

# DuraCharger EV Charger Operating Manual

**DURACELL<sup>®</sup>**  
ENERGY



# Contents

|                                                        |           |                                                                     |           |
|--------------------------------------------------------|-----------|---------------------------------------------------------------------|-----------|
| <b>1. Safety &amp; Warning .....</b>                   | <b>3</b>  | <b>4. Electrical Connection .....</b>                               | <b>12</b> |
| <b>2. Introduction .....</b>                           | <b>4</b>  | <b>5. Front Cover Assembly .....</b>                                | <b>15</b> |
| <b>2.1. Technical Specifications .....</b>             | <b>4</b>  | <b>6. Turn-On Procedure.....</b>                                    | <b>17</b> |
| <b>2.2. External Structure.....</b>                    | <b>6</b>  | <b>6.1. Power-on Status Checking .....</b>                          | <b>18</b> |
| <b>2.3. Package Contents .....</b>                     | <b>7</b>  | <b>7. Duracharger App (Installer) .....</b>                         | <b>19</b> |
| <b>3. Installation Instructions.....</b>               | <b>8</b>  | <b>8. App Registration.....</b>                                     | <b>20</b> |
| <b>3.1. Installation Preparation.....</b>              | <b>8</b>  | <b>8.1. Register the Homeowner on the Duracharger app .....</b>     | <b>20</b> |
| 3.1.1. Required Tools.....                             | 8         | <b>9. RFID Card .....</b>                                           | <b>24</b> |
| 3.1.2. Recommended Cables .....                        | 9         | <b>10. Load Balancing .....</b>                                     | <b>26</b> |
| <b>3.2. Installation Process.....</b>                  | <b>9</b>  | <b>11. Duracell Energy App (User) .....</b>                         | <b>28</b> |
| 3.2.1. Installation Notice .....                       | 9         | <b>11.1. Register the Homeowner on the Duracell Energy App.....</b> | <b>29</b> |
| 3.2.2. Checks Before Starting the Installation Process | 9         | <b>11.2. Install EV Charger at a New Site.....</b>                  | <b>30</b> |
| <b>3.3. Installation Procedure .....</b>               | <b>10</b> |                                                                     |           |
| <b>3.4. Mounting .....</b>                             | <b>11</b> |                                                                     |           |

|                                                            |    |
|------------------------------------------------------------|----|
| 11.3. Install EV Charger at an Existing Site .....         | 32 |
| 11.4. Edit EV Charger Details.....                         | 34 |
| 12. Configuration and Operation .....                      | 35 |
| 12.1. Charging Operation .....                             | 35 |
| 12.1.1. Connect the Charger to EV.....                     | 35 |
| 12.1.2. Start Charging & Stop Charging .....               | 35 |
| 12.2. EV Mode Definitions & Uses .....                     | 36 |
| 12.3. How to Use & Control Charging Sessions.....          | 38 |
| 12.4. Variable Rate Tariff (VRT) Algorithm.....            | 39 |
| 13. Troubleshooting .....                                  | 43 |
| 13.1. Indicator status .....                               | 43 |
| 13.2. Error Codes & Resolutions (Duracharger App)<br>..... | 45 |
| 13.3. Re-Pairing Wi-Fi Connection.....                     | 48 |
| 13.3.1. Access Point mode .....                            | 48 |



## 1. Safety & Warning

1. Save these instructions. Read all instructions before installing or using the charger.
2. Keep the charger away from explosive or flammable materials, chemicals, vapours, and other hazardous objects.
3. Keep the charger socket clean and dry. If it gets dirty, please wipe it with a clean, dry cloth.
4. Touching the socket core with fingers or foreign objects is strictly forbidden when the power is on.
5. Do not use the charger in case of any device defects, cracks, abrasions, leakage etc. Please contact professional personnel if any of these conditions occur.
6. Do not attempt to disassemble, repair, or refit charger. If necessary, please contact professional personnel. Improper operation may result in device damage and voided warranty.
7. In case of abnormal operation, please terminate all input and output power supplies immediately.
8. Please ensure in case of lightning and thunderstorms, the charger is not in use.
9. Keep children away from the charger.
10. During charging, do not drive the EV. Charge only when the EV is stationary. For hybrid cars, charge only when the engine is switched off.
11. Our packaging materials are environmentally friendly and can be recycled. Please put the packaging in applicable containers to recycle it. Do not dispose of this device with household waste. It should be taken to a suitable facility for recycling of electrical and electronic devices. For more detailed information about recycling of this device, please contact your local city/town council office or your household waste disposal service.



Warning

The input and output voltages of this device are high voltage, which threaten the safety of human life. Please strictly observe all warnings on the device and user manual. Unauthorized and non-professional service personnel are forbidden to remove the cover of this device.



## 2. Introduction

### 2.1. Technical Specifications

| Model no.                        | Duracell EV (1P-T) 7kW-T            |
|----------------------------------|-------------------------------------|
| <b>Electrical Parameter</b>      |                                     |
| Rated Power (kW)                 | 7.4kW                               |
| Rated Voltage (V)                | AC 230V ± 10%                       |
| Rated Current (A)                | 40A                                 |
| Frequency (Hz)                   | 50Hz/60Hz                           |
| Charging Mode                    | Mode 3 (EN/IEC 61851-1)             |
| Charging Connector Type          | IEC 62196 Type 2 (Tethered)         |
| Standby Power (W)                | <1W                                 |
| Status Indication                | 3 Coloured LED (Red, Yellow, Green) |
| <b>Mechanical Parameter</b>      |                                     |
| Dimensions (mm, W x H x D)       | 250 x 341 x 85 mm                   |
| Weight (kg)                      | 3.2 kg                              |
| Cable Length (m)                 | 4m (7m optional)                    |
| Unit Material                    | ABS                                 |
| Operating temperature range (°C) | -30°C ~+ 50°C                       |
| Relative humidity (%)            | 5% ~ 95%                            |

### Communication

|                            |                                                          |
|----------------------------|----------------------------------------------------------|
| <b>Wi-Fi Communication</b> | W-Fi 2.4GHz, LAN, Bluetooth (on installation only), RFID |
| <b>Protocol</b>            | OCPP 1.6 JSON (OCPP 2.0 Optional)                        |

### Safety

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| <b>RCD</b>                | 6mA DC Protection                                                                    |
| <b>Ingress Protection</b> | IP55                                                                                 |
| <b>Flame Retardant</b>    | UL 94V-0                                                                             |
| <b>Certification</b>      | CE, UKCA, OZEV, EN/IEC 61851-1: 2017, EN/IEC 61851-21-2: 2018, EN/IEC 61000-6-1:2019 |

### Electrical Protection

- Over current protection
- Residual current protection
- Ground protection
- Surge protection
- Over/Under voltage protection
- Over/Under frequency protection
- Over/Under temperature protection

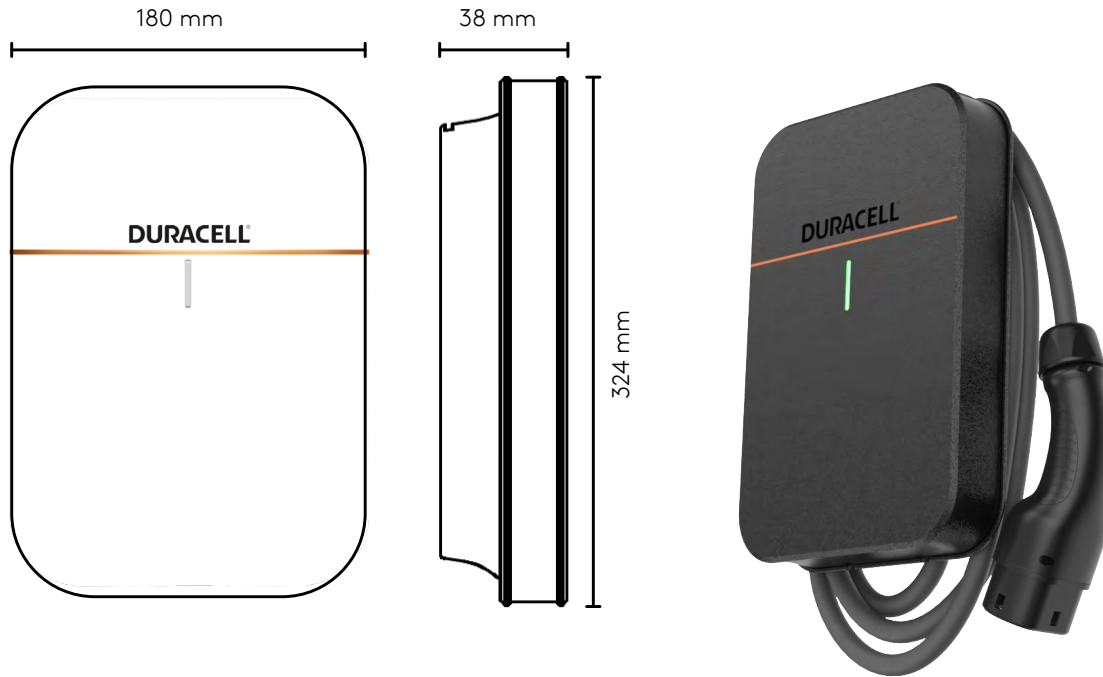
|                 |         |
|-----------------|---------|
| <b>Warranty</b> | 3 years |
|-----------------|---------|

### Installation

|                     |                                            |
|---------------------|--------------------------------------------|
| <b>CB/RCD</b>       | 40A/Type A                                 |
| <b>Earth Rod</b>    | No                                         |
| <b>Installation</b> | Indoor or Outdoor, Wall-mount, Floor-mount |

This charger is integrated with internal 6mA (DC) RCD, please install a Type A domestic breaker externally. The charger has built-in PEN Fault functions. An earth rod is not required.

