

AC EV Charging Station Manual



Before operating this product, please read the operating instruction carefully

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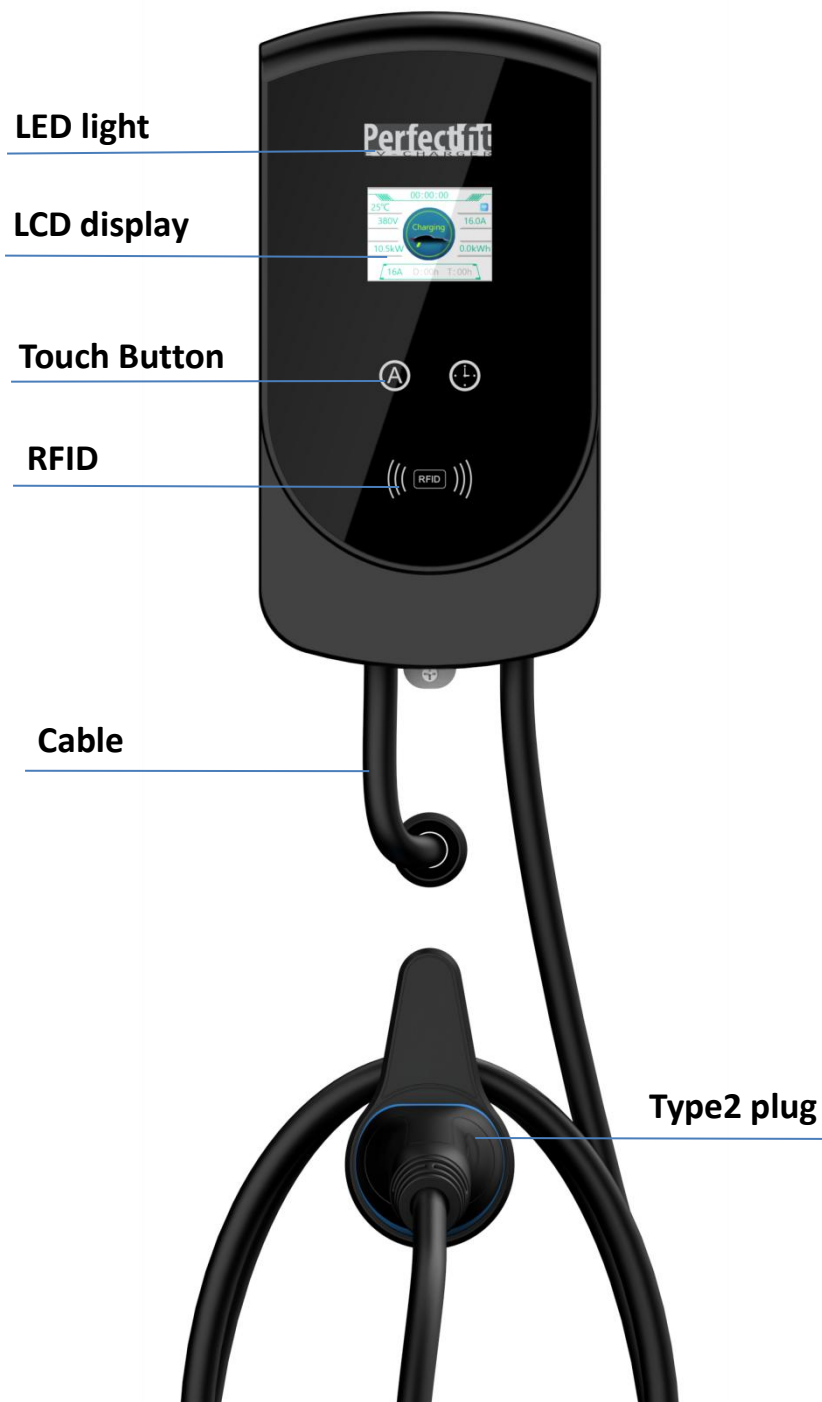
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Safe Use Guide

When using the charging station, please read all instructions carefully before:

