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# 1. About This Guide

This guide applies to both socket and cable versions of **Anker SOLIX V1 Smart EV Charger**. This guide will walk you through the steps to learn, install, and use your EV charger.

## 2. Unboxing

### 2.1 Check Before Installation

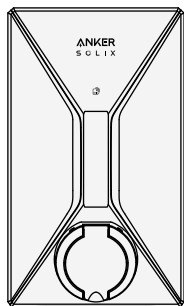
#### Inspect the Outer Packaging

Before unpacking the equipment, check the outer packaging for damage, such as holes and cracks, and review the equipment model number. If any damage is found or the model is not what you requested, do not unpack the equipment and contact Anker customer service as soon as possible.

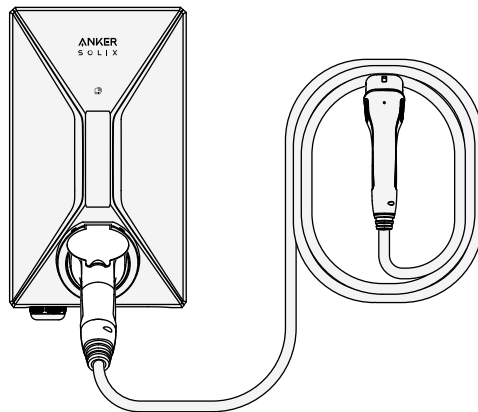
#### Verify Contents

After unpacking the equipment, check that the contents are intact and complete, and free from any obvious damage. If any item is missing or damaged, contact Anker customer service.

### 2.2 In the EV Charger Box

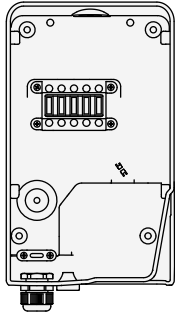


Socket Version

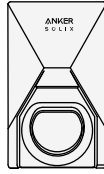


Cable Version

Charger Body



Wire Box



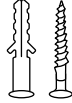
EV Charger Holster



RFID Card ×1



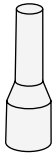
Expansion Screw  
(M5 40 mm) ×4



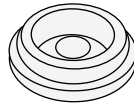
Expansion Screw  
(M6 50 mm) ×5



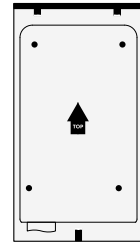
Screw (M5 12 mm) ×6



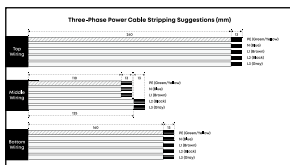
Tube Terminal ×6  
(For 6 mm<sup>2</sup> Conductor)



Cable Seal  
(For 25.3 mm Cable Entry Hole)



Positioning Card



Power Cable Stripping  
Suggestions



Quick Start Guide  
(With Bluetooth  
Passkey Sticker)



Warranty and Safety  
Information



## 2.3 Optional Accessories

The following accessories can be ordered separately.



### Anker SOLIX Smart Meter

Install the smart meter to your system to enable load balancing and solar charging modes.



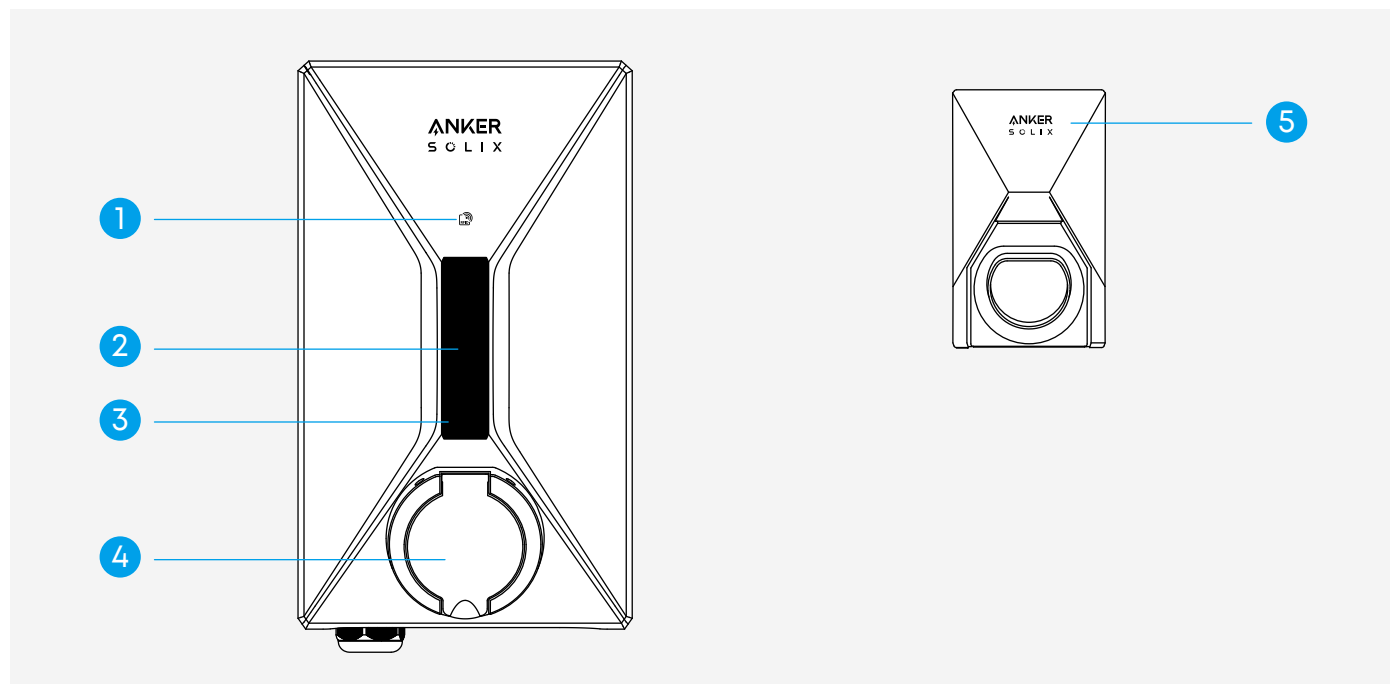
### Anker SOLIX EV Charger RFID Card

The EV charger supports up to ten individual RFID cards. This enables multiple users to access and operate the EV charger with their own cards.