## 2.2. External Structure



### 2.3. Package Contents

|                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| <b>Duracharger</b>                                                                | <b>User Manual (x1)</b>                                                           | <b>Online document ref.</b>                                                       | <b>RFID cards</b>                                                                   | <b>Mounting Template (x1)</b>                                                       |
|  |  |  |  |  |
| <b>Ø 6 Wall plugs(6)</b>                                                          | <b>M4 Allen Key (x1)</b>                                                          | <b>M4*32 Screws (x6)</b>                                                          | <b>Insulated Terminal (x3)</b>                                                      | <b>CT Clamp (x1)</b>                                                                |
|  |  |  |  |  |
| <b>Washers</b>                                                                    | <b>RJ 45 head</b>                                                                 | <b>Cable holster</b>                                                              | <b>Internal cable clamp</b>                                                         | <b>Screws</b>                                                                       |
|  |  |  |  |  |
| <b>Gland component #1</b>                                                         | <b>Gland component #2</b>                                                         | <b>Gland component #3</b>                                                         | <b>Gland component #4</b>                                                           | <b>Gland component #5</b>                                                           |

## 3. Installation Instructions

### 3.1. Installation Preparation

#### 3.1.1. Required Tools

|                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| Multimeter                                                                        | Clamp meter - Multimeter                                                          | Phillipshead Screwdriver<br>(PH2x150mm, PH3x250mm)                                 | EVSE tester                                                                         |
|  |  |  |                                                                                     |
| Wire cutters                                                                      | Insulated Torque Wrench                                                           | Electric Drill                                                                     |                                                                                     |

### 3.1.2. Recommended Cables

| Name                      | Specification | Quantity                             |
|---------------------------|---------------|--------------------------------------|
| 3 Core H07RNF Rubber Flex | 6.0mm 3 core  | Depends on Installation requirements |

## 3.2. Installation Process

### 3.2.1. Installation Notice

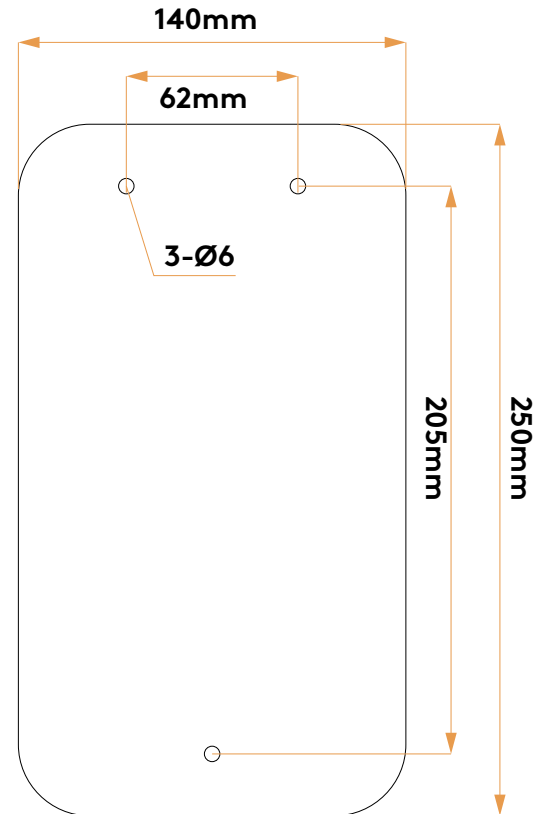
- a. Electrical devices should only be installed, operated, and maintained by qualified personnel. No responsibility is assumed by the manufacturer for any consequences arising out of the use of this device. A qualified person is one who has certified skills and knowledge related to the construction, installation and operation of this type of electrical device and who has received safety training to recognize and avoid the hazards involved.
- b. All applicable local, regional, and national regulations must be applied when installing, repairing, and maintaining this device.
- c. This charger is integrated with internal 6mA (DC) RCD, please install a Type A domestic breaker externally.
- d. The charger has built-in PEN Fault functions. An earth rod is not required.

### 3.2.2. Checks Before Starting the Installation Process

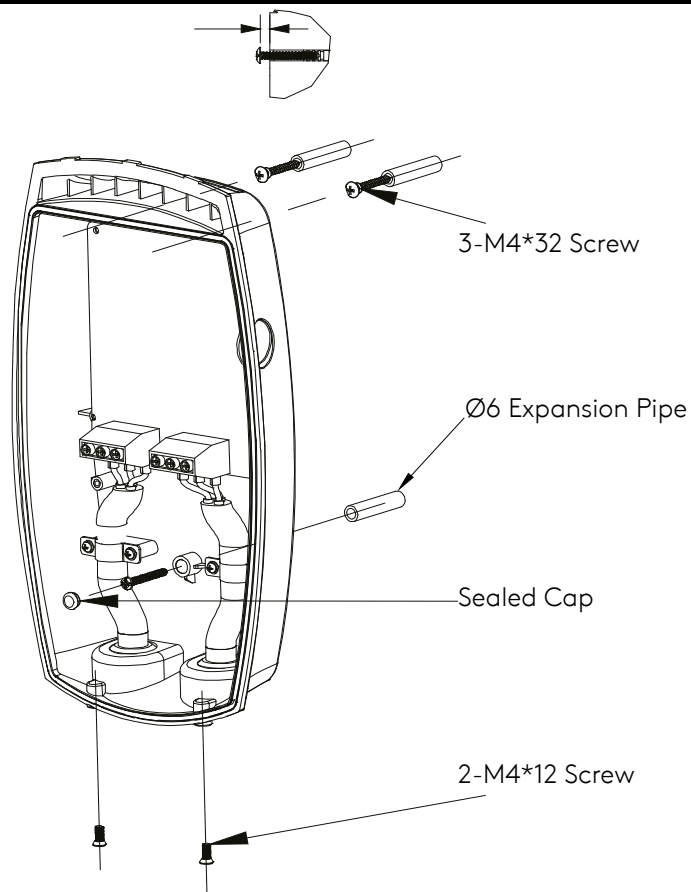
1. Ensure that the location of the charger is convenient for operational access for normal use and maintenance.
2. The AC input components within the premises' s power supply are correctly fitted with required protection items prior to installation of the charger.

### 3.3. Installation Procedure

- a. Based on the profile of the attached mounting template, drill 3 x Ø 6 x 35 mm holes in the wall and insert the wall plugs.
- b. Lock the 2 x M4x32mm screws into the expansion pipe, leaving a 5mm space, between the screw head and the wall.
- c. Open the upper cover of EV charger, hang it on the 2x M4x32 mm screws, lock it into the bottom M4x32mm screw and then cover the sealing cap.
- d. Connect wires to the connectors, close the upper cover, and lock it with 2 x M4x12mm screw.



### 3.4. Mounting



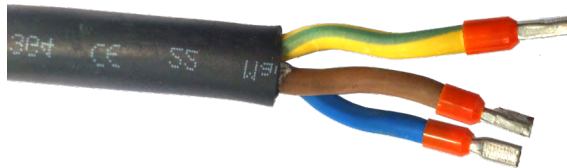


## 4. Electrical Connection

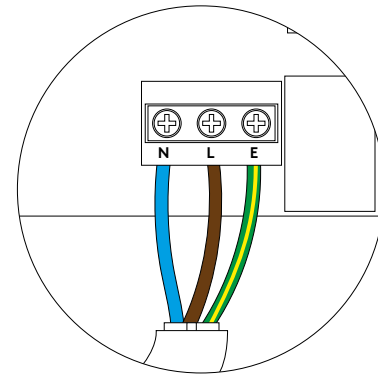
**Note:** Before inserting the power supply cable, cut silicon sealed loop as required (depending on cable CSA) to maintain the IP65 rating.



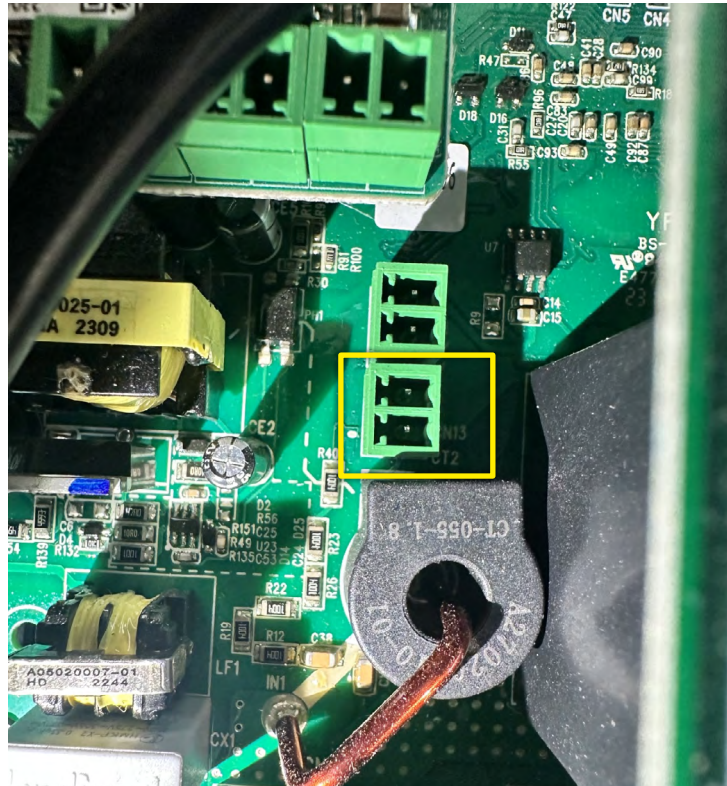
1. Remove a length of 40mm of the outer insulation and strip the core insulation to a length of 8~15mm.
2. Crimp the terminal as shown in **Figure 1** below.
3. Terminate the connections as shown in **Figure 2**.



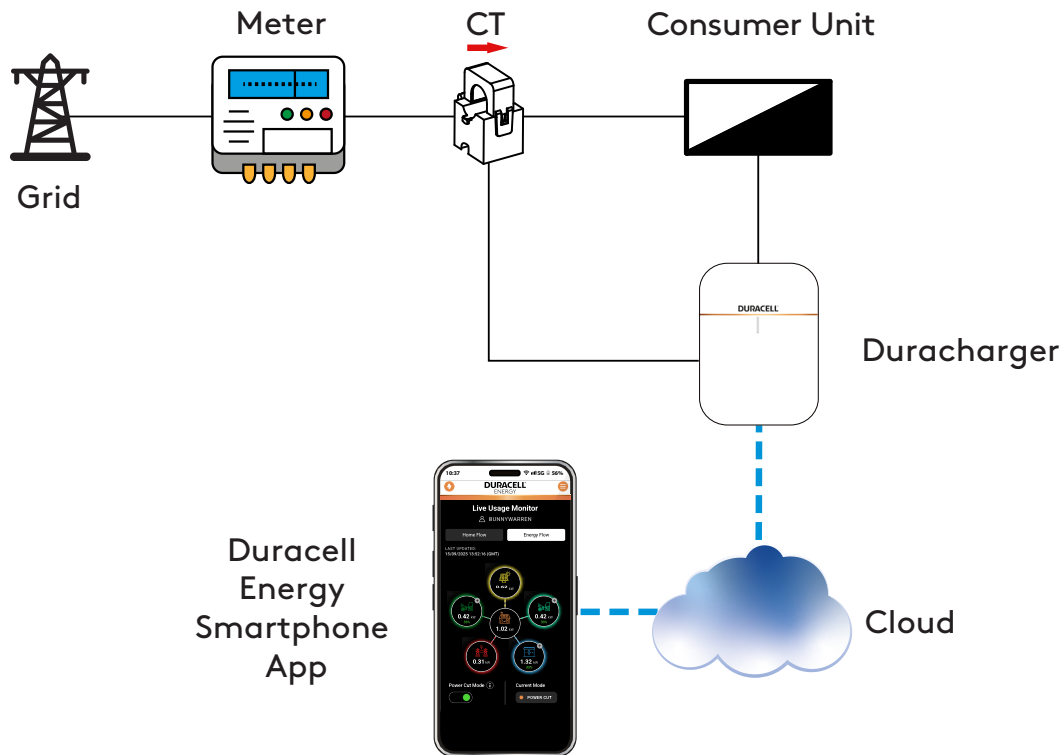
**Figure 1.** Single phase cable



**Figure 2.** Single-Phase connection



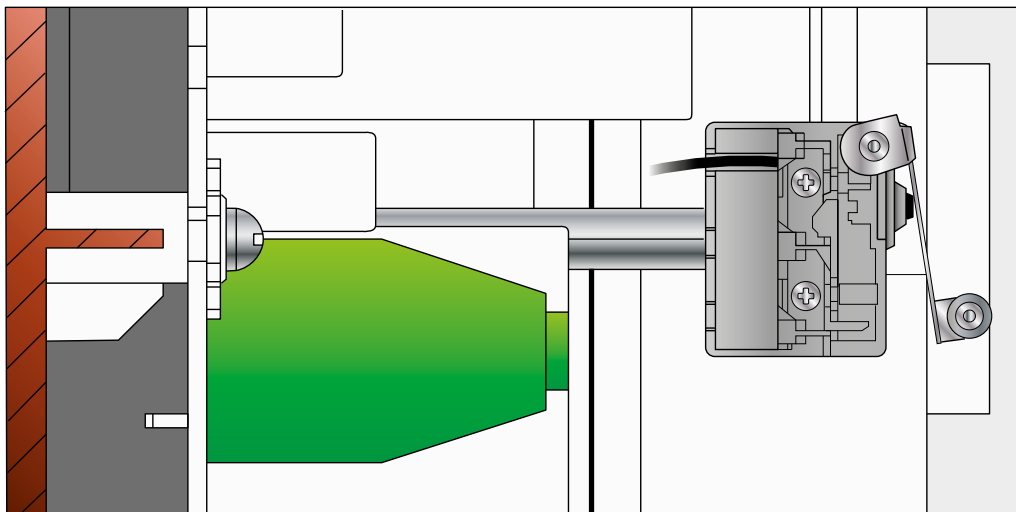
**Figure 4.** After the CT is installed, Dynamic Load Balancing can be setup on the App.



