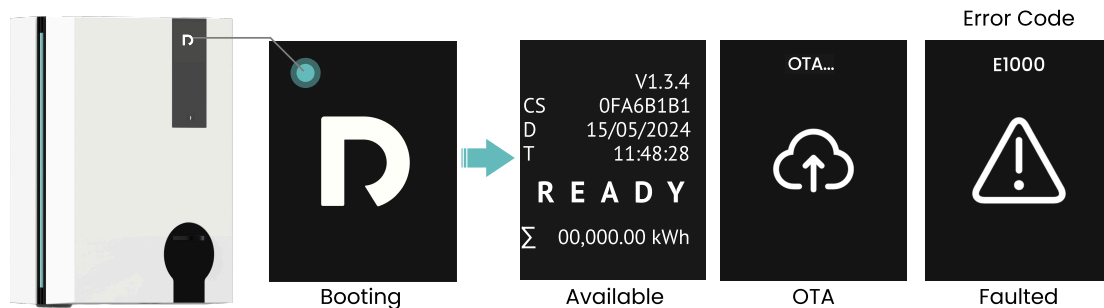
No.	Item	Socket Variant	Cable Variant
1	Display	✓	✓
2	RFID card reader	✓	✓
3	Type 2 socket	✓	-
4	Type 2 connector holder	-	✓
5	LED stripe	✓	✓
6	Top cable entry	✓	✓
7	Rear cable entry	✓	✓
8	Bottom cable entry	✓	✓
9	Nameplate	✓	✓
10	Meter label	✓	✓
11	Charging cable	-	✓

### 3. HMI description

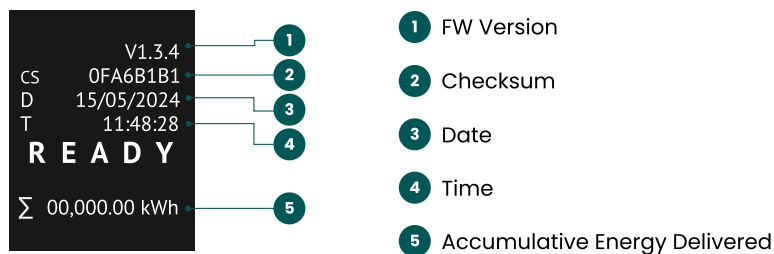
#### 3.1 Status indication

	LED Status	Definition
	White meteor	Standby, available for charging
	Green bouncing	Cable plugged in: • Pending for authorization • Waiting for EV • Charging stopped EV
	Cyan water drop	Charging in progress
	Red steady	Fault state
	Purple flashing	Pairing RFID cards