## 3. Product Overview

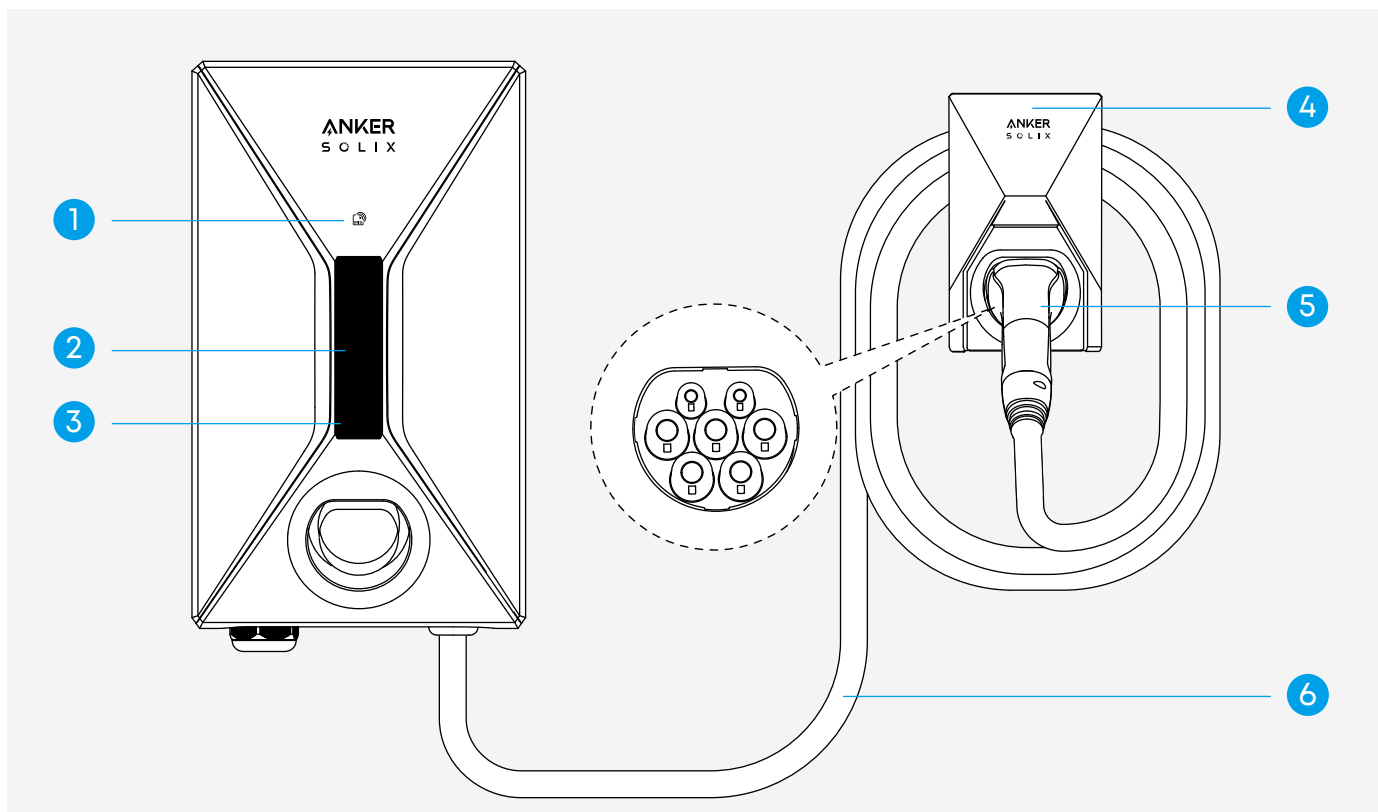
### 3.1 External Appearance

Socket Version



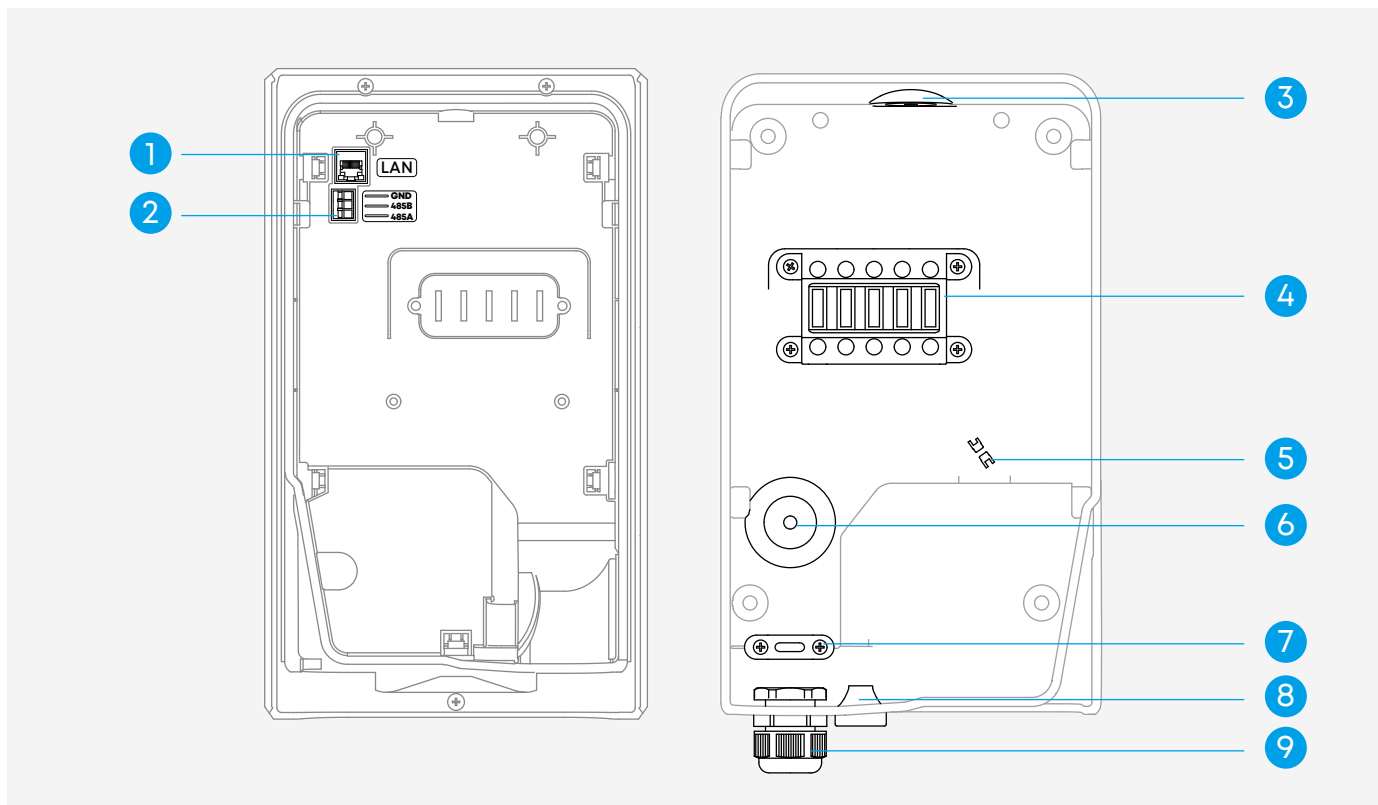
- ① RFID Reader
- ② Light Bar
- ③ Smart Touch Area
- ④ Type 2 Socket
- ⑤ EV Charger Holster

## Cable Version



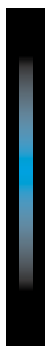
- ① RFID Reader
- ② Light Bar
- ③ Smart Touch Area
- ④ EV Charger Holster
- ⑤ Type 2 Connector
- ⑥ Charging Cable
  - AU Model: 7 m
  - UK / EU Model: 5 m

## 3.2 Internal Appearance



- ① Ethernet Port
- ② Smart Meter Terminals (RS485)
- ③ Top Cable Entry Inlet
- ④ Power Cable Terminals
- ⑤ Communication Cable Holder
- ⑥ Rear Cable Entry Inlet
- ⑦ Cable Clip
- ⑧ Communication Cable Inlet
- ⑨ Bottom Cable Entry Inlet

## 3.3 LED Guide



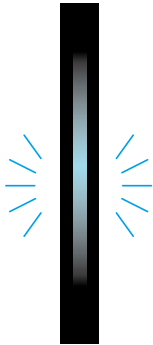
### Powered On

The LED illuminates toward the center, and then cycles twice.



### Connector Not Plugged In

The LED turns solid blue.



### Ready to Start

The LED flashes blue.



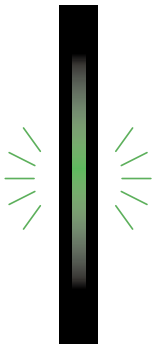
### Charging

The green LED runs from top to bottom.



### Solar Charging or Smart Charging Mode Enabled

The LED changes from green to blue while running from top to bottom.



### Charging Paused

The LED flashes green



### **Charging Completed**

The LED turns solid green.



### **Firmware Updating**

The white LED runs from top to bottom.



### **Error: Clock Not Calibrated**

The LED on the top turns solid red.

Your EV charger can still be used. However, clock calibration is required after a long power outage to avoid charging issues.

To recalibrate the clock, connect your EV charger to the app via Bluetooth or connect it to Wi-Fi. The calibration will run automatically.



### **Fault**

The LED flashes red.

Your EV charger cannot be used until the fault is rectified



### **Critical Fault**

The LED turns solid red.

Your EV charger can no longer be used. Please contact customer service.

## 4. Pre-Installation

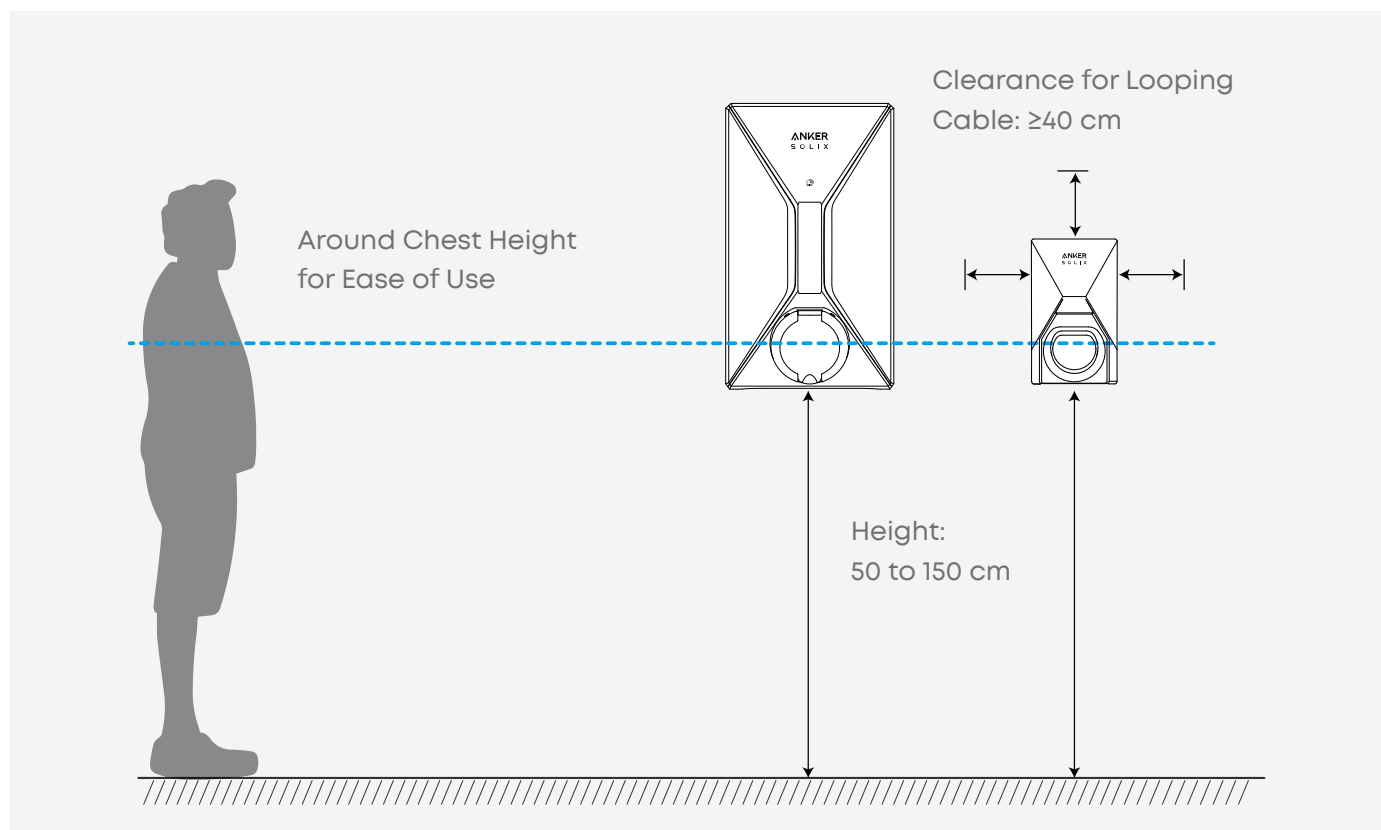
### 4.1 Select an Installation Site

#### Environmental Requirements

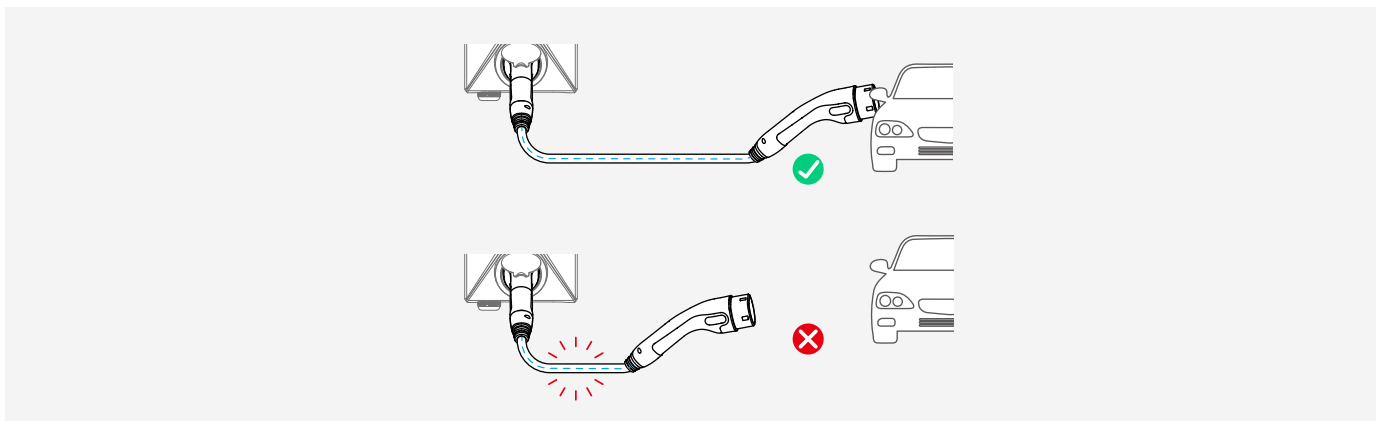
- Install the EV charger away from flammable, explosive, or chemical materials, strong magnetic fields, or wireless transmitters.
- Ensure the wall is solid, flat, and large enough to support the equipment, with a minimum bearing capacity of 100 kg.
- Avoid areas with strong vibrations, shock, or electromagnetic interference, such as a car wash, welding machine, electric arc furnace, electric motor, and places that may cause interference to the power grid.