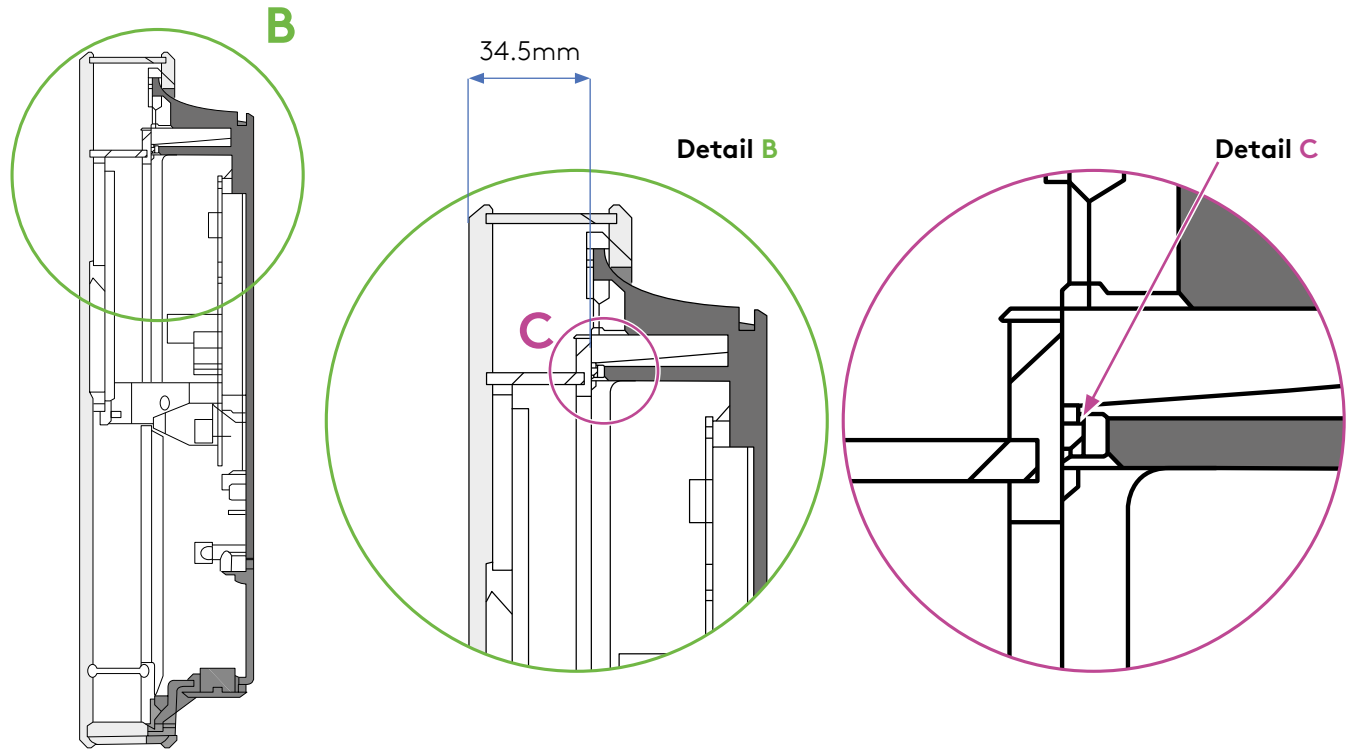
**Figure 5.** CT Connection Diagram (Single Phase Charger 7kW)

## 5. Front Cover Assembly

1. Make sure the front cover is correctly mounted and tightened so the tamper detection switch can be activated.  
(UK only)
2. Protrusion of the front cover should be intersected to seal off the back plate as shown in detail C to maintain IP65.



**Figure 3.** Tamper detection switch (from left) (UK only)



**Figure 6.** Section A2, with detail (from right)

## 6. Turn-On Procedure

- Check wiring as per colour-coded guide.
- Check all terminations are tight.
- Complete all dead tests with a multimeter ON CABLES ONLY ensuring no cross-polarity or insulation failure.
- Turn on.

## 6.1. Power-on Status Checking

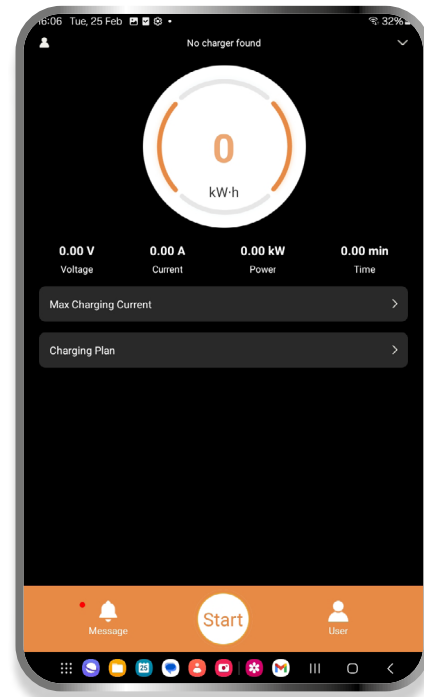
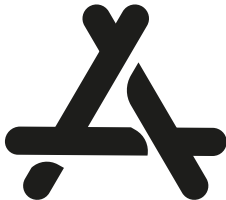
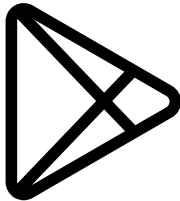
Power-on the charger. The LED indicator should initiate as flashing white, 1 second on; 1 second off as the charger is in POST (Power on self-test).

| State                            | LED Status                                                            | Description                                                                                                                                      |
|----------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| POST                             | Flashing white, 1 second on; 1 second off                             | Power on self-test                                                                                                                               |
| Tamper Detection Alarm (UK only) | Solid yellow                                                          | The security switch for Tamper Detection is not activated                                                                                        |
| No Internet Access               | Flashing green 1 second, flashing yellow 1 second, then 3 seconds off | The charger has not been network configured or the charger has no internet access.                                                               |
| Standby                          | Flashing green, 1 second on; 3 seconds off                            | Power-on, but not plugged into EV                                                                                                                |
| Ready To Charge                  | Flashing yellow, 1 second on; 1 seconds off                           | Gun is plugged in, but the charging session hasn't been initiated                                                                                |
| Charging In Progress             | Breathing green, 1 second on; 1 second off                            | Charging in progress                                                                                                                             |
| Fault Detected                   | Flashing red or constantly red                                        | An error/fault state has been detected. Please check the <b>Troubleshooting</b> section on <b>op pagina 43</b> for error code details/resolution |

## 7. Duracharger App (Installer)

This app can be downloaded from the App store or Google Play store. Scan the shown QR codes to download the app.

**Duracharger App: For installer setup.**

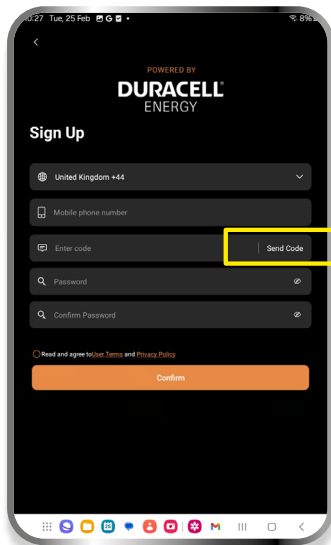




## 8. App Registration

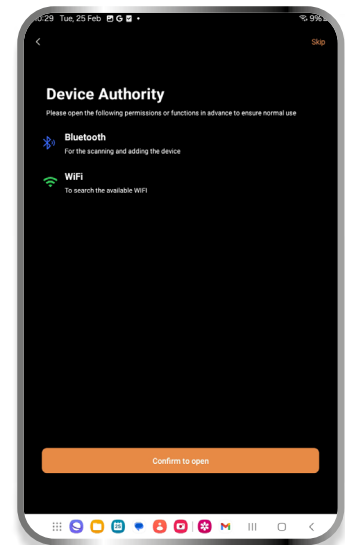
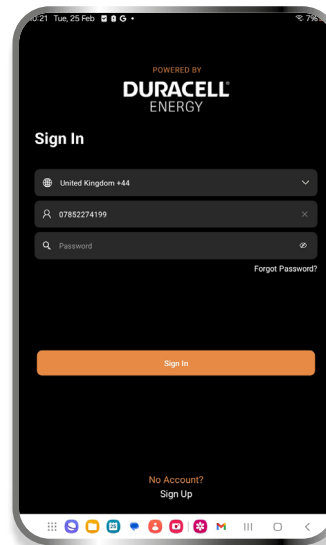
### 8.1. Register the Homeowner on the Duracharger app

Use the Duracharger App to register the EV charger, the RFID cards, and to set up the dynamic load balancing.

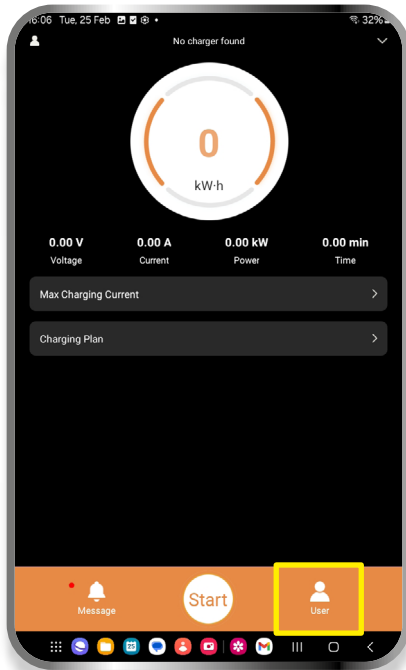


Sign up with the homeowner's phone number in order to register the EV charger.