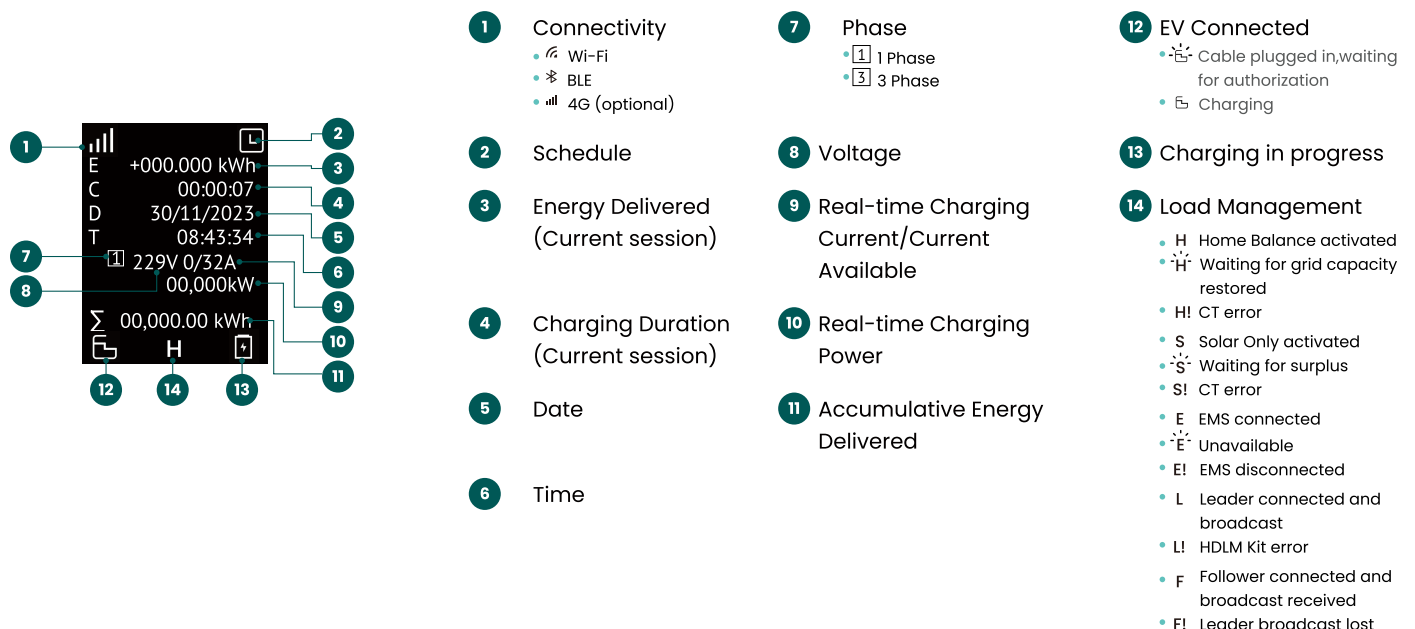
#### 3.2 OLED display



##### 3.2.1 Available



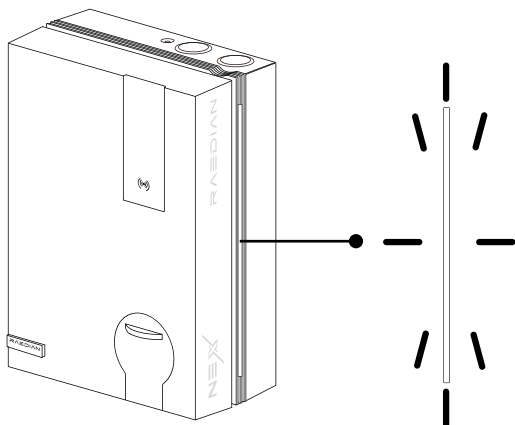
##### 3.2.2 Charging



## 4. Quick start

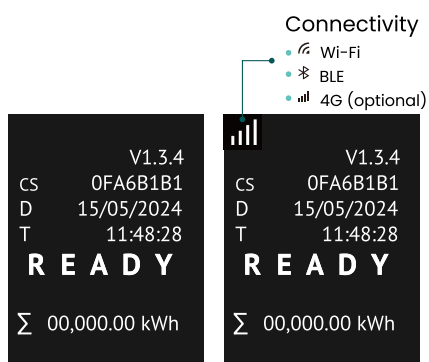
### 4.1 Power-on

- Turn on the local power supply.
- The charger will boot up and perform self-diagnostics within a few seconds.
- The charger's LED will display a white meteor effect and the charger is now ready for testing.



### 4.2 Network connection check

- Check the network connection through the network icon on the display.