- 1)** Do not bring flammable, explosive or combustible materials, chemicals, combustible vapors and other dangerous items near the charging station.
- 2)** Keep the charging gun head clean and dry, wipe it with a clean dry cloth if it is dirty, and it is strictly forbidden to touch the charging gun core by hand when it is charged.
- 3)** It is strictly forbidden to use the charging station when the charging gun or charging cable is defective, cracked, worn, broken, or the charging cable is exposed, etc. If found, please contact the staff in time.
- 4)** Please do not attempt to disassemble, repair or modify the charging station, if you have a need for repair or modification, please contact the staff, improper operation may cause damage to the equipment, water leakage, electricity leakage, etc.
- 5)** If there is any abnormal situation during use, press the emergency stop button immediately to cut off all input and output power.
- 6)** In case of rain and thunder, please charge with caution.
- 7)** Children please do not approach or use the charging station during charging to avoid injury.
- 8)** During the charging process, the vehicle is forbidden to drive and can only be charged when it is stationary. Please turn off the hybrid electric vehicle before charging.
- 9)** If the charging station is damaged, in order to prevent injury accidents, it must be repaired only by the manufacturer or its agent, or an equally qualified person.

Product Overview



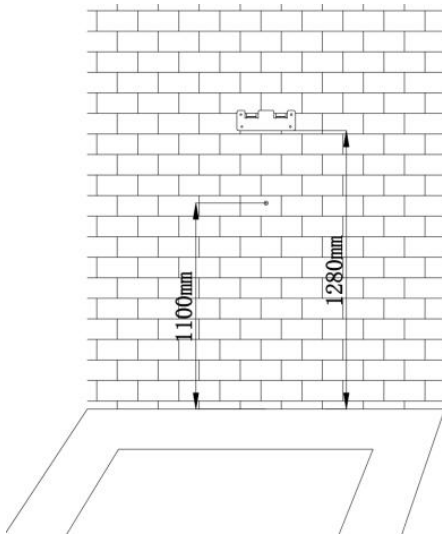
Product Features

1. With RFID function to start or stop charging.
2. Connect to APP via Bluetooth or WIFI.
3. With the function of appointing charging time and appointing charging duration.
4. Equipped with display screen to show charging information in real time.
5. With overload protection, over-voltage protection, under-voltage protection, over-temperature protection, leakage protection, emergency stop and other functions.

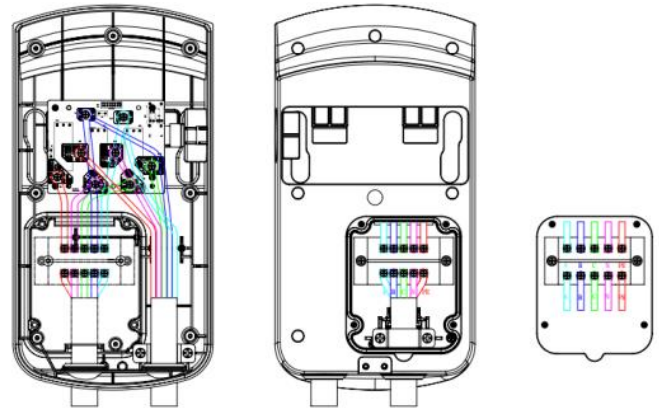
Technical Specification

| | |
|------------------------------|---|
| Model | FE-AM3-16P3-WB |
| Current (adjustable current) | 16A (8/10/13/16A) |
| Voltage | 415V |
| Power | 11kW |
| Frequency | 50/60Hz |
| Communication(Optional) | WIFI, Bluetooth, App(Tuya) |
| User interface | LED light + LCD display (2.8 inch) + RFID |
| Certificate | CE,TUV |
| Charging interface | Type2+5M /8M /10M cables |
| Cable specification | 5G2.5mm ² +1*0.75mm ² |
| Degree of protection | Charging gun: IP65, charging station: IP65 |
| Operating temperature | -30℃ to 55℃ |
| Operating humidity | 5%-95% |
| Product dimensions (H*W*D)mm | 310*161*79.8mm |