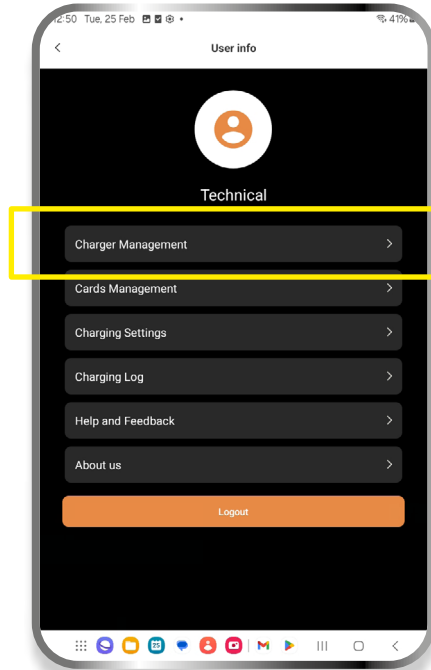
**Wi-Fi must be 2.4GHZ!**



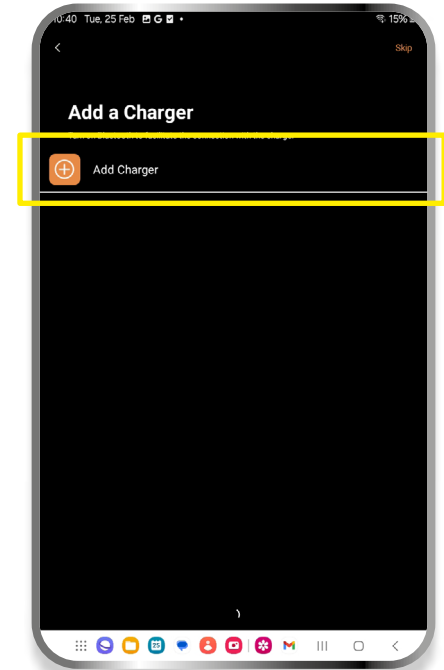
The entered phone number to which the initial One Time Password is sent (together with a new password created by the installer) becomes the login credentials for the installer to commission.



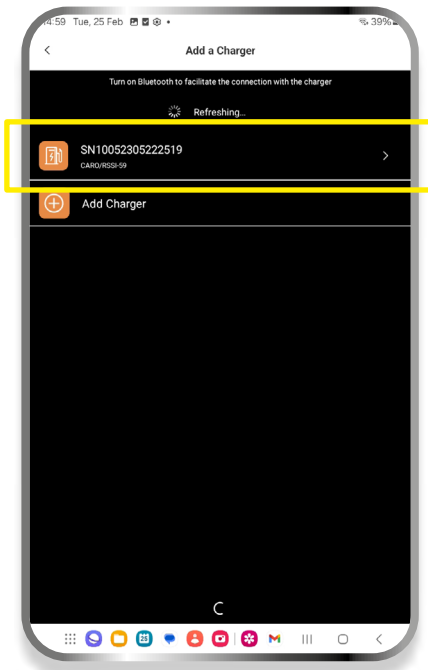
Select User



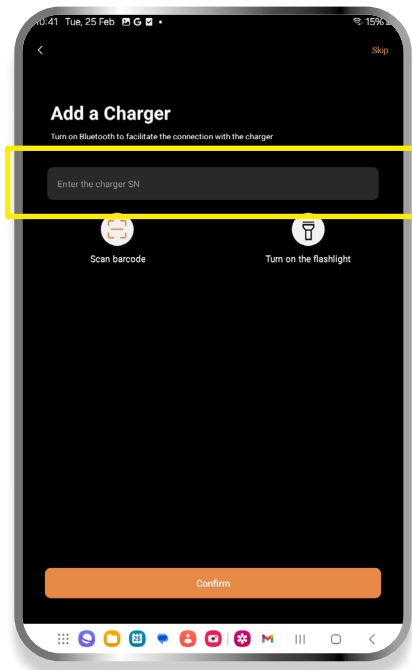
Charger  
Management



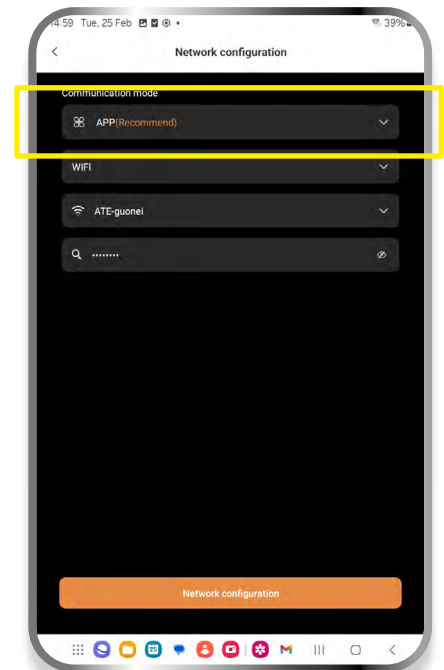
Wait for  
Charger to  
appear here



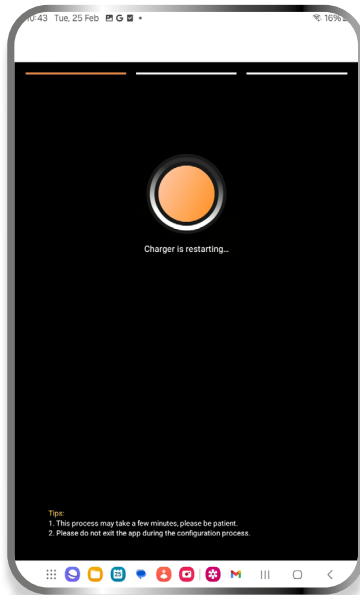
Please select the available charger. If the charger is not appearing, type in the serial number.



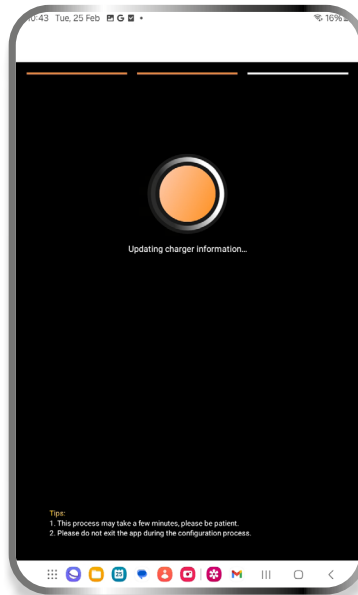
Please enter the serial number found on the side of your EV charger



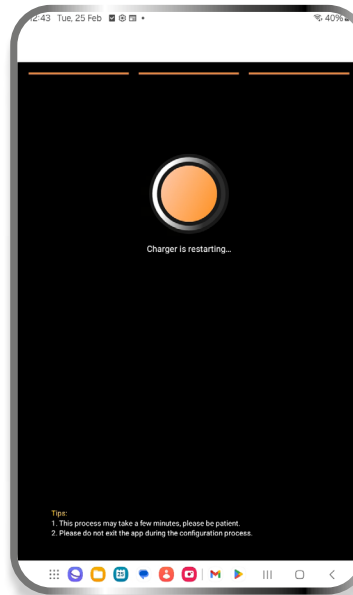
Select **APP(Recommend)**  
NOT 'AP mode' (found in dropdown)



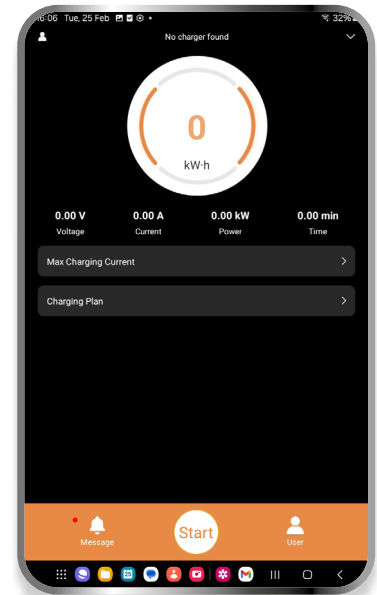
Complete the Wi-Fi setup.



Please be patient whilst  
EV Charger configures.



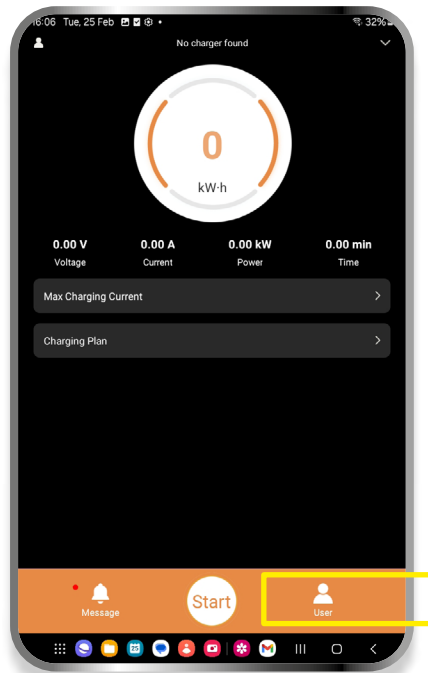
Three orange bars at the  
top of the screen indicates  
configuration complete.



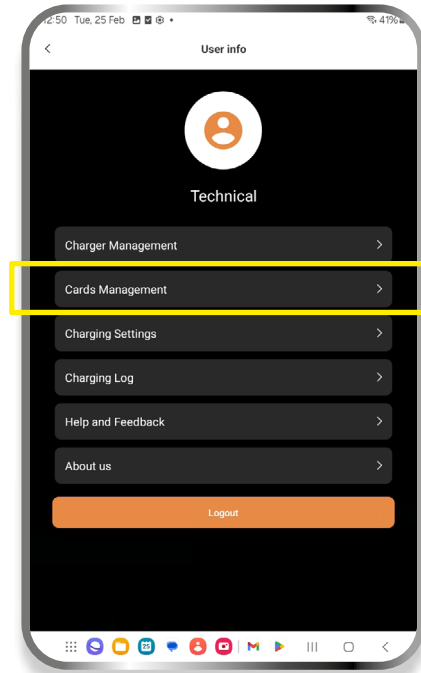
Configuration finished!

**To ensure test function is working correctly use an EVSE tester or Megger to simulate a charge.**

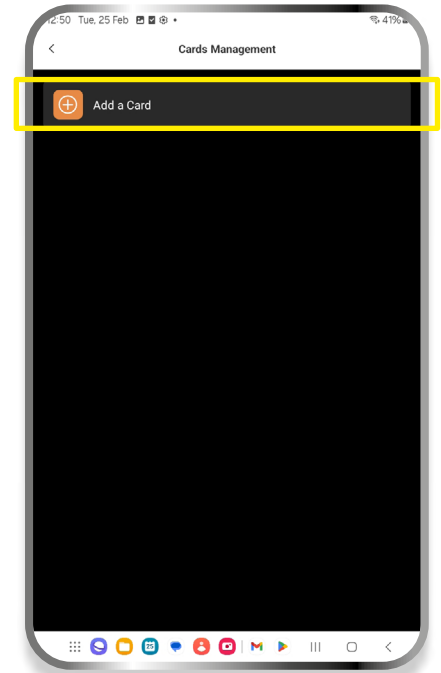
## 9. RFID Card



Click 'User' to access Main Menu



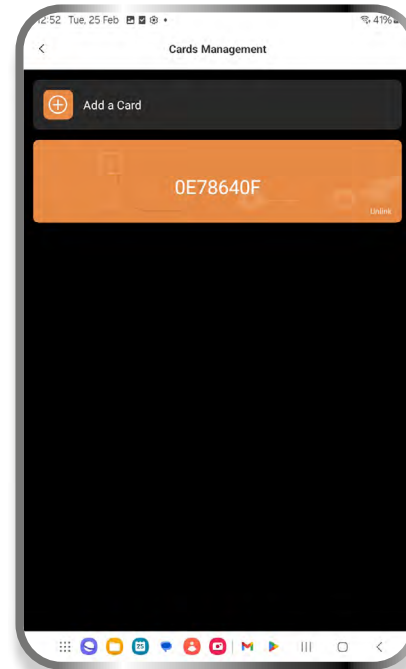
To register your RFID card, select Cards Management.