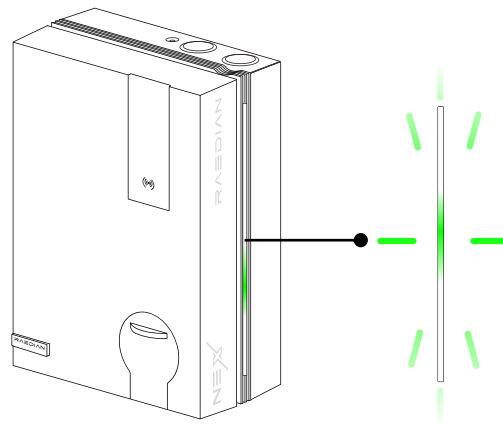


#### NOTE

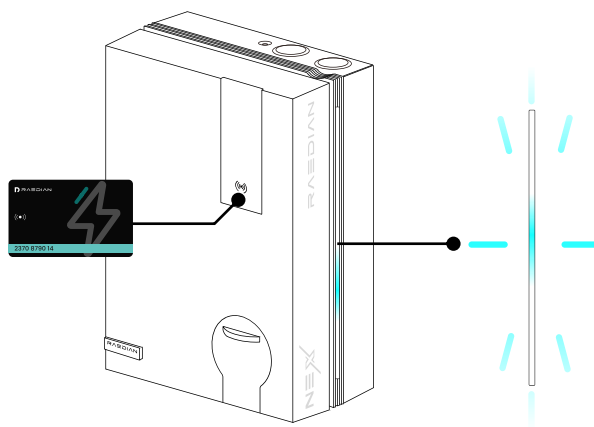
If the charger can not connect to the network or you need to change the connection method, please contact your installer.

### 4.3 Charge with RFID card

- To charge with an RFID card, please ensure that the 'Access' mode is set to 'Authorization'.
- Connect the charger with vehicle. The charger's LED will turn green with a bouncing effect.



- Tap the RFID card above the card reader area until you hear a beep. The charging session will start automatically and the charger's LED will turn cyan with a falling drop effect.



## 5. Site operational guide by NEBULA

### 5.1 Build the site

#### 5.1.1 Add The Site

- Access to NEBULA portal, URL: <https://nebula.raedian.com/>
- Create an account to login in the NEBULA system.
- Add the site and fill in the site name, site address, VAT and currency.



#### NOTE

As a registered user, use your email and password to login in the system directly.

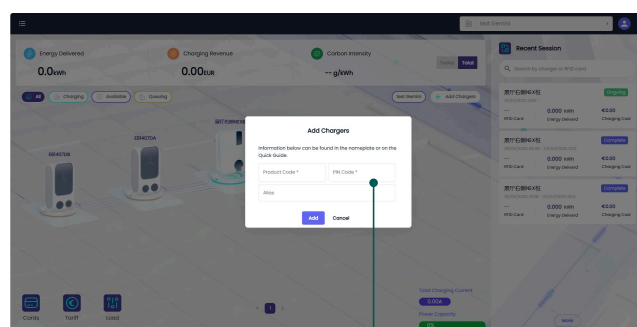
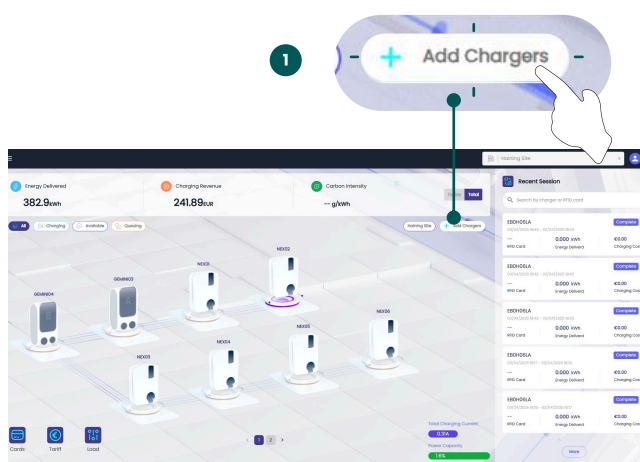


#### NOTE

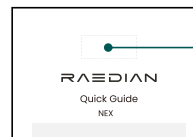
The site's currency can be set only once and can not be changed after it is set.

#### 5.1.2 Add Chargers To Your Site

- Click “Add Chargers” button on the overview page.
- Enter your charger's product code and PIN code. You can find it inside the rear of the charger and on the quick guide.
- The charger will appear in your charger list.



2



PIN Code: 1177  
Product Code: EB0H06LA



#### NOTE

One charger can be only added to one site.