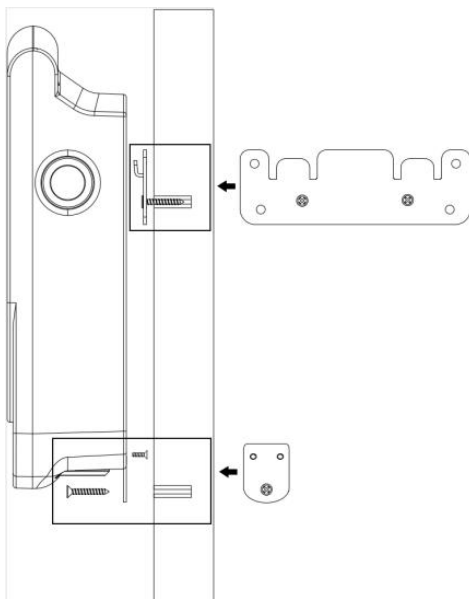
Installation Steps



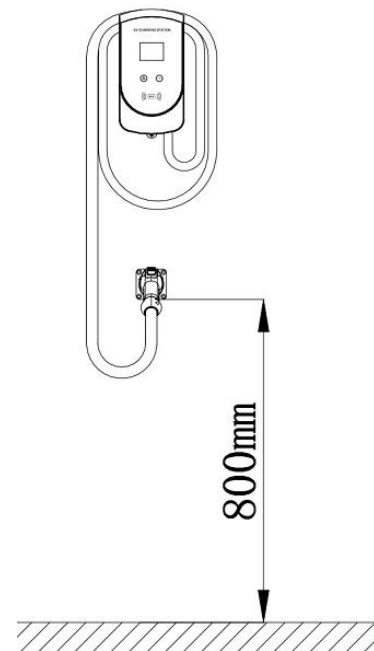
Step 1 :According to the size of the steel plate's hole, using an electric drill to drill a hole in the wall at a suitable height, then put in the expansion tube. and use long screws to fix the steel plate(the large one) in the wall.



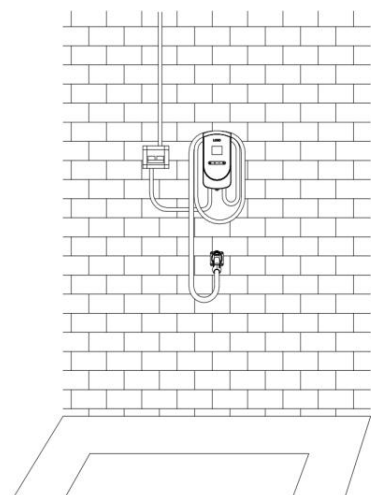
Step 2 :Installation of charging station.



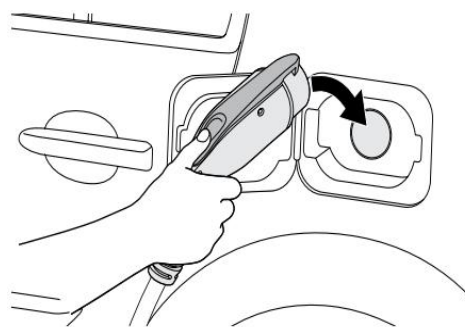
Step 3: After installing the steel plate (the small one) on the end of the control box using short screws, hang the equipment on the steel plate (the large one) and fix the steel plate (the small one) on the wall using long screws.



Step 4: Install the hook.



Step 5: Turn on the power to confirm that the LED light and the display start normally.

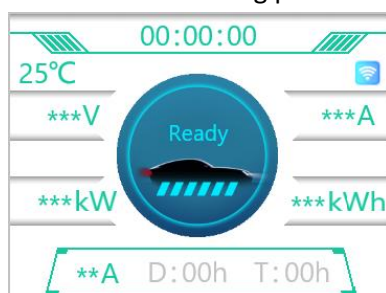


Step 6: Try to start charging by inserting the gun and swiping the card.

Charging Steps

Standby status :

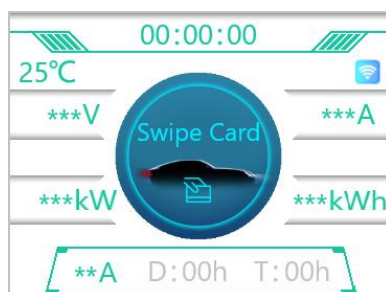
(1) In the standby state of the charging station, the interface shows that the device has entered the ready charging state, as shown in the following picture.