Select Add a Card.



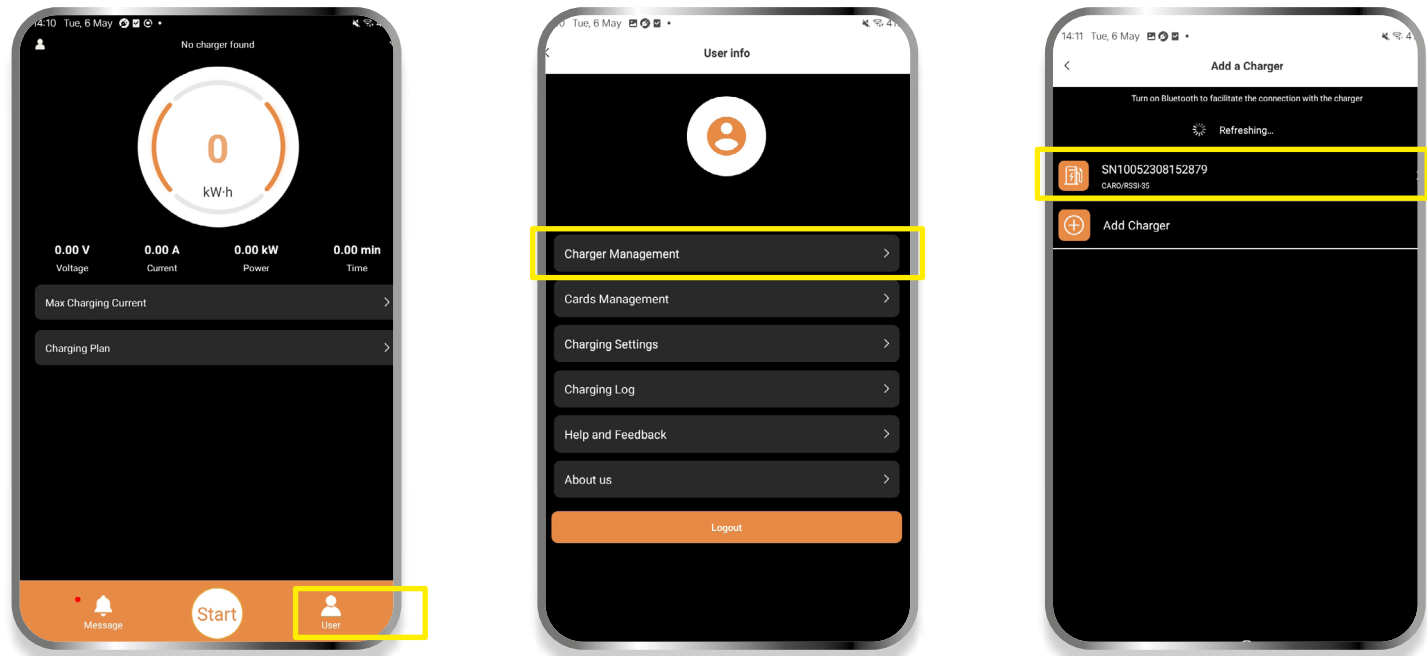
Scan the barcode on your card.

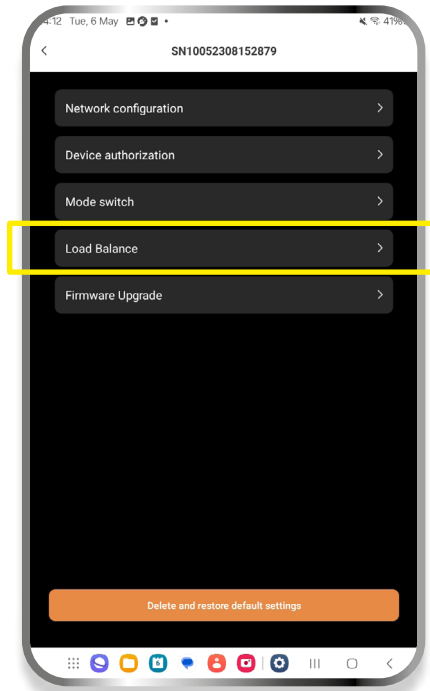


Your card should then be added here in Cards Management.

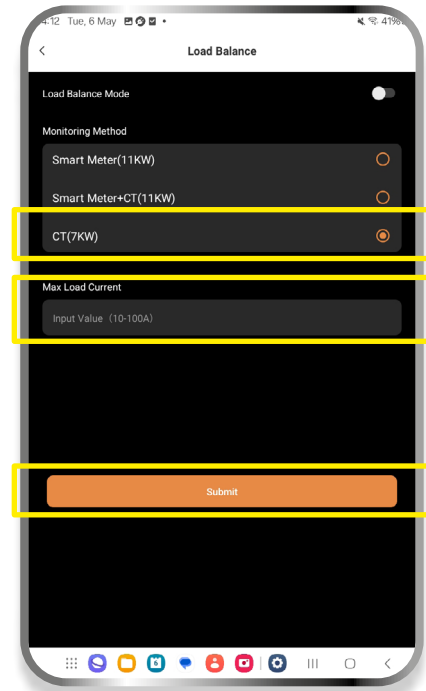
## 10. Load Balancing

Load Balancing is to ensure the property's main supply fuse rating is not exceeded when a charge is required. Since each dwelling could potentially have a different supplied fuse rating, it is necessary to enter the known fuse size to ensure this operation functions. Follow the below procedure to enable accurate Load Balancing.





Select 'Load Balance'



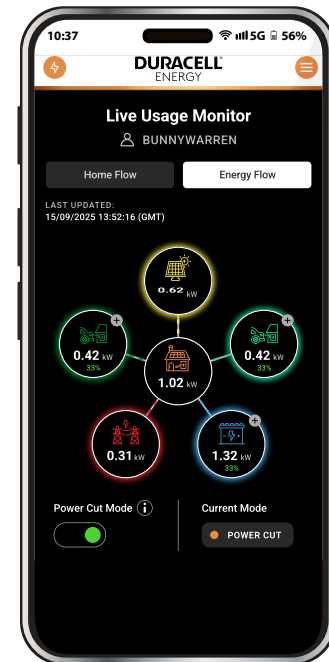
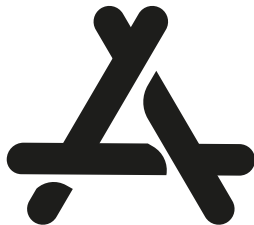
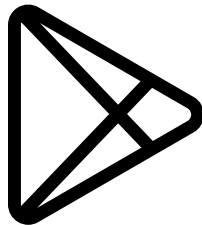
Select 'CT(7kW)'  
Input your main supply fuse rating  
Click 'Submit'



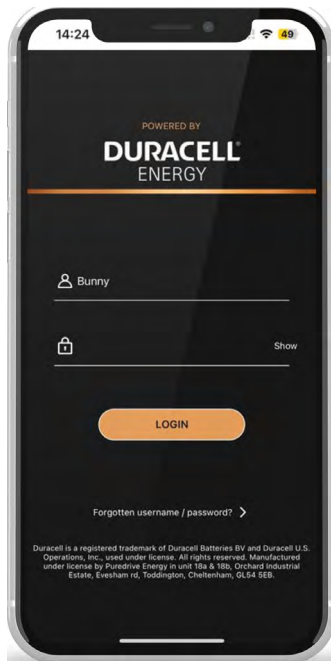
## 11. Duracell Energy App (User)

This app can be downloaded from the App store or Google Play store. Scan the shown QR codes to download the app. Installer - please inform the customer they can access our Consumer App Guide and warranty information by scanning the QR code of the back cover of this manual.

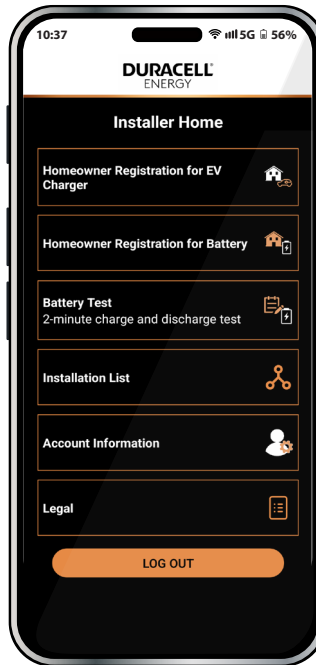
**Duracell Energy App: For consumer use and product monitoring.**



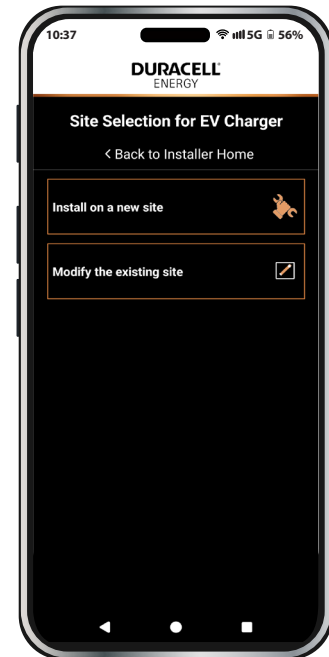
## 11.1. Register the Homeowner on the Duracell Energy App



Enter the installer Username and Password. If you do not have a Username & Password then go to [duracellenergy.com/contact](https://duracellenergy.com/contact)

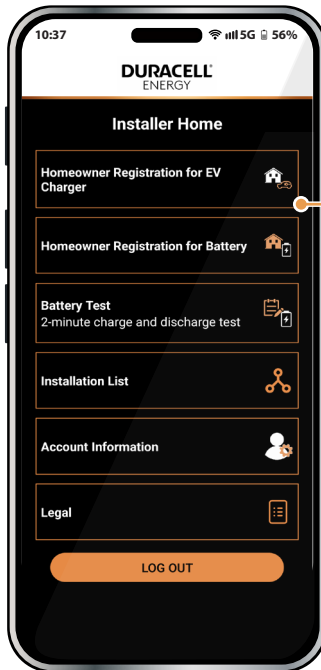


Please select 'Homeowner Registration for EV Charger'

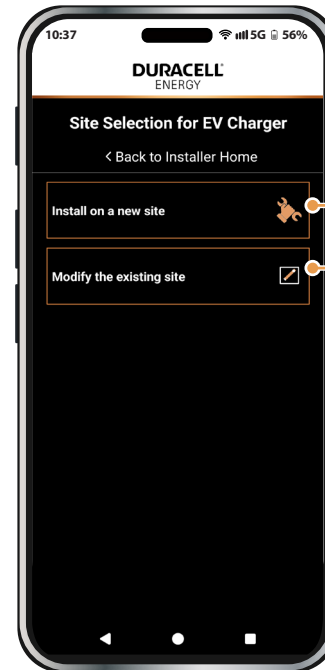


If Customer is already set up on the app, select 'Modify the existing site'. If not, select 'Install on a new site'.