#### Space Requirements

- Provide enough space around the EV charger for ventilation and cable looping.
- Select a height so that the connector can easily land in the dock.

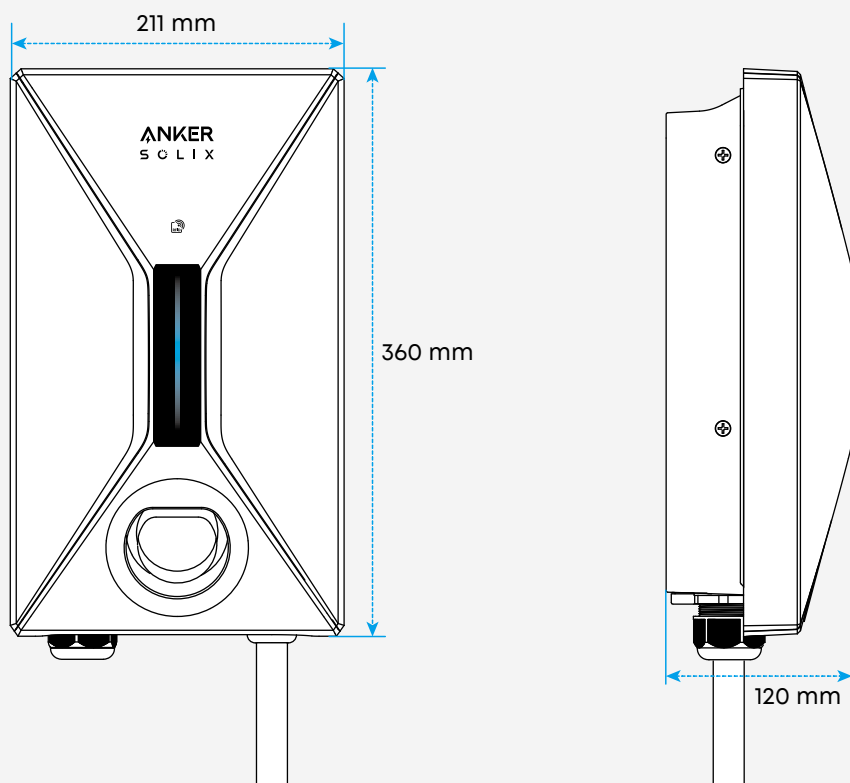


Ensure the connector reaches the charger port.

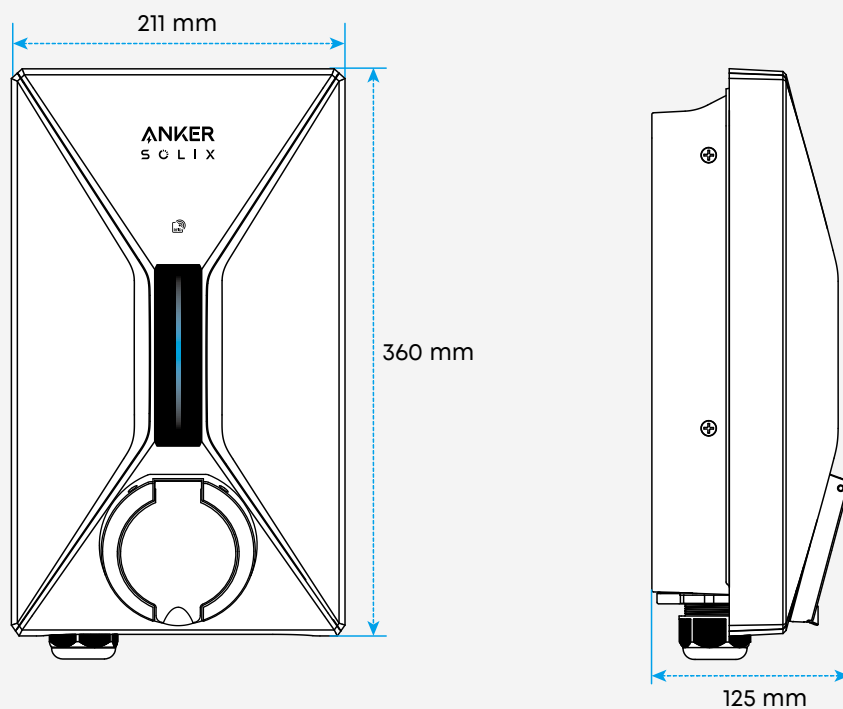


## Equipment Dimensions

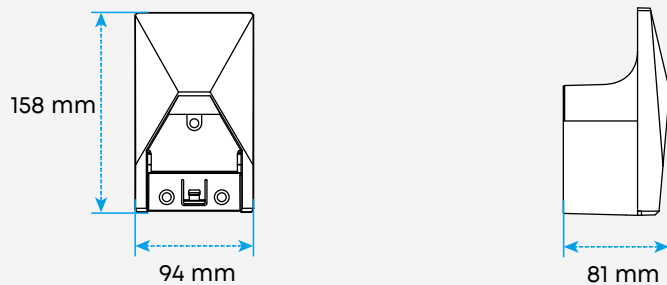
### Cable Version



## Socket Version



## EV Charger Holster

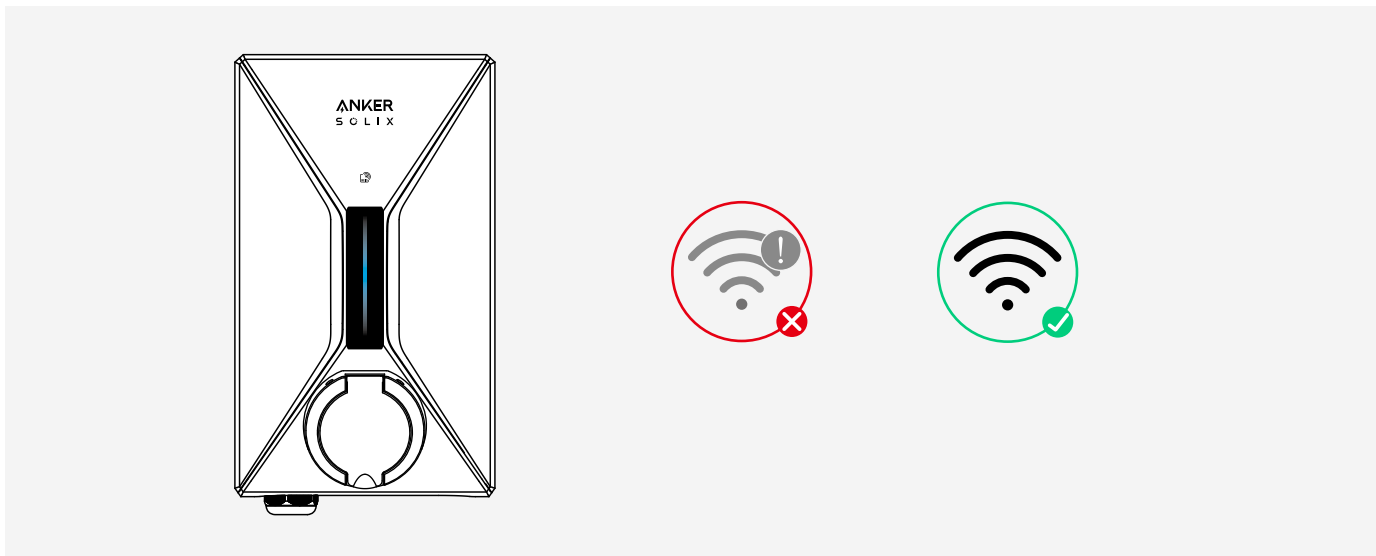




## Wi-Fi Reception

If using Wi-Fi connection, ensure the area has a good wireless signal.

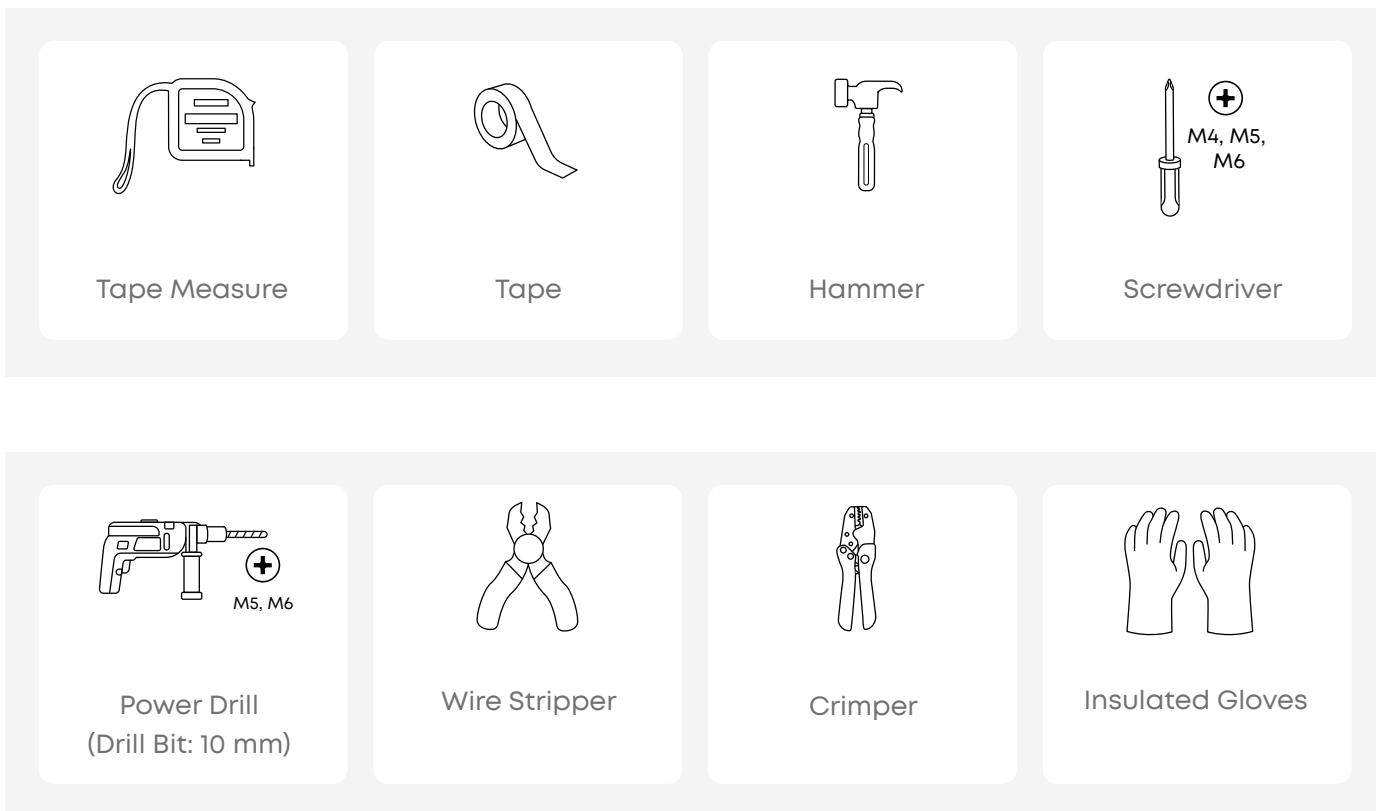
If a mobile device is able to connect to local 2.4Ghz Wi-Fi at a given location, it is a good indication that the EV charger will also be able to connect.