The LED light on the station (applicable to WIFI function only) is green and always on.

Waiting for card swipe status :

(2) Take off the charging gun from the hook and insert it into the connector of the electric vehicle, please make sure that it is inserted in place and the connection is safe and reliable. When the charging gun monitors that it is inserted correctly, it will enter the status of identity verification, as shown in the following picture.



The LED light on the station green flashing (for WIFI function only).

Start-up device :

(3) Use RFID cards to authorize the use of charging station.

START



Start charging :

(4) The device starts charging and the interface displays the charging status and information parameters as shown in the flowing picture.



The LED light on the station (for WIFI function only) is green breathing.

Stop charging :

(5.1) When the vehicle is fully charged, the charging station will automatically stop charging; in case of emergency, the power can be cut off by manually pressing the emergency stop button.

(5.2) During the charging process, users can also use RFID card to authorize to stop charging.

STOP



(5.3) When charging is finished, the end interface has two displays, as shown in the following pictures.



Non-active card swipe to end charging



Active swipe to stop charging

The LED light on the station (for WIFI function only) is green flashing or green always on.

Key Operation Instructions



Enable or disable the card swipe function : Before the charging gun is inserted, long press the first button for 5 seconds to set the opening or closing of the card swiping function.

Setting the current adjustment function: Touch the second button to adjust the current, the current can be set 8A 10A 13A 16A.

Setting the appointment charging function: Touch the third button to set an appointment for charging and then start charging with an RFID card , the device will start charging after a delay of (X) hours according to the set appointment time, which can be set from 0 to 15 hours (each touch increases the time by 1 hour).
For example, if it is set to 1 hour, then the charger will start charging after 1 hour.

Setting the charging time: Touch the fourth button on the station to set the charging duration. and then start charging with an RFID card, the device will continue charging for (X) hours according to the time you set before which can be set from 0 to 15 hours (each touch increases the time by 1 hour).
For example, if it set to 1 hour, then the charger will continue charging for 1 hour and then stop charging automatically.

Clear the accumulated power function: When the charging gun is not inserted, press and hold the fourth button for 5 seconds to clear the accumulated charge history.

Charging Status and LED Definition

| Serial number | Charging | Green | Blue | Red | Definition description |
|---------------|---------------|-------|---------|-------------------------|---|
| 1 | Ready | On | Off | Off | Power-on self-test or reset |
| 2 | Connect | Flash | Off | Off | The voltage of detection point 1 is $9\pm0.8V$, |
| 3 | Charging | Off | Breathe | Off | Detection point 1 voltage is $6\pm0.8V$, the relay is closed |
| 4 | Finish | Off | On | Off | |
| 5 | Err:CP | Off | Off | Fault (0.5s) 1 time | The voltage of detection point 1 is $9.8V < U < 11.2V$; $6.8V < U < 8.2V$; $12.8V < U$ or $U < 5.2V$; the relay is off |
| 6 | Under Voltage | Off | Off | Fault (0.5s) 2 time | $<147V$ |
| 7 | Over Voltage | Off | Off | Fault (0.5s) 3 time | $>457V$ |
| 8 | Elec Leakage | Off | Off | Fault (0.5s) 4 time | The relay is disconnected, and it needs to be re-powered after the fault is removed before the relay is allowed to close |
| 9 | Over Current | Off | Off | Fault (0.5s) 5 time | Line current in $I_{e+4} < I \leq I_{e+8}$, hold 5S, disconnect the relay, automatically restart after 10S, repeat three times to permanently disconnect, at $I > I_{e+8}$, the relay is disconnected, the charge is over |
| 10 | Over Temp | Off | Off | Fault (0.5s) 6 time | Temperature >85 degrees, disconnect the relay, wait for the temperature <65 degrees, then turn on charging |
| 11 | Err:Reset | Off | Off | Fault (0.5s) 7 time | When the emergency stop button is pressed, the relay is disconnected. After the fault is removed, the relay is allowed to close |