## 11.2. Install EV Charger at a New Site

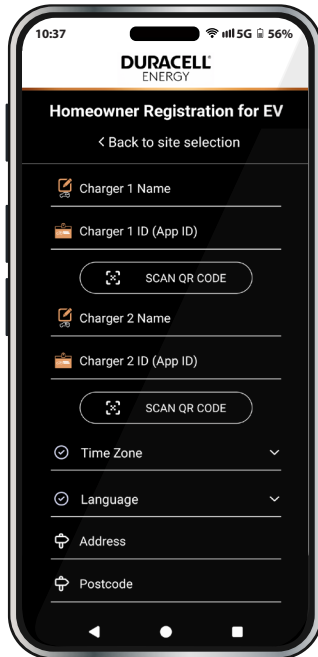


Select homeowner registration from options

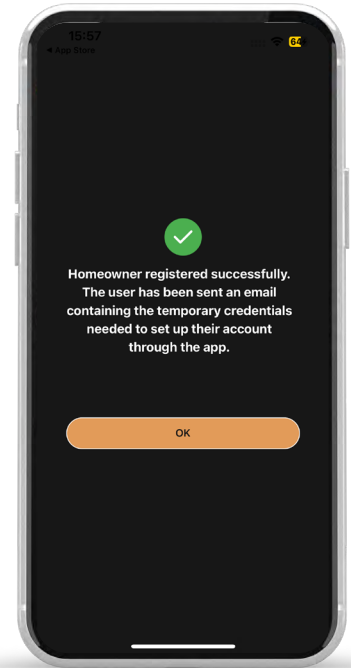


To register an EV Charger to a new user

To register an EV Charger to an existing user

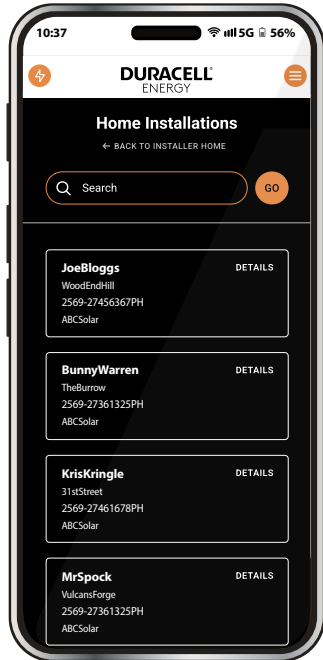


After filling in the customer's information select 'submit'. This sends an automated email with temporary login credentials to the homeowner

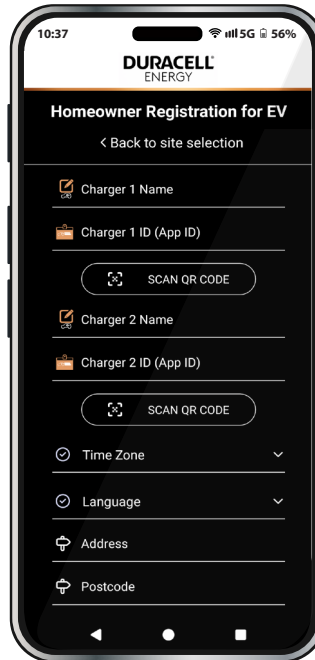


Using those credentials, the homeowner can place their own passwords and use the app to monitor and control

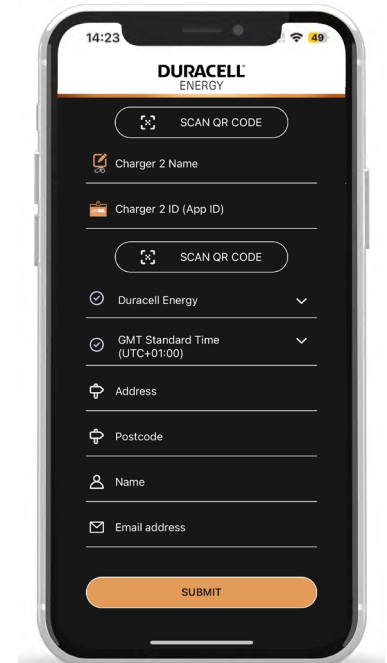
## 11.3. Install EV Charger at an Existing Site



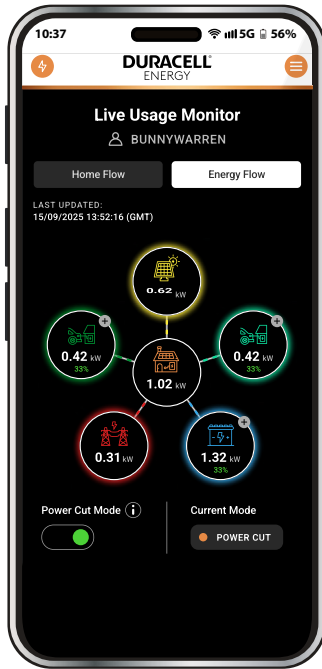
For an existing homeowner, search the Inverter serial number and the homeowner's name should appear



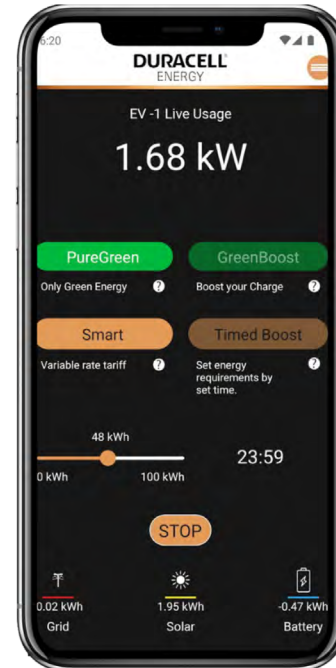
Select the customer and fill in the necessary details in the registration page



Select 'Submit'. The EV Charger will be added to the live usage monitor page & customer account.

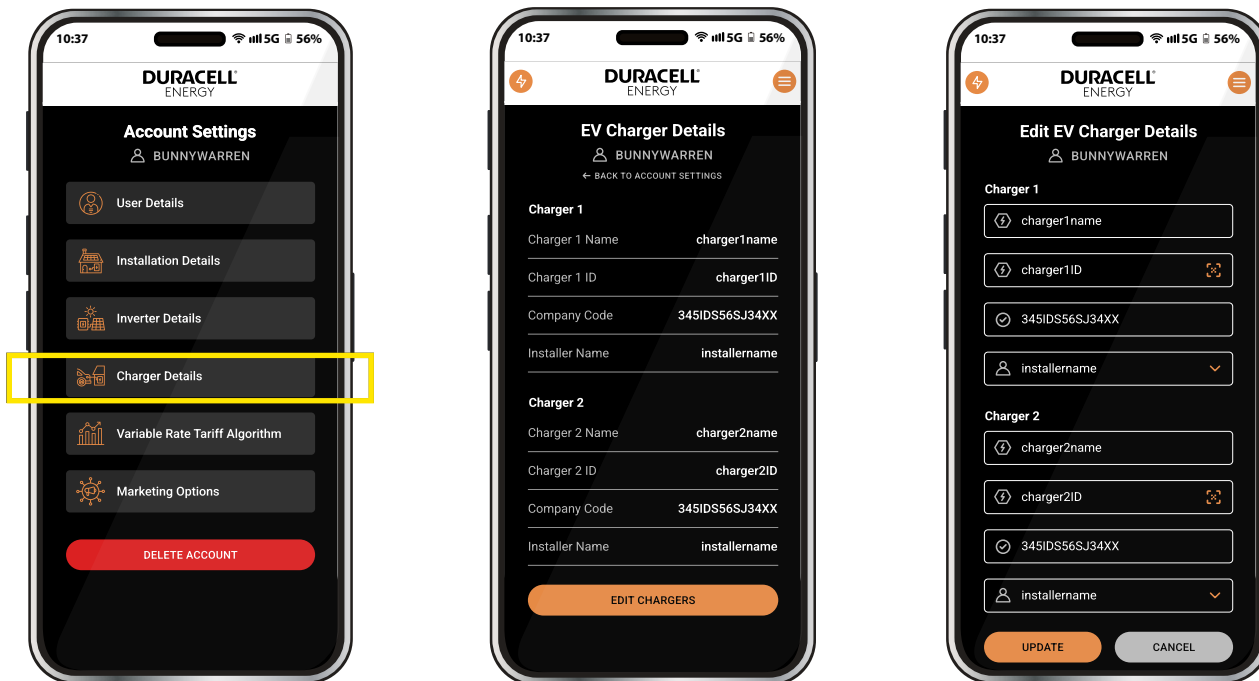


Live usage page



EV mode page

## 11.4. Edit EV Charger Details



Edit: ■ EV charger name ■ EV charger serial number

## 12. Configuration and Operation

### 12.1. Charging Operation

#### 12.1.1. Connect the Charger to EV

1. Plug the charger gun into the EV Charging Port
2. After plug-in, please check the charger gun is connected securely.
3. When the charger gun & EV connection is secured, the LED indicator will start flashing green, meaning the charger is ready to initiate a charging session.

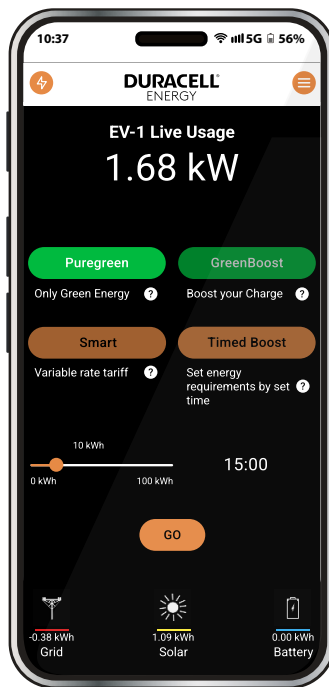
#### 12.1.2. Start Charging & Stop Charging

The charging session can be initiated and stopped by the following options.

1. **By RFID card:** Using the registered RFID card to start & stop session.
2. **Plug & Play mode:** In a situation with no internet connection access, the charger can be set into plug & play mode, meaning after plugging in connector, the charging session will be initiated and after unplugging the connector, the charging session will be stopped. Please contact [support.uk@duracellenergy.com](mailto:support.uk@duracellenergy.com) to enable this function.
3. **By App:** The charger can be monitored and controlled by either Duracharger App, Duracell Energy App or Monta App. Please refer to the App manual.



## 12.2. EV Mode Definitions & Uses



**Important:** To use the EV Charger, tap the preferred mode and tap 'Go'. If you want to stop the charger, tap 'Stop' to end the session. If no modes are selected and you click 'Go', Default Mode is activated.

### Default

Simple Plug and Charge. To activate default mode deselect everything else and tap 'Go'. It will draw from whatever power is available to charge the car at the maximum rate.

■ Default cannot be combined with any other Modes.

### PureGreen

When selected, this enables the end-user to charge their vehicle solely from excess Solar. Providing you have only this mode selected on the app and that you have at least 1.4kw of excess Solar available.

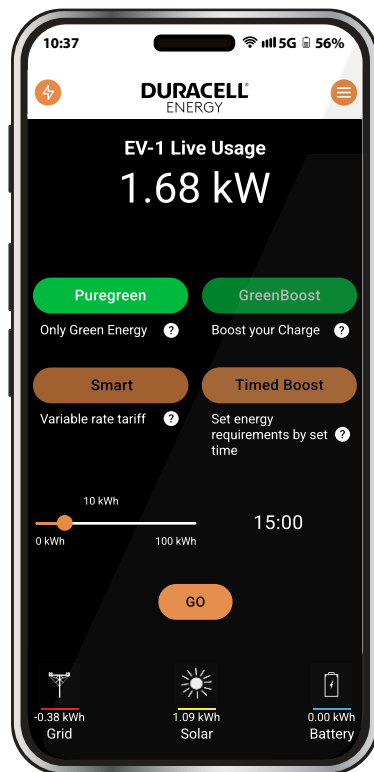


Figure 38

## Timed Boost

Set and end time for your session. When selected, this gives the end-user the ability to set how many kW of energy are to be released to the vehicle by a set time. Nominate the amount of kW with an end time for your charging session to be completed by.