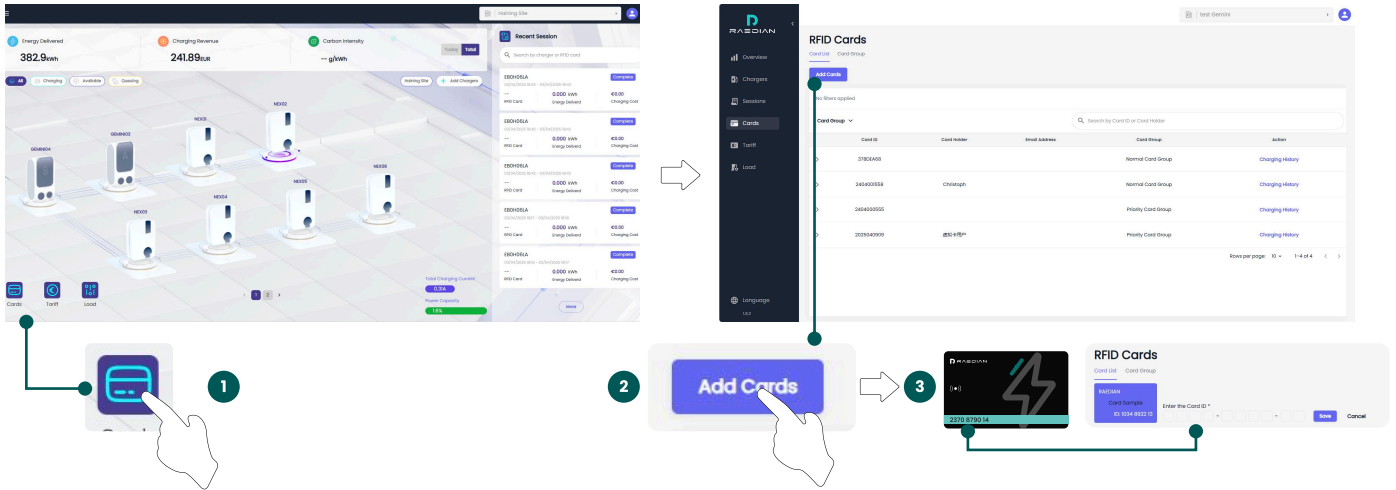
#### 5.1.3 Status Indication

		Colour	Status
		Gray	Offline
		Cyan	Charging
		Purple	Available
		Yellow	Queuing
		Red	Faulted

## 5. Site operational guide by NEBULA

### 5.2 Card issuing

- Purchase RFID cards from RAEDIAN distributor.
- Add RFID card with 10 numbers to the system.
- Edit card information in the card list.