Trouble Shooting

| | |
|--|--|
| The fault name | Symptom Possible causes |
| AC over voltage | AC input voltage too high |
| Rule out advice | |
| <p>1.If the voltage exceeds 457Vac for a short time,wait for the power grid to restore itself to the normal voltage range.</p> <p>2.Check the background monitoring data and analyze, if this area is over-voltage for a long time, the input over voltage protection point can be increased through the configuration software, up to 457Vac.</p> | |
| The fault name | Symptom Possible causes |
| AC under voltage | AC input voltage too low |
| Rule out advice | |
| Check the background monitoring data and analyze, if the voltage in this area is chronically under voltage 147Vac, please contact the power supply department. | |
| The fault name | Symptom Possible causes |
| AC over current | Excessive AC input current |
| Rule out advice | |
| <p>1.Immediately turn off the leakage/over current protection circuit breaker of the power distribution box.</p> <p>2.Check whether there is low impedance or short circuit between the output line of AC station.</p> <p>3.After the fault is rectified, power on the device again. If the fault persists,contact us.</p> | |
| The fault name | Symptom Possible causes |
| Over temperature | The temperature in the AC pile is too high |
| Rule out advice | |
| Check the ac station installation environment. Check whether there are other heating devices nearby. Ensure that the ambient temperature is below 60 ° C.(140°F) | |

| | |
|--|---|
| The fault name | Symptom Possible causes |
| Leakage current exceeds standard | High leakage current to the ground |
| Rule out advice | |
| 1. Immediately turn off the leakage/over current protection switches in the power distribution box. 2. Check whether the output line of AC station is damaged or has low impedance to the ground. 3. After the fault is rectified, power on the device again. If the fault persists, contact us. | |
| The fault name | Symptom Possible causes |
| Ground fault | The input/output is improperly grounded or the input L/N is inversely connected |
| Rule out advice | |
| 1. Immediately turn off the leakage/over current protection switches in the power distribution box 2. Check whether the input and output cables of ac stations are grounded properly and whether the input L/N cables are connected in normal sequence. 3. After the fault is rectified, power on the device again. If the fault persists, contact us. | |
| The fault name | Symptom Possible causes |
| Abnormal communication(Internet mode) | Poor background communication of AC pile |
| Rule out advice | |
| 1. Check whether the network cable is properly connected. 2. Check whether charging stations are correctly configured in the background. | |
| The fault name | Symptom Possible causes |
| Abnormal connection of charging gun | Charging gun CC/CP Connection exception |
| Rule out advice | |
| 1. Check whether the charging gun is connected correctly and reliably. 2. If the fault persists, contact us. | |

Adding Device

1) Application download

Download Tuya Smart App from the App Store



Tuya Smart

2) Configure the charging device network

Ensure that the charging device and the mobile phone are in the same Wifi network (5G band Wifi is not currently supported) and that the phone located near the charging device. When the device is powered on, open the Tuya APP, and the networking status of the charging device will be displayed as follows:



Wait for the network



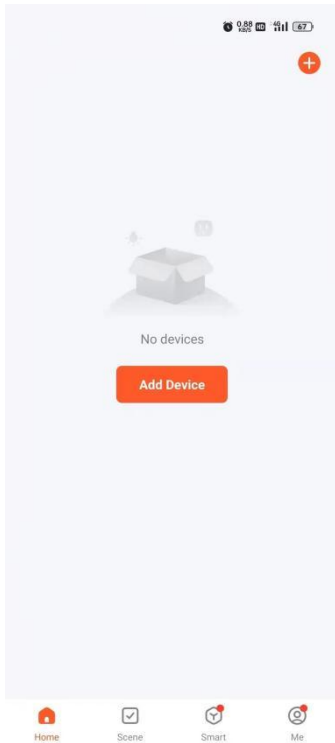
Connected



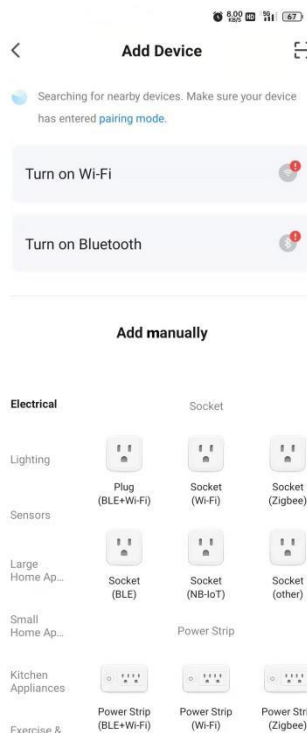
Unconnected

If there is a timeout or network distribution failure during network distribution, please check whether the Wifi network has been connected to the network and the router is working in the 2.4G band or the phone is too far away from the charging device, resulting in Bluetooth connection failure. If these situations, repeat the above operations to successfully configure the network.