## 4.2 Tools and Accessories (Not Supplied)

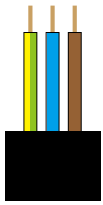
The following tools and accessories are not included in this package. Please make sure they are ready before installation.

### Required Items



## Hardwired Installation

Single-Phase



Three-Phase



Power Cables

### Conductor:

6 to 10 mm<sup>2</sup>, 32A (7.4kW and 22kW Models)

2.5 to 10 mm<sup>2</sup>, 16A (11kW Models)

### Outer Diameter:

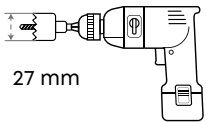
13 to 18 mm

### Materials:

Copper

## Optional Items

### Top / Middle Cable Entry

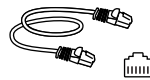


Hydraulic Hole Puncher



Wrench

### Wired Connection to Internet

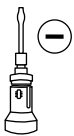


Ethernet Cable



Scissors

### Wired Connection to Smart Meter



Screwdriver



E2512

Tube Terminal



Signal Cable  
(1.3 to 2 mm<sup>2</sup> Conductor)

## 5. Installation

### Precautions

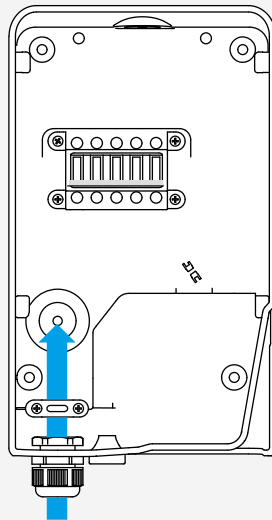
- You can install your EV charger on a wooden or concrete wall or on a wallbox stand.
- Follow the steps below to install the EV charger on a wooden or concrete wall.
- For installation on a wallbox stand, please contact a qualified installer.

### Step 1. Prepare the Wire Box

The EV charger supports three cable entry options. Select your preferred option and prepare the wire box accordingly.

#### Option 1: Bottom Cable Entry

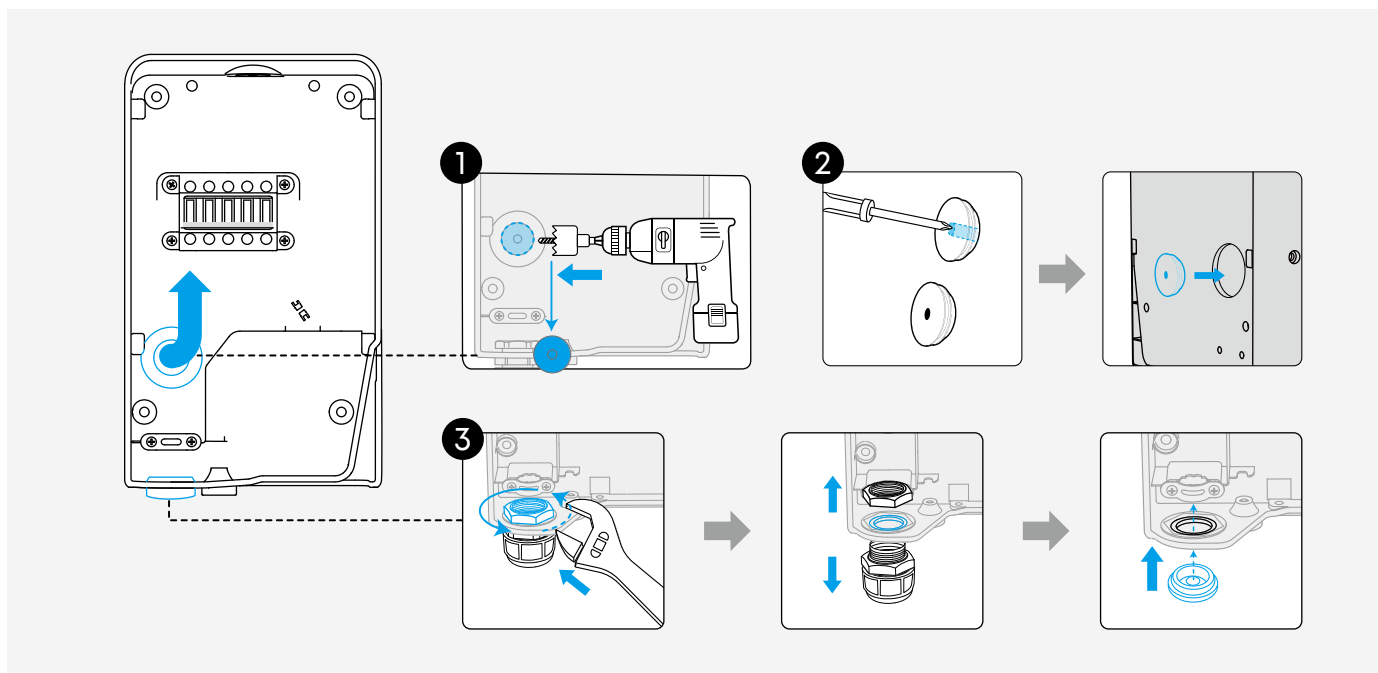
No additional preparation is required.



💡 For outdoor installations, it is recommended to use the bottom cable entry method.

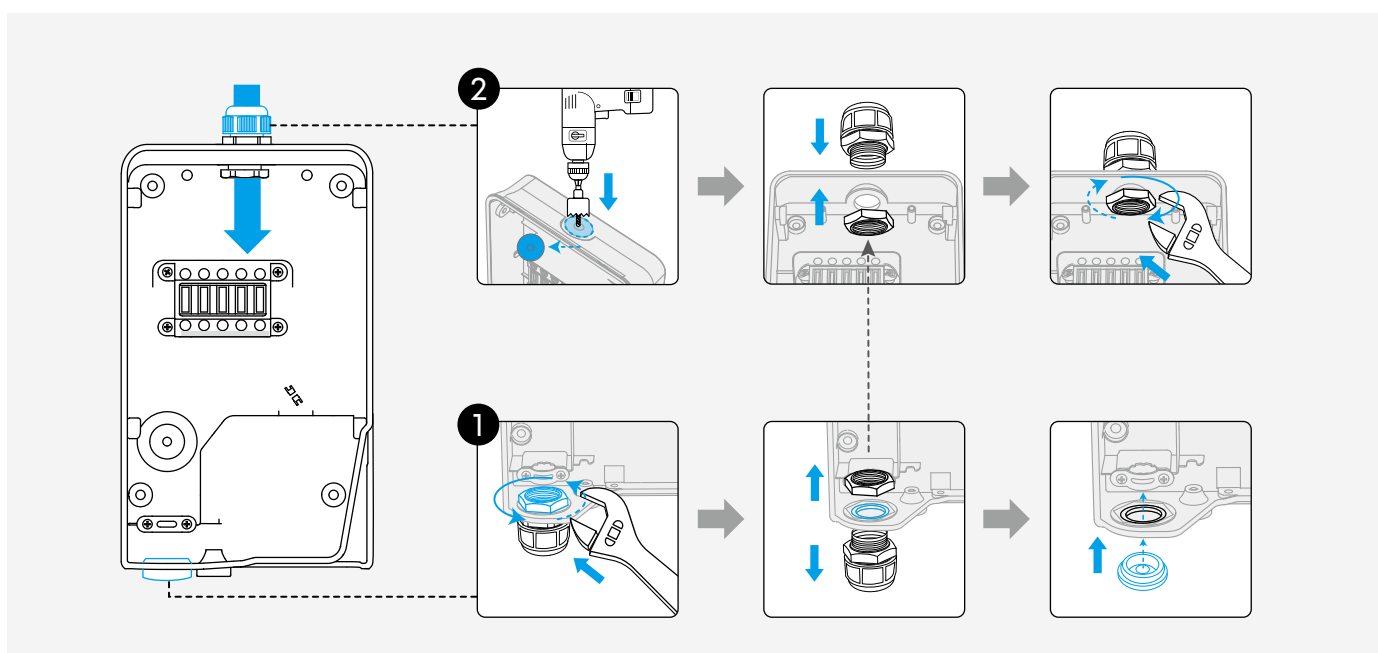
## Option 2: Middle Cable Entry

- 1 Drill a hole in the wire box using a hydraulic hole puncher.
- 2 Cut the cable seal, and install it into the new hole from the outside of the wire box.
- 3 Seal the original bottom cable entry inlet.