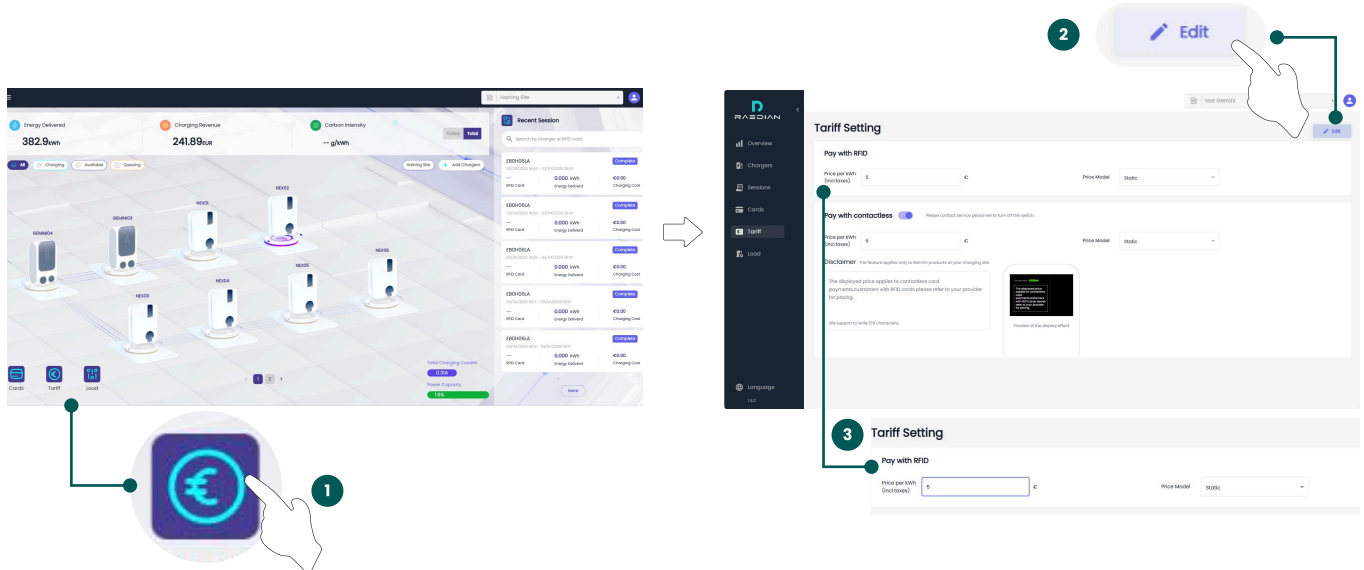


#### NOTE

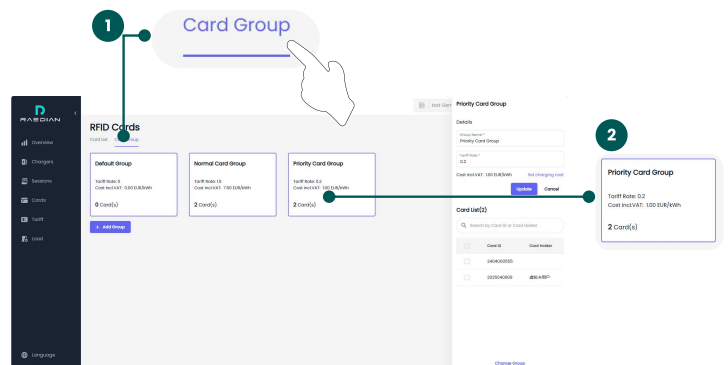
One RFID card can be only added to one site.

### 5.3 Tariff management

- In the tariff settings section, set "Price per kWh" with static price model.



- Add group in the card section, fill in the group name and tariff rate.
- Different roles can be separated by different groups.
- Each group can be assigned an independent tariff rate.



## 6. Hybrid dynamic load management



### NOTE

Before configuration, ensure complete electrical installation according to HDLM Kit quick guide. If it has not been installed, please contact your installer.

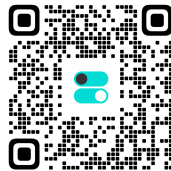


### CAUTION

All configurations must be performed by a qualified electrician in accordance with the specific installation environment and local laws and regulations.

### 6.1 Install RAEDIAN INSTALL APP

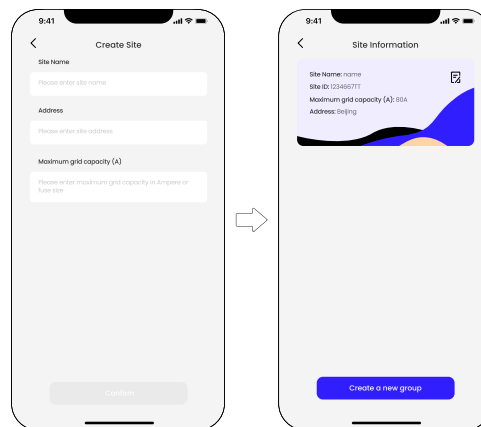
Download the RAEDIAN INSTALL APP from the App Store or Google Play, then install the app and register an account.



### 6.2 HDLM configuration

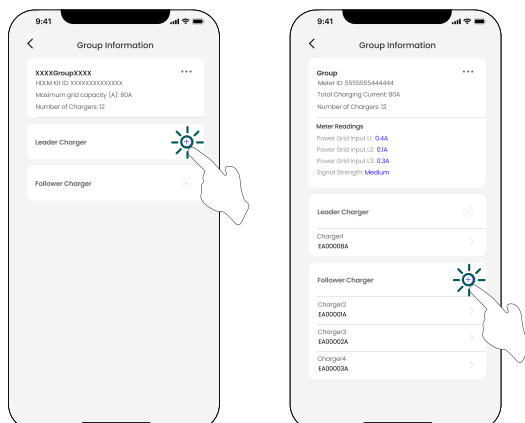
#### 6.2.1 Create the site

- Create the charging site, edit site information and total grid capacity.
- Create group under the site, there could be one or more groups under one site.
- Add HDLM Kit to monitor live consumption of the site.