## Timed Boost + Smart

When these two are selected, you will receive all the benefits of the Timed Boost; this will choose the best times to complete most of its charge on the cheapest available rate.

To get the full benefit of this mode, the end-user must have;

- a Variable Rate Tariff (VRT)
- the correct tariff selected on the app (see **Consumer App Guide, Chapter 6. Variable Rate Tariff (VRT) Algorithm**)

- entered an end charge time with a required kW amount (on Timed Boost).

**For example:** a homeowner requires 10kWh of charge in the next 5 hours, and within the next 5 hours, there are two hours of cheaper energy. The system will charge at a rate of 5kW to reach 10kWh of energy within the cheap two hours based on their set tariff.

**Remember that the max kw/h that this single phase charger can fulfil is 7kw!**

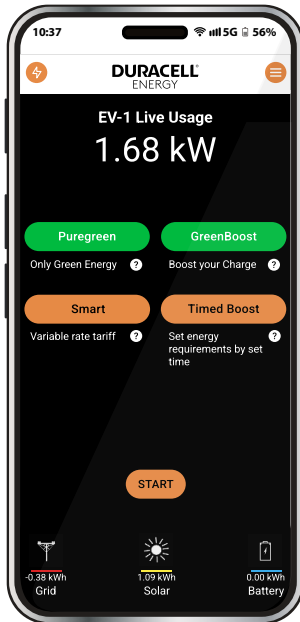
## Timed Boost + GreenBoost

When these two are selected, you will receive all the benefits of the Time Boost, however this will also use any excess solar available to complete the charge session set using less energy from the Grid.

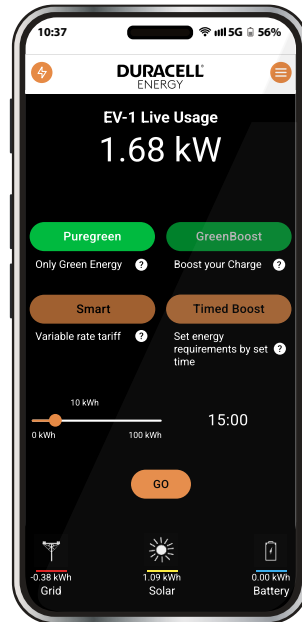
**For example;** I need 10 kWh of charge within 5 hours, it will average out those hours (so it will set the charge rate to 2kW per hour)

So, for the whole duration of the charging session it will only take upto 2kw of charge per hour, taking from excess as a priority and then making up any difference if required from the grid!

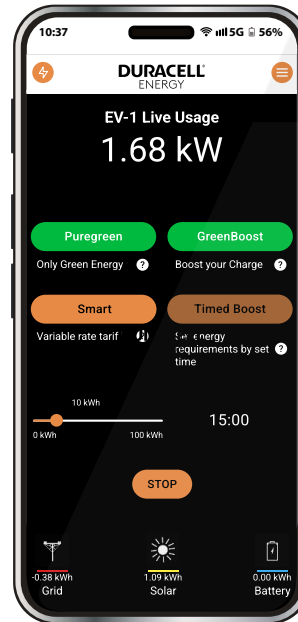
## 12.3. How to Use & Control Charging Sessions



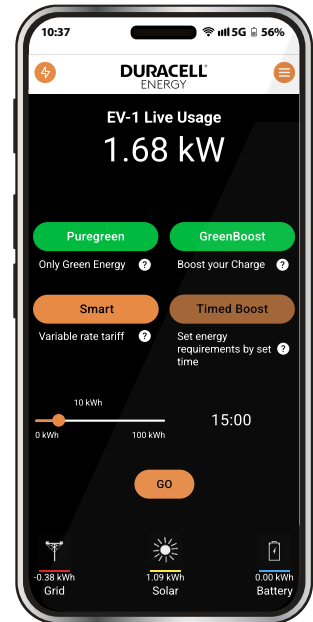
Select 'Start'



Select Mode(s), Select 'Go'



To End Charging, Select 'Stop'

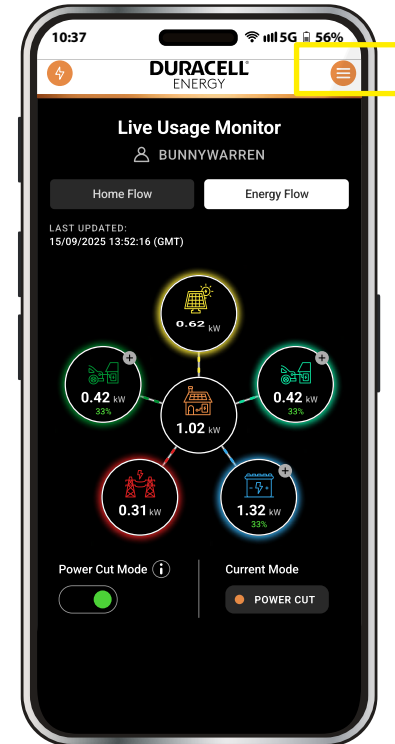


To change charging session mode whilst in another mode: Deselect current mode(s)  
Select desired new mode(s) Press 'Go'

## 12.4. Variable Rate Tariff (VRT) Algorithm

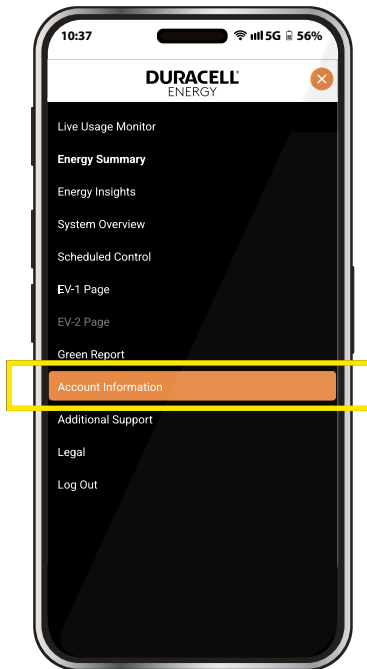
The following three pages are excerpts from the Duracell Energy Consumer App Guide - **Chapter 6 Variable Rate Tariff (VRT) Algorithm.**

This document is available for consumers to download from the Duracell Energy Website.



# App Guide

## 6. Variable Rate Tariff (VRT) Algorithm



The **Variable Rate Tariff (VRT) Algorithm** allows homeowners to link their energy system to a **dynamic electricity tariff** (such as Octopus Agile) to optimise charging and discharging based on real-time energy pricing.

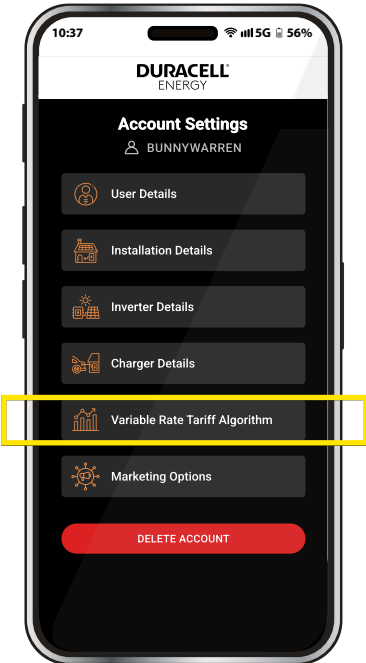
### Accessing the VRT Algorithm Settings:

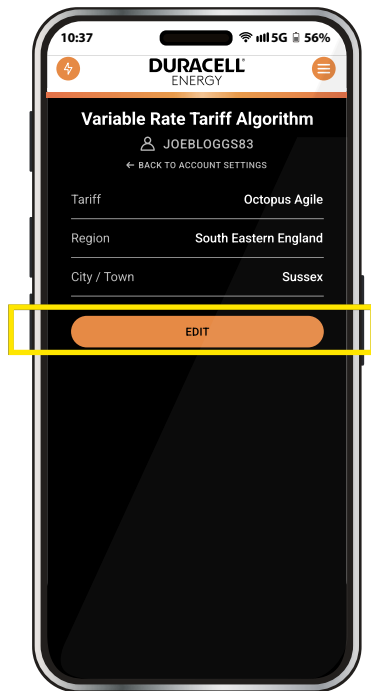
1. Open the App Menu
2. Click on **Account Information**.
3. Tap on **Variable Rate Tariff Algorithm** to view your current tariff details.

### Understanding the VRT Settings:

The VRT settings page displays the following information:

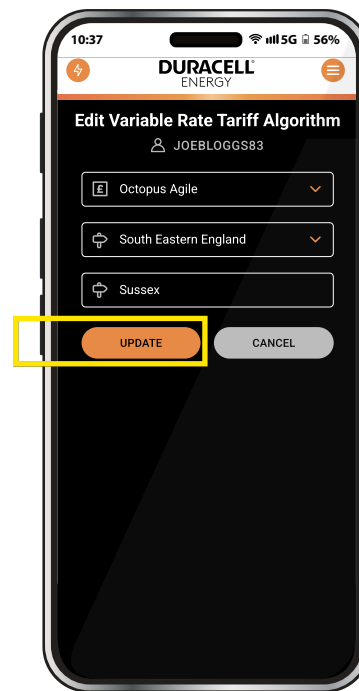
- **Tariff:** The dynamic tariff plan currently selected (e.g., Octopus Agile).
- **Region:** The electricity supply region (e.g., South Eastern England).
- **City/Town:** The user's registered location (e.g., Sussex).



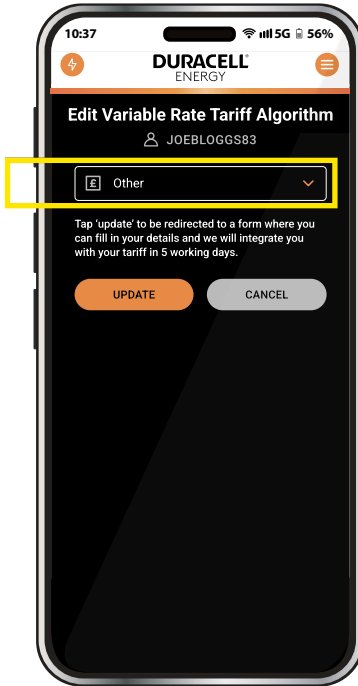


## Editing Your Tariff Details:

1. Tap **EDIT** on the VRT settings page.
2. You will see dropdown menus for:
  - **Tariff Selection** – Choose from available tariffs.
  - **Region** – Select your electricity supply region.
  - **City/Town** – Input your location.
3. Tap **UPDATE** to save your changes or **CANCEL** to discard them.



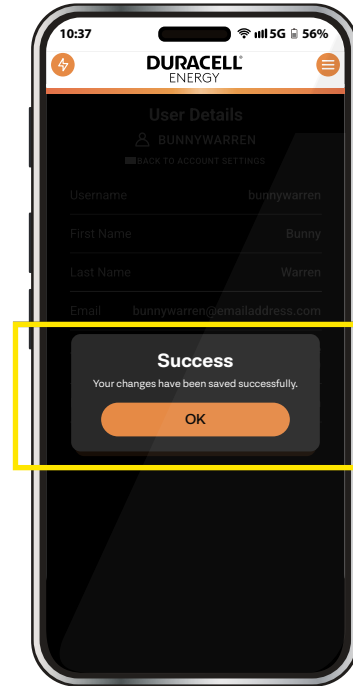
## App Guide



### Adding a New Tariff Provider:

If your tariff provider is not listed:

1. Select **Other** from the **Tariff** dropdown menu.
2. A message will appear explaining that you will be redirected to a form.
3. Tap **UPDATE** to proceed.
4. Fill out the form with your tariff details.
5. Your tariff will be integrated within **5 working days**.