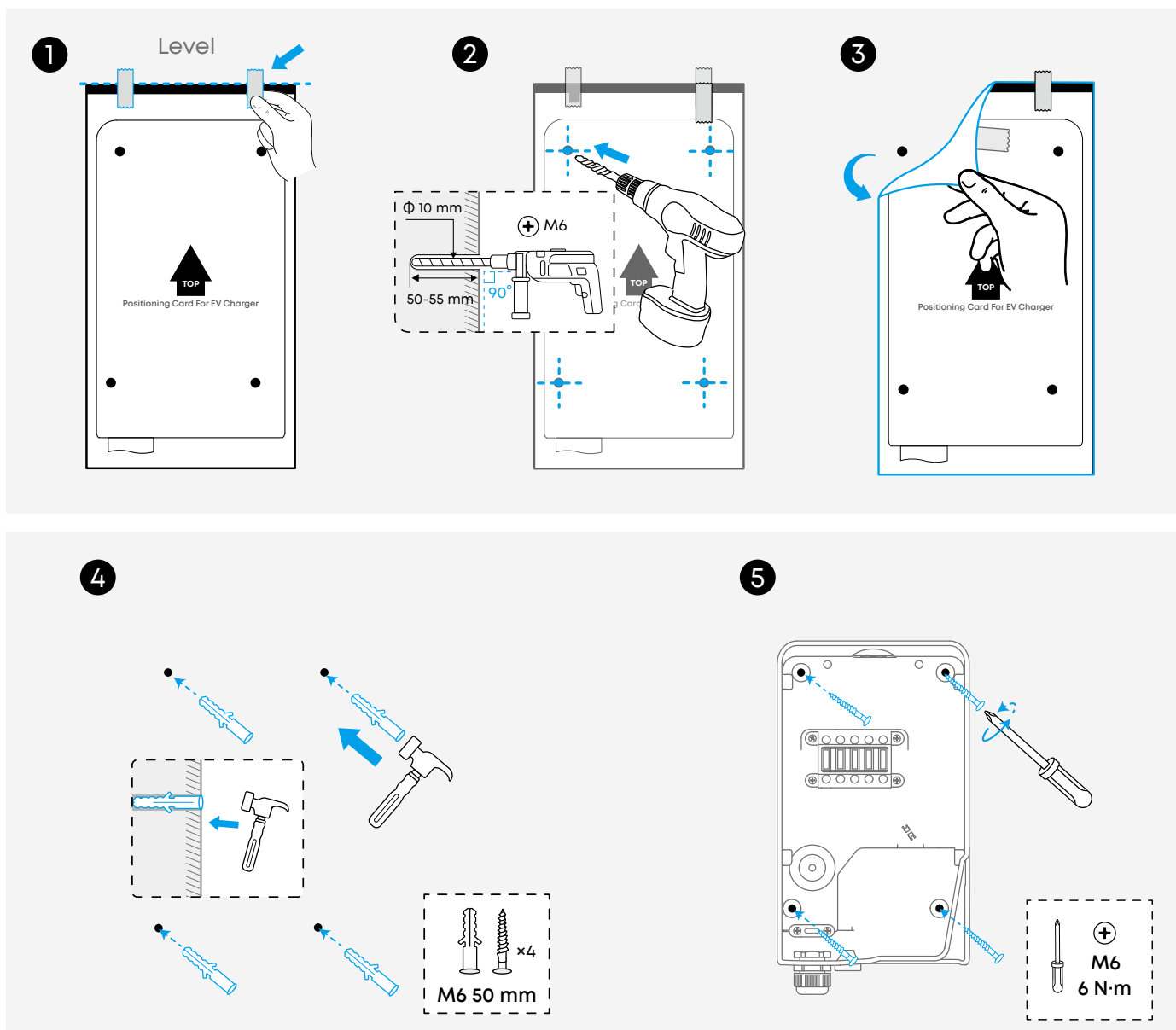
## Option 3: Top Cable Entry

- 1 Remove the cable gland and install the cable seal.
- 2 Drill a hole using a hydraulic hole puncher and install the cable gland onto the wire box.

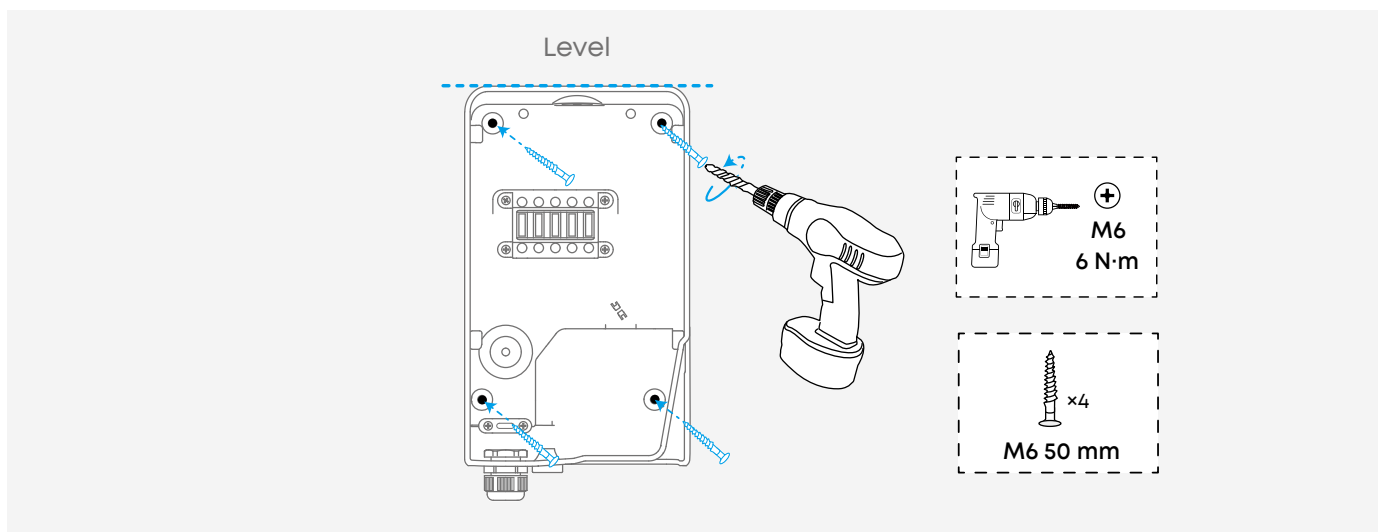


## Step 2. Mount the Wire Box to the Wall

For concrete or masonry walls: Use plastic anchors and self-tapping screws.



💡 For wooden walls: Use self-tapping screws only.

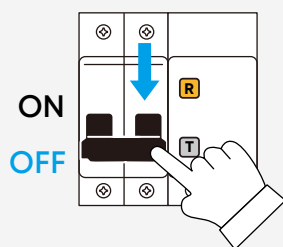


### Step 3. Connect to Power Supply

- ⚠️ · All electrical connections must comply with local regulations.
- Wiring must be performed by a qualified electrician.
- The EV charger features a built-in 6mA DC residual current monitoring device. Please ensure that an upstream Type A RCD, compliant with local regulations, is installed.

| EV Charger  | Circuit Breaker           | External RCD       |
|-------------|---------------------------|--------------------|
| 7.4kW Model | Single Phase, 40A Breaker | Type A, 40A / 30mA |
| 11kW Model  | Three Phase, 20A Breaker  | Type A, 20A / 30mA |
| 22kW Model  | Three Phase, 40A Breaker  | Type A, 40A / 30mA |

- ⚠️ · Before wiring, wear insulated gloves and turn off the circuit breaker for the EV charger.

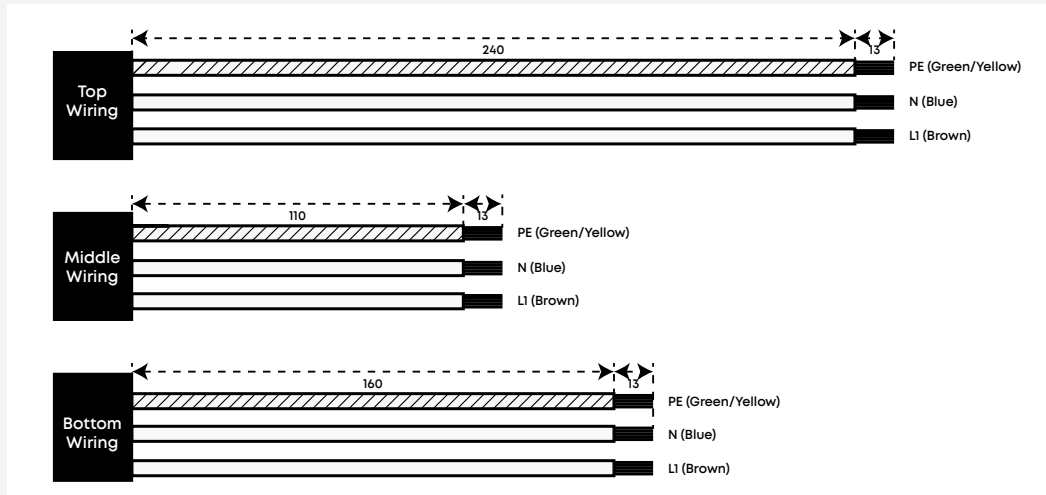


#### 1 Strip cables and crimp tube terminals.

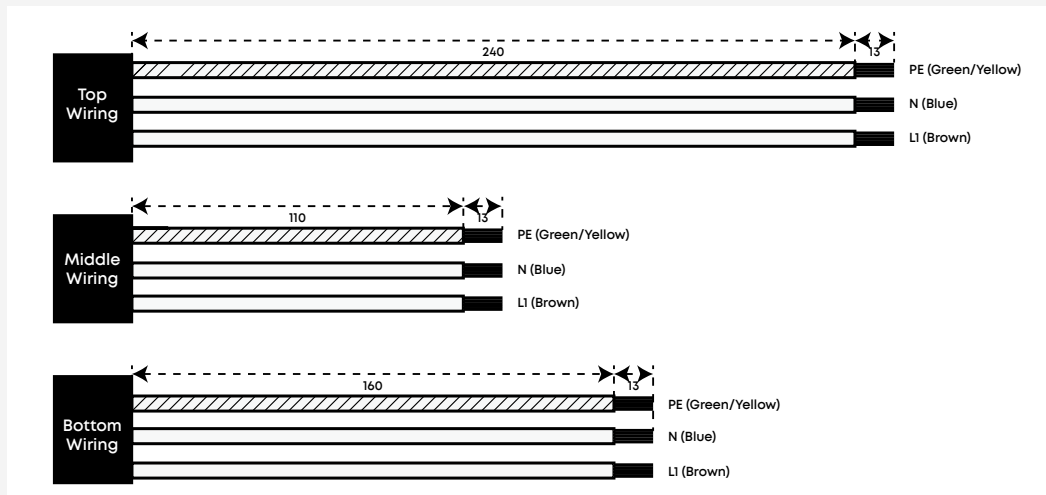


- The included tube terminals only fit 6 mm<sup>2</sup> cables. Please prepare tube terminals for other cable sizes.
- To reduce the risk of fire, remove 13 mm of the insulation layer from each conductor.
- Check the suggestions for stripping the power cables.

### Three-Phase Power Cable Stripping Suggestions (mm)



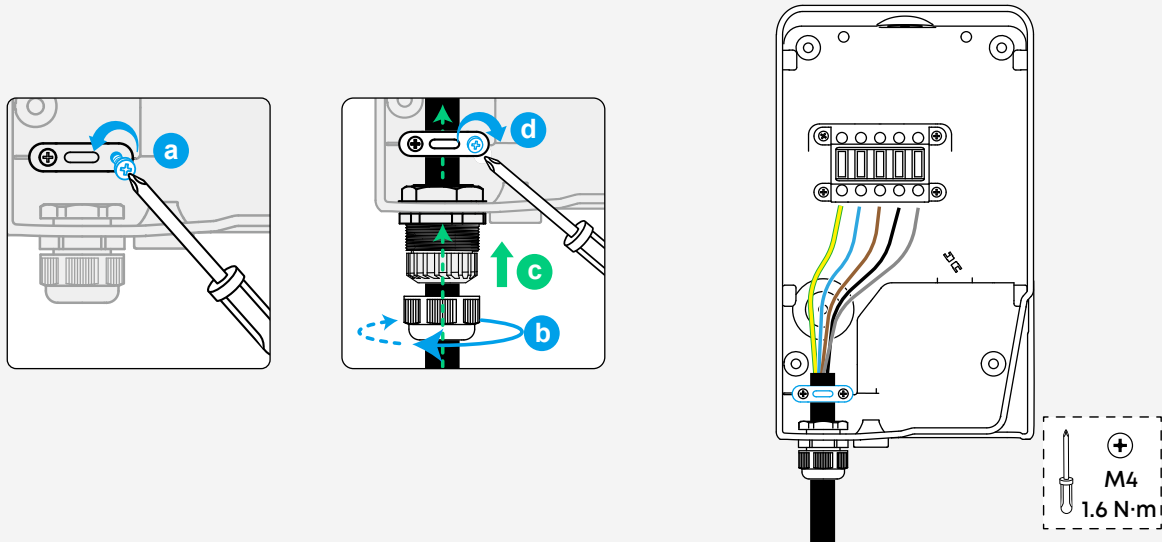
### Single-Phase Power Cable Stripping Suggestions (mm)



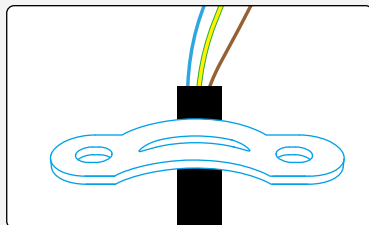
## ② Route cables (example: three-phase wiring).