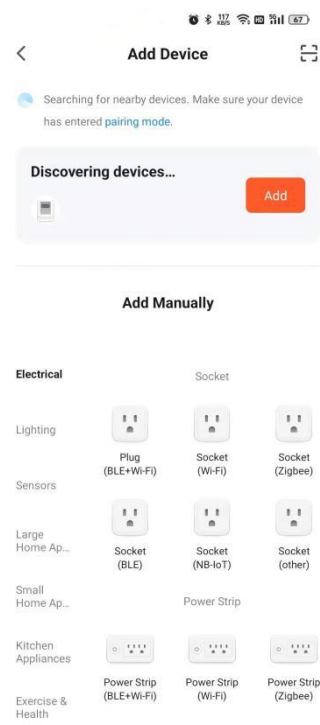
Demonstration of distribution network operation process:



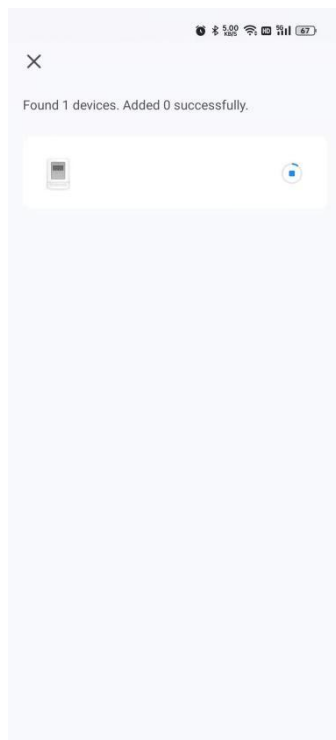
Step 1 :
Add Device



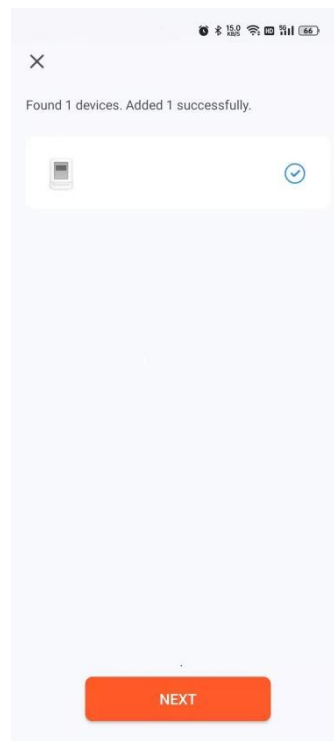
Step 2 :
Turn on WIFI&Bluetooth



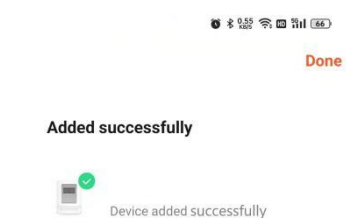
Step 3 :
Add Enter



Step 4 :
Waitting

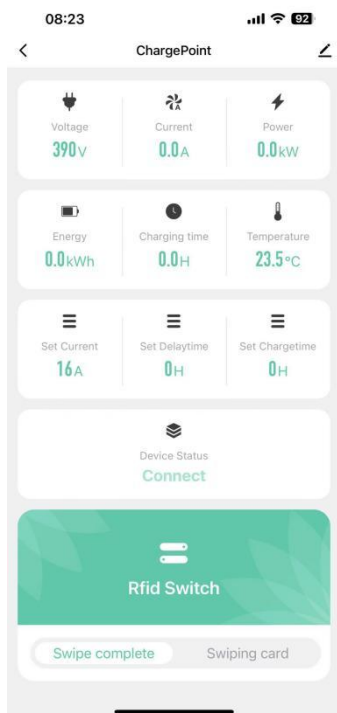