### Additional Notes:

- The app will use the selected tariff data to adjust charging and discharging patterns automatically.
- Users can update their tariff settings anytime via the **Account Settings** page.
- Selecting the correct **Region** and **City/Town** ensures accurate tariff application.

## 13. Troubleshooting

### 13.1. Indicator status

| LED Status                                                                                                                                  | State  | Description                              |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------|
|  Flashing green, 1s on, 3s off                              | Normal | In standby                               |
|  Breathing green, 1s on, 1s off                             | Normal | Charging                                 |
|  Breathing yellow, 1s on, 1s off                            | Normal | Plugged-In gun state,<br>Ready To Charge |
|  Green light flash                                          | Normal | Software upgrade                         |
|  Flashing yellow, 2s on, 2s off                             | Normal | Ground warning                           |
|  Red light on                                               | Fault  | Relay adhesion                           |
|  Flashing red, 500ms on, 500ms off, 1 time, 3s off, Cycle   | Fault  | Input polarity reverse                   |
|  Flashing red, 500ms on, 500ms off, 2 times, 3s off, Cycle  | Fault  | CP fault                                 |
|  Flashing red, 500ms on, 500ms off, 3 times, 3s off, Cycle | Fault  | Leakage current fault                    |



| LED Status |                                                            | State | Description                    |
|------------|------------------------------------------------------------|-------|--------------------------------|
|            | Flashing red, 500ms on, 500ms off, 4 times, 3s off, Cycle  | Fault | Input terminal overtemperature |
|            | Flashing red, 500ms on, 500ms off, 5 times, 3s off, Cycle  | Fault | Relay overtemperature          |
|            | Flashing red, 500ms on, 500ms off, 6 times, 3s off, Cycle  | Fault | Under voltage fault            |
|            | Flashing red, 500ms on, 500ms off, 7 times, 3s off, Cycle  | Fault | Over voltage fault             |
|            | Flashing red, 500ms on, 500ms off, 8 times, 3s off, Cycle  | Fault | Overload fault                 |
|            | Flashing red, 500ms on, 500ms off, 9 times, 3s off, Cycle  | Fault | Over frequency fault           |
|            | Flashing red, 500ms on, 500ms off, 10 times, 3s off, Cycle | Fault | Under frequency fault          |
|            | Flashing red, 500ms on, 500ms off, 11 times, 3s off, Cycle | Fault | Leakage current loop abnormal  |

## 13.2. Error Codes & Resolutions (Duracharger App)

| Error Code | Problems            | Possible Causes                    | Solutions                                                                                                           |
|------------|---------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| OverVolt   | Input over voltage  | AC input voltage may be too high   | 1. Check the input voltage from the grid.                                                                           |
|            |                     |                                    | 2. If the voltage is over 253Vac for a short time, wait till the power supply recovers to normal voltage range.     |
| UnderVolt  | Input lower voltage | AC input voltage may be too low    | 1. Check the input voltage from the grid.                                                                           |
|            |                     |                                    | 2. If the voltage is under 184Vac for a short time, wait till the power supply recovers to normal voltage range.    |
| OverCurr   | Output overload     | AC output current may be too large | 1. Shut down the leakage current protection, then switch off main power supply from distribution board immediately. |
|            |                     |                                    | 2. Check whether there is low resistance connection between AC output cables of the charger.                        |

| Error Code  | Problems              | Possible Causes                               | Solutions                                                                                                                                        |
|-------------|-----------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| OverFreq    | Input over frequency  | AC input frequency may be too high            | 1. Check the input voltage frequency from the grid.                                                                                              |
|             |                       |                                               | 2. If the frequency exceeds 63Hz for a short time, wait till power supply recover to normal voltage range.                                       |
| UnderFreq   | Input lower frequency | AC input frequency may be too low             | 1. Check the input voltage frequency from the grid.                                                                                              |
|             |                       |                                               | 2. If the frequency is lower than 47Hz for short time, wait till power supply recover to normal voltage range.                                   |
| OverTemp    | Over temperature      | Temperature may be too low inside the charger | Check the surrounding conditions of chargers installed whether there is heating device nearby. Make sure environmental temperature is under 60℃. |
| Over DCLeak | Over leakage current  | Leakage current to the earth may be too high  | 1. Shut down the leakage current protection, then switch off main power supply from distribution board immediately.                              |
|             |                       |                                               | 2. Check whether there is broken of AC output cables or low resistance connection to the earth.                                                  |

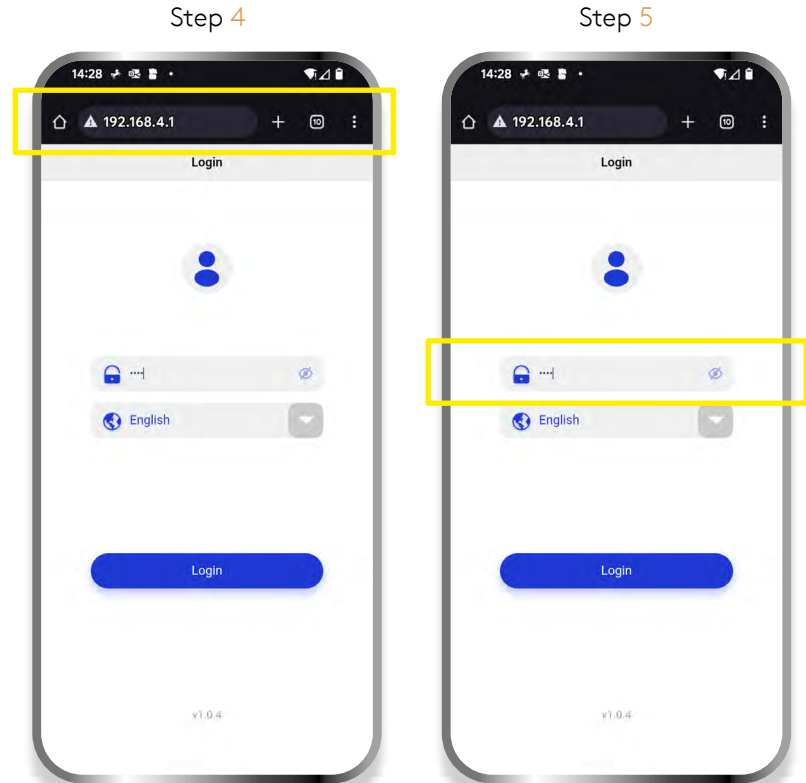
| Error Code | Problems                           | Possible Causes                                   | Solutions                                                                                                           |
|------------|------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| PhaseError | Reverse connection                 | Reverse connection of L/N input cable             | 1. Shut down the leakage current protection, then switch off main power supply from distribution board immediately. |
|            |                                    |                                                   | 2. Check if AC input/output cables are normal, and if inverse connection of L/N input cables.                       |
| CableRCErr | Charging cable connection abnormal | Poor connection of charging cable with EV/Charger | Check if charger gun is connected to EV securely.                                                                   |

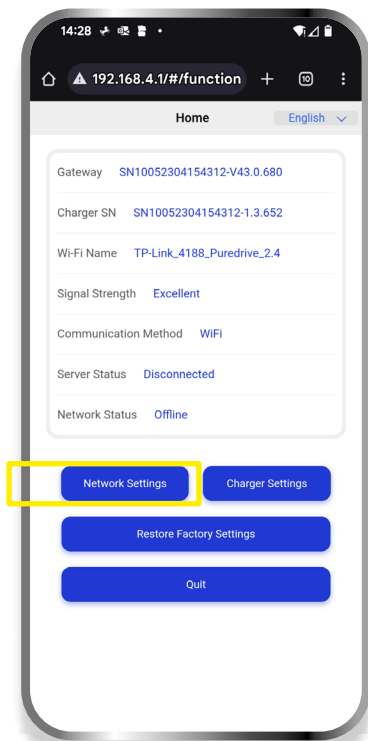
## 13.3. Re-Pairing Wi-Fi Connection

### 13.3.1. Access Point mode

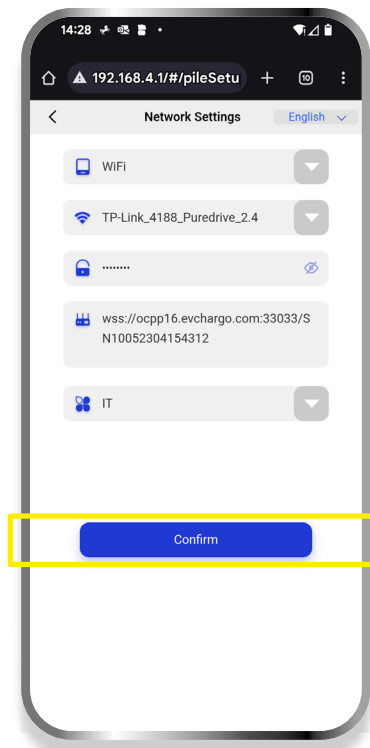
#### On your mobile device;

- Step 1.** Select Airplane mode or deactivate mobile data.
- Step 2.** Open up your Wi-Fi settings and connect to the charger serial number (If the serial number doesn't appear, restart your Duracharger by turning it off and on again via the breaker or isolator)
- Step 3.** Once connected to the charger the password will be **admin123**
- Step 4.** Then go to your internet browser and enter **192.168.4.1** into the omnibox. *(see image, right)*
- Step 5.** After you have searched for this Access Point mode will show up and then will ask for a password (4 digit pin code) This PIN was supplied with your Duracharger. *(see image, right)*





To change your Wi-Fi details  
click **'Network Settings'**



Once completed, click  
**'Confirm'**

If the;

- Wi-Fi strength is weak,
- Server status shows disconnected
- If the Wi-Fi is not 2.4GHz
- Network status is offline

This is why the EV charger is not working.

If your Wi-Fi strength is weak, you will need to find a way for a stronger connection. Options include;

- Move your Wi-Fi router closer to your Duracharger
- Hardwire via CAT5 LAN
- Home Wi-Fi signal extender/repeater

If you are still experiencing difficulty please contact your installer or call Customer Services



# DURACELL<sup>®</sup> ENERGY



Get in touch...

@ support.uk@duracellenergy.com

01386 577845

www.duracellenergy.com



Please scan this QR code to find this document in alternative languages, for your warranty informaton, and for the Duracell Energy Consumer App Guide.

**EU Authorised Representative address:**

Comply Express Unipessoal Limitada,  
StartUp Madeira,  
EV141,  
Campus da Penteada,  
9020 105 Funchal,  
Portugal

Duracell is a registered trademark of Duracell Batteries BV and Duracell U.S. Operations, Inc., used under license. All rights reserved. Manufactured under license and warranty supported by Puredrive Energy Limited in Toddington, UK. **Note:** NEITHER DURACELL BATTERIES BV, DURACELL U.S. OPERATIONS, INC., NOR ITS AFFILIATES ARE INVOLVED IN THE DESIGN, MANUFACTURE, MARKETING OR DISTRIBUTION OF THE PRODUCTS AND THEY DO NOT MAKE ANY (AND HEREBY DISCLAIM ALL) EXPRESS OR IMPLIED WARRANTIES RELATING TO THE PRODUCTS.