### Bottom Cable Entry

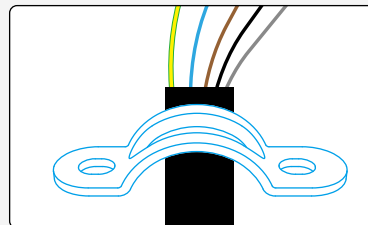
- Loosen the screw on the cable clip partially.
- Remove the connector from the cable gland.
- Route the cables through the connector, the cable gland, and the cable clip.
- Make sure the cables are long enough to reach the terminals. Secure the cables by tightening the cable clip.



💡 Replace the cable clip if needed.



Cable diameter:  
13 to 16 mm

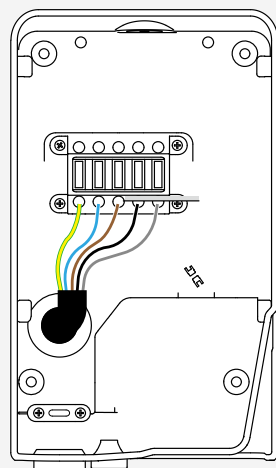


Cable diameter:  
16 to 18 mm



## Middle Cable Entry

Route the cables through the drilled hole.

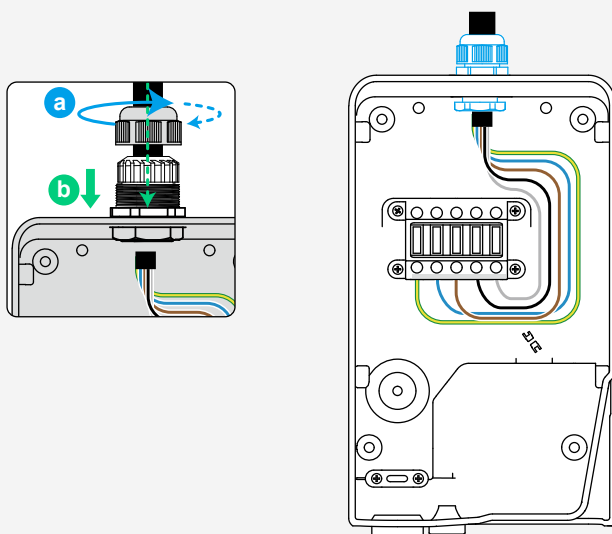


💡 • Ensure the cable seal is securely installed before routing the cables.

## Top Cable Entry

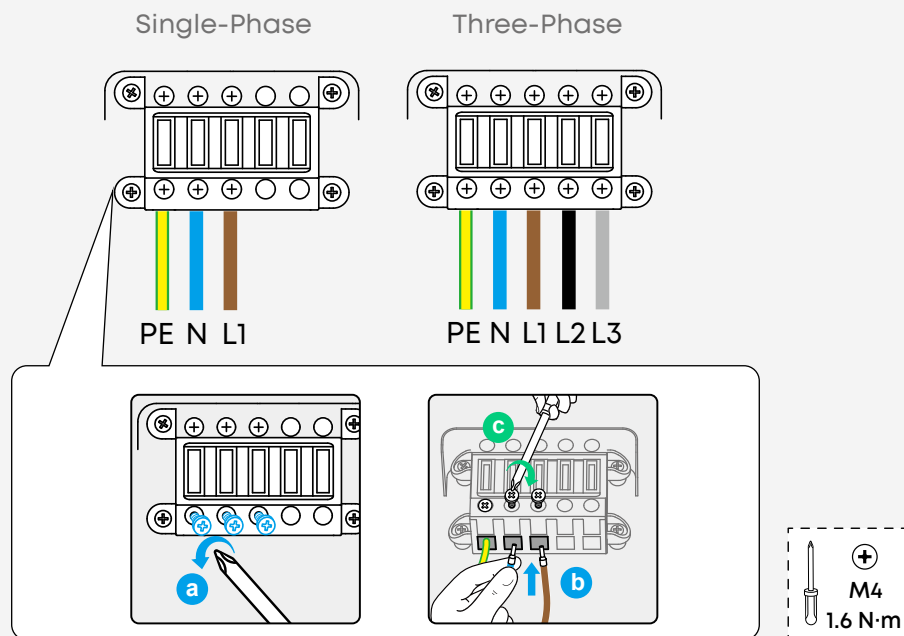
a. Remove the connector from the cable gland.

b. Route the cables through the connector and the cable gland.

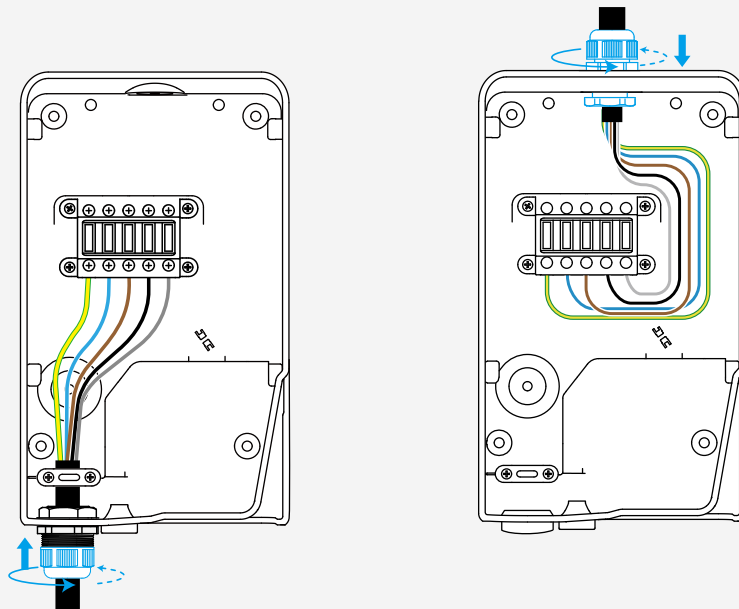


### 3 Secure cables.

- Confirm that the labels and colors of the cables are correct.
- After wiring, ensure that the metal parts of the tube terminals are not exposed.
- Gently pull the cables to ensure a secure connection.



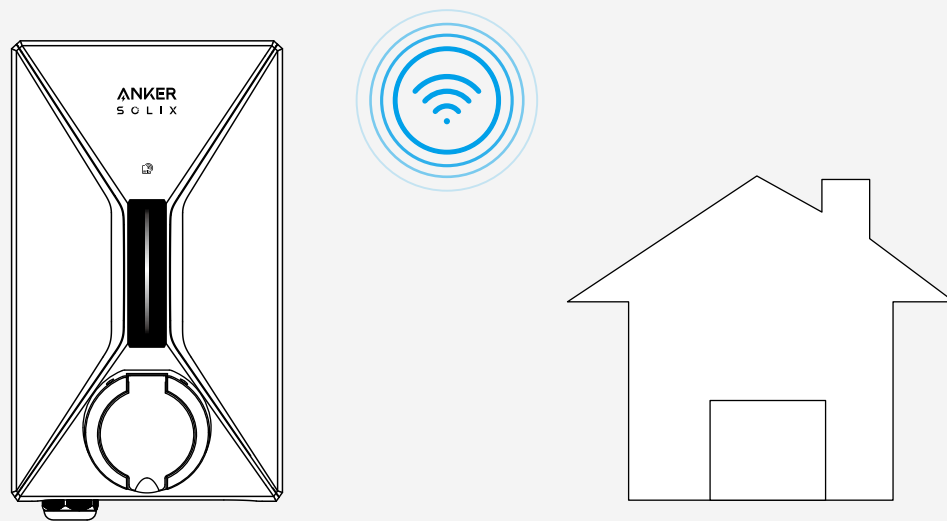
### 4 Tighten the connector (for top or bottom cabling).



## Step 4. Connect to the Internet

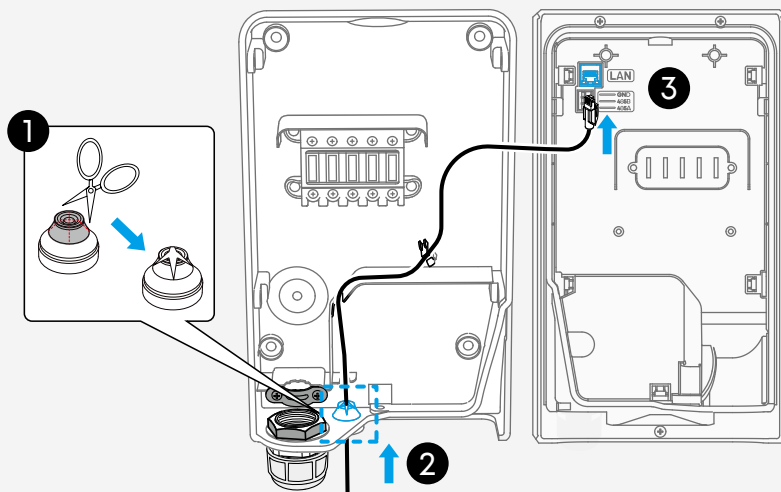
### Option 1: Wireless Connection

Configure the Wi-Fi connection during app setup.



### Option 2: Wired Connection

- ❶ Cut the rubber plug inside the wire box.
- ❷ Route the Ethernet cable through the rubber plug.  
Make sure to leave 430 mm of the cable inside the EV charger.
- ❸ Insert the Ethernet cable into the Ethernet port on the EV charger.



💡 · Tip: Angle the Ethernet connector while inserting it into the rubber plug.