#### 6.2.2 Add chargers to the site

- Add leader charger and verify the reading of HDLM Kit.
- Select the connection method between the leader charger and the HDLM Kit (RS-485 or Wireless).
- Add follower chargers and verify connection with leader.



### NOTE

Each group can only have one leader charger and the maximum number of chargers is 16.



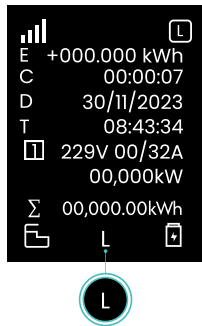
### NOTE

Plan site capacity and number of chargers according to local regulations. It's recommended to plan at least 6A capacity for each one of the charger.

## 6. Hybrid dynamic load management

### 6.3 Connection check

Once HDLM has been activated, L will appear for the charger selected as Leader and F for the rest of the chargers selected as followers (no flashing, no exclamation mark).



- L Leader connects to HDLM Kit
- L! HDLM Kit disconnected
- F Follower connects to Leader
- F! Leader disconnected

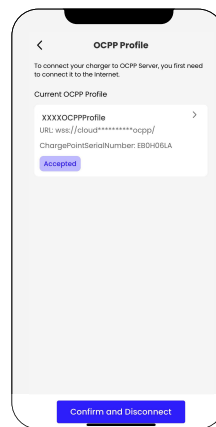
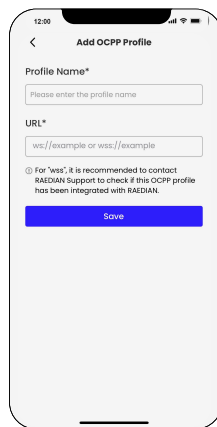
## 7. Switching to the third-party OCPP



#### NOTE

Before switching to OCPP server, ensure the charger is connected to the Internet.

- In the Install APP, select OCPP option on the home page.
- Search for the corresponding charger code and enter the correct PIN CODE.
- Add a new OCPP profile, edit the profile name and URL.
- Once connected successfully, current OCPP profile will display "Accepted".



#### NOTE

If the OCPP profile that you want to connect exists in the list, you can choose it directly.





#### NOTE

If the connection is rejected, please contact RAEDIAN support to confirm whether the profile has been integrated.

## 8. Maintenance and cleaning

### 8.1 Cleaning

The RAEDIAN NEX can be cleaned with a soft and damp cloth. Do not use cleaning agents or solvents.

-  **CAUTION**  
Please disconnect the power before cleaning the charger.
-  **NOTE**  
Do not use harsh cleaning agents, high-pressure washers, or abrasive pads, as they can damage the charger casing

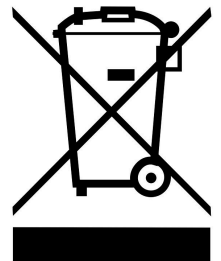
### 8.2 Maintenance

The RAEDIAN NEX is maintenance-free. If the charger becomes defective or damaged, please stop using it and contact your dealer or send mail to [support@raedian.com](mailto:support@raedian.com).

## 9. Disposal

Electrical and electronic equipment (EEE) contains materials that can be harmful to human health and the environment if not disposed of properly. Products marked with the crossed-out wheeled bin symbol (as shown on the right) should not be disposed of with household waste. These items must be collected separately to ensure they are recycled and disposed of in an environmentally responsible manner.

Please check with your local authority for collection schedules. Residents can dispose of waste electrical and electronic equipment at designated recycling centres or other collection points.







Zhejiang RAEDIAN New Energy Technology Co., Ltd  
No.3, Shuangbai Road, Yuanhua Town, Haining City  
Zhejiang, 314416  
China