Step 5 :
Next

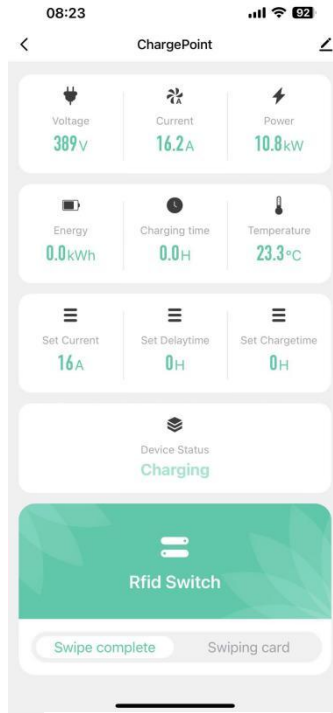


Step 6 :
Done

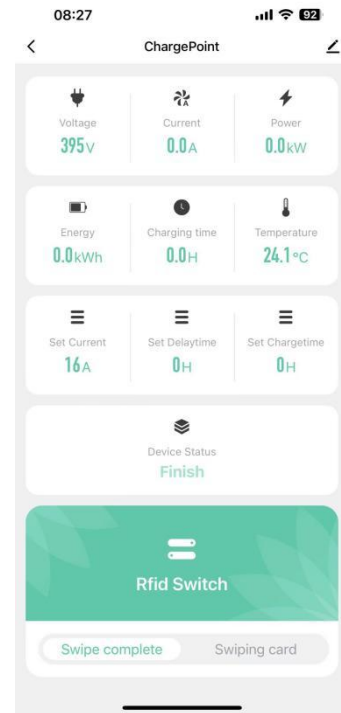
App Function



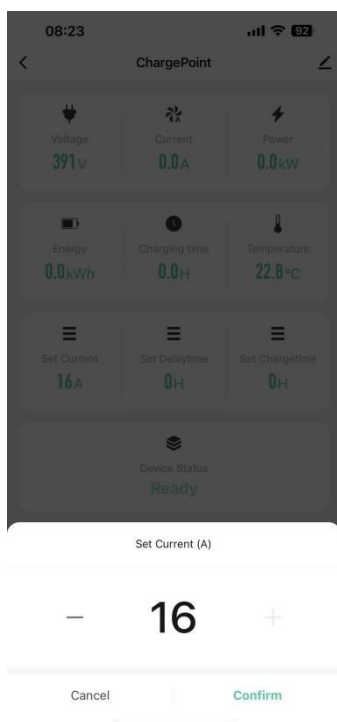
Connect



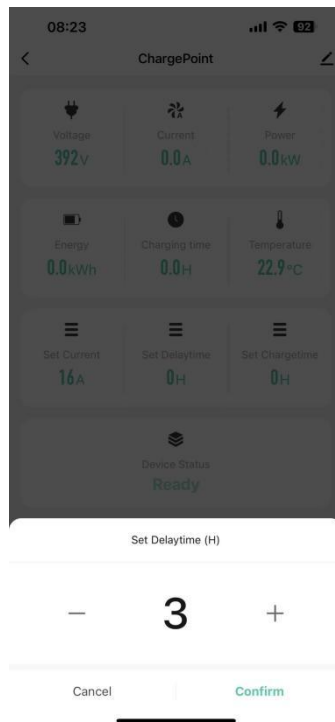
Charging



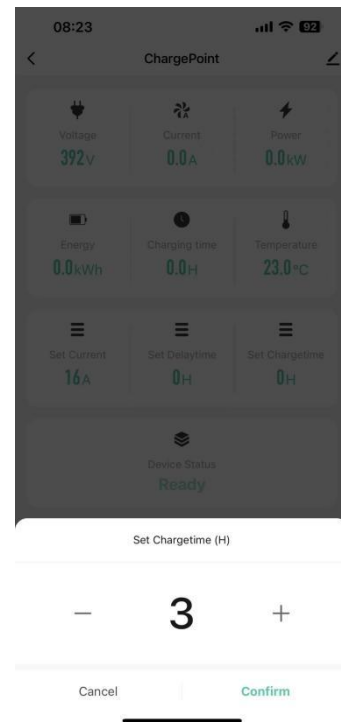
Finish



Set Current



Set Delaytime



Set Charge time