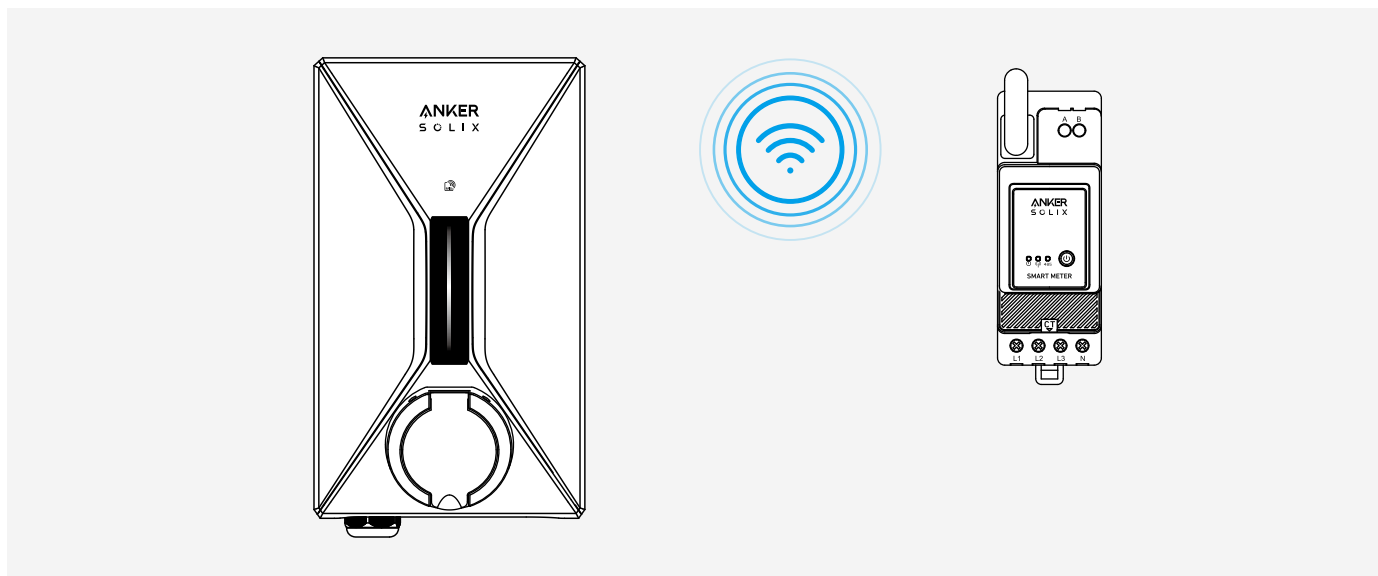
## Step 5. Connect to a Smart Meter (Optional)

A smart meter is required to activate solar charging mode and load balancing mode. Supported smart meter include:

- Anker SOLIX Smart Meter (A17X7)
- Shelly Smart Meter Pro 3EM
- Shelly Smart Meter 3EM

### Option 1: Wireless Connection

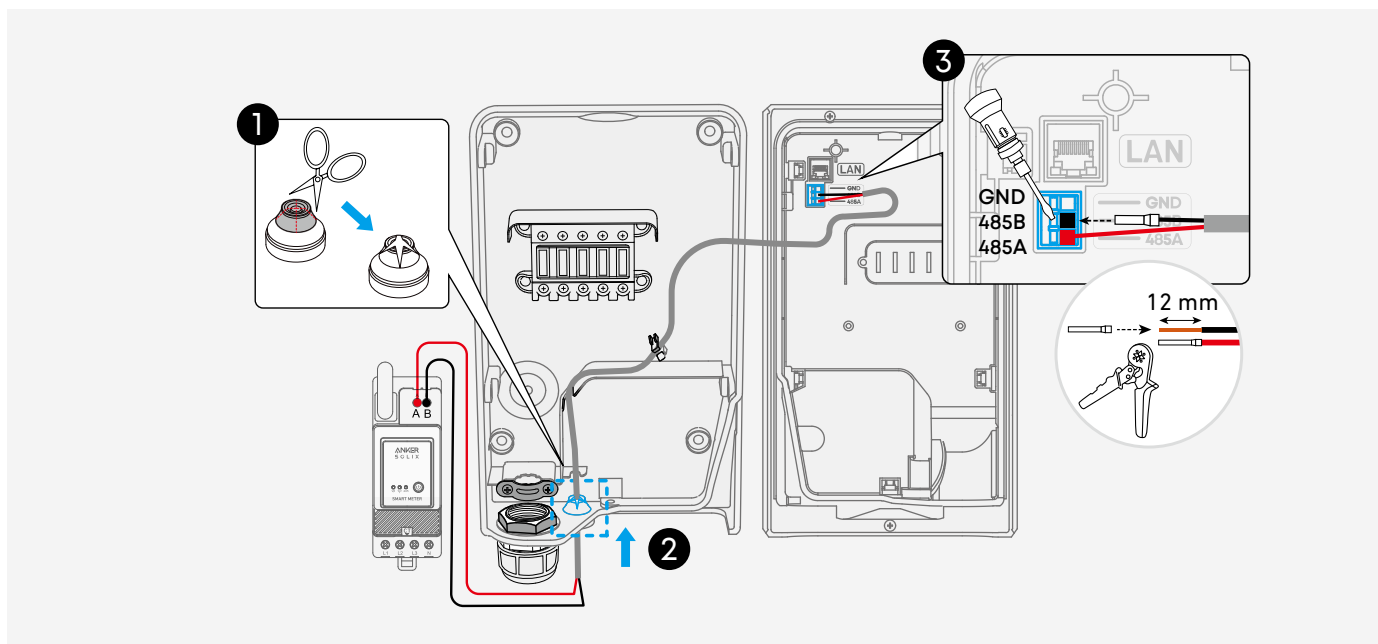
Connect the EV charger and smart meter to the same Wi-Fi network in the Anker app.



### Option 2: Wired Connection

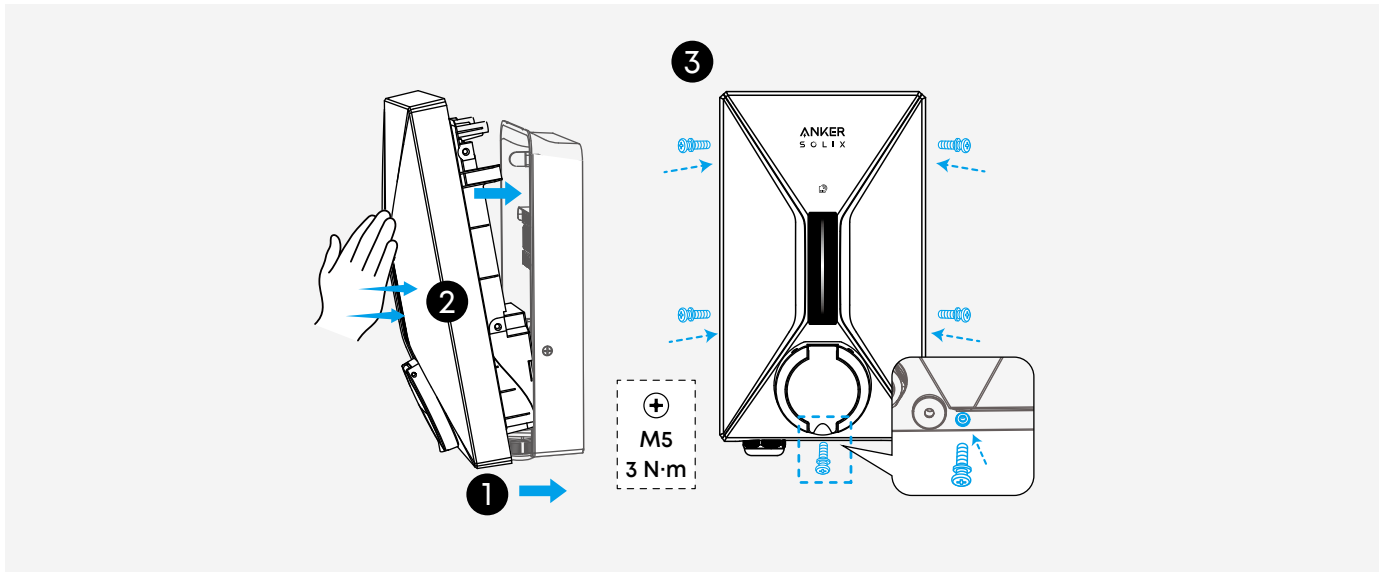
This option only applies to Anker SOLIX Smart Meter.

- 1 Cut the rubber plug inside the wire box.
- 2 Route the signal cables through the rubber plug.
- 3 Insert the signal cables into the smart meter terminals on the EV charger.



## Step 6. Attach the Charger Body to the Wire Box

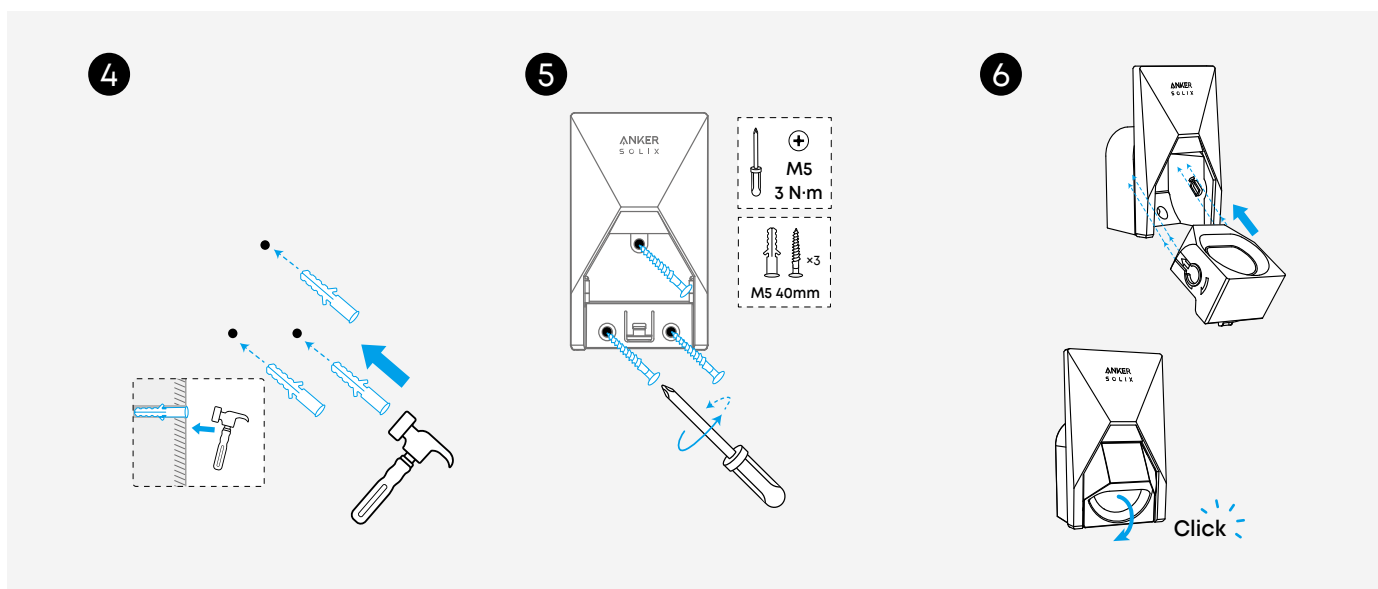
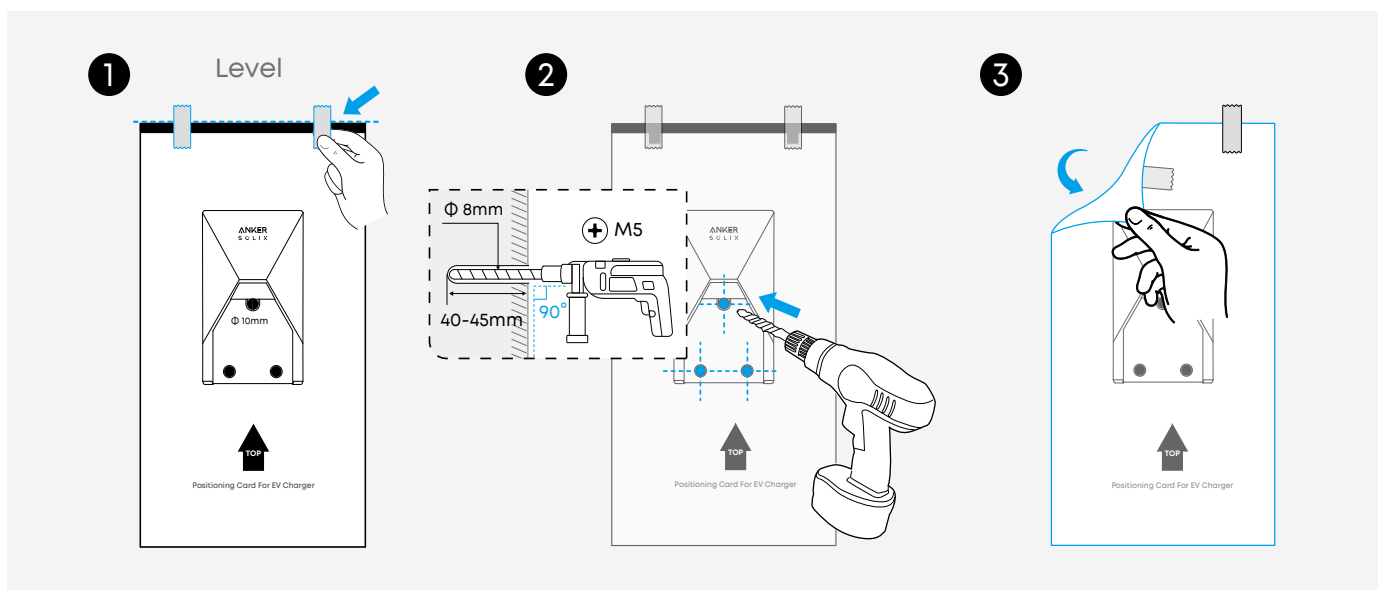
- 1 Align the charger body with the bottom edge of the wire box.
- 2 Push the charger body toward the wire box until it fits securely.
- 3 Fasten the charger body to the wire box using the included screws.



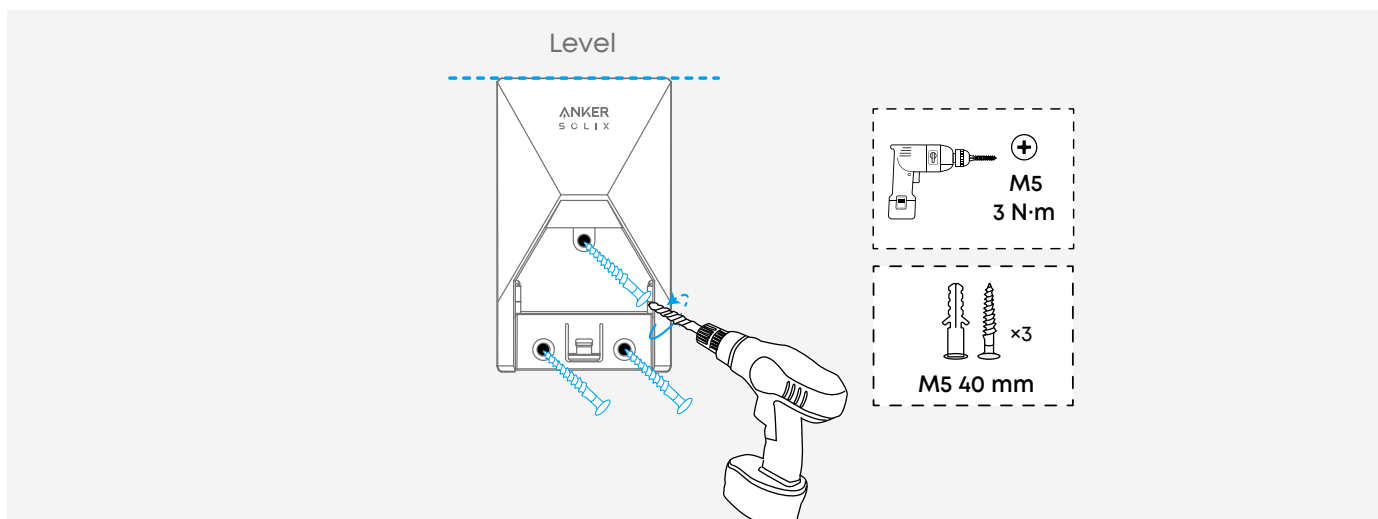
💡 · Tighten the screws in a diagonal sequence until the EV charger body is securely fixed.

## Step 7. Install the EV Charger Holster

For concrete or masonry walls: Use plastic anchors and self-tapping screws.

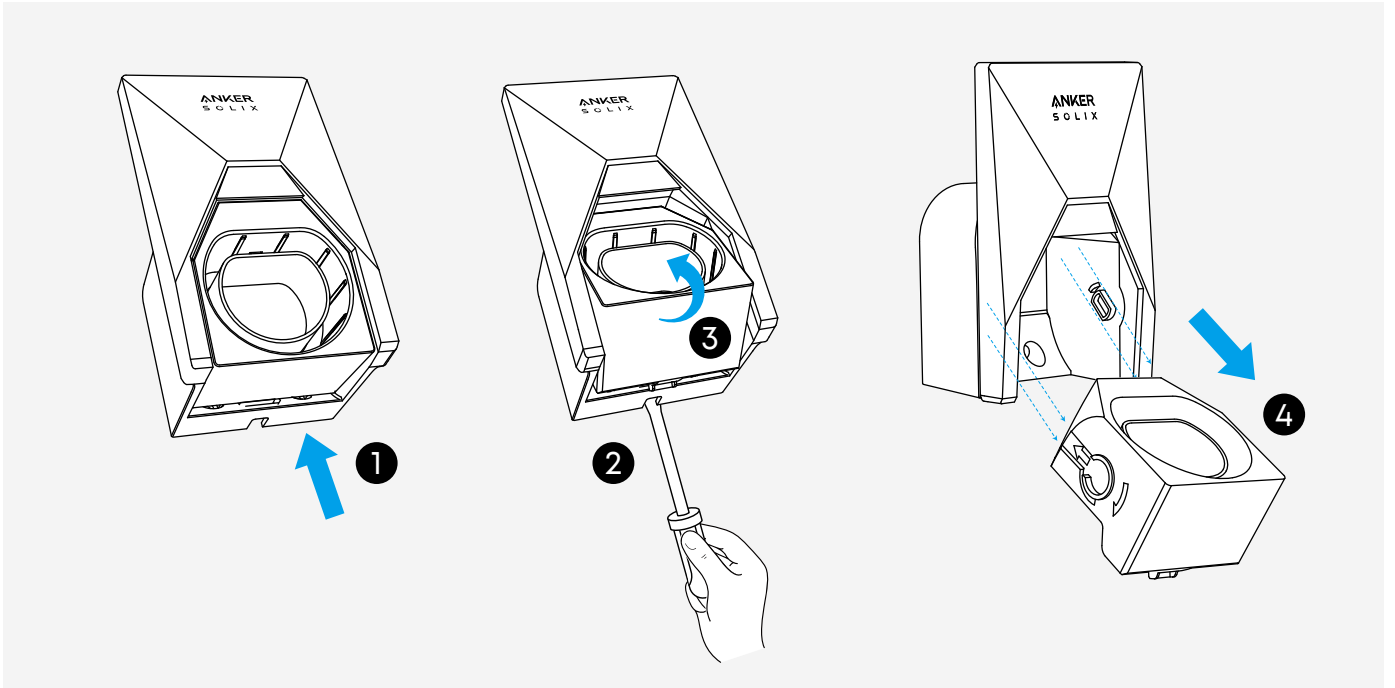


💡 For wooden walls: Use self-tapping screws only.



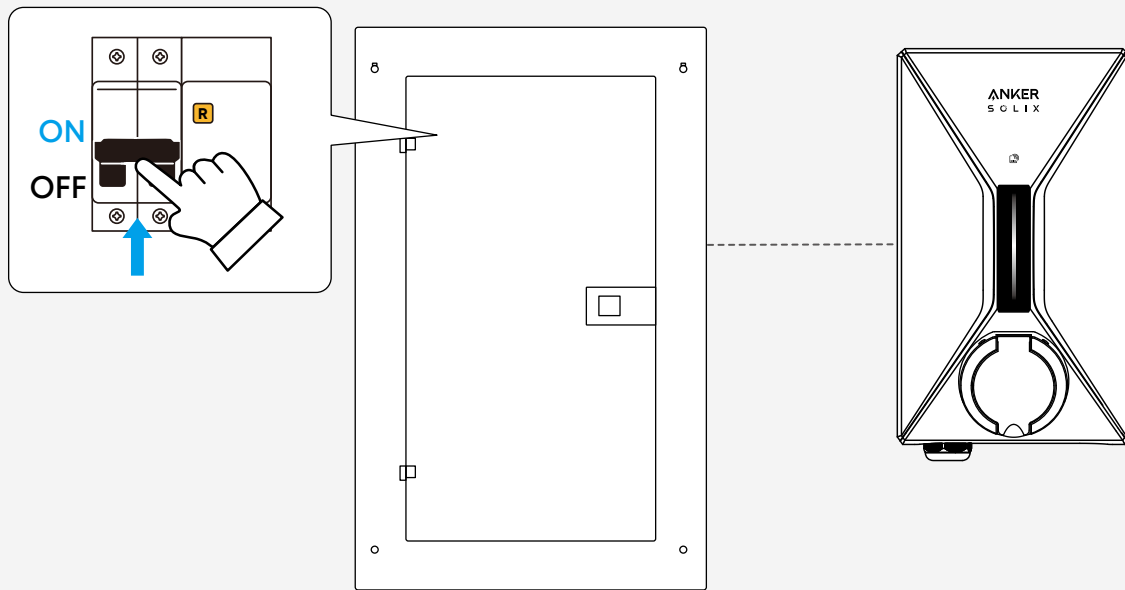
💡 To disassemble the EV charger holster, follow the steps below.

- 1 Locate the tab.
- 2 Rotate the dock while pressing the tab.
- 3 Remove the dock.

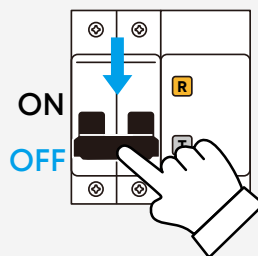


## 6. Power On / Off

Before powering on the EV charger, ensure that all cables are properly connected. To power on the EV charger, switch the charger circuit breaker to the ON position.



💡 To power off the EV charger, set the charger circuit breaker to the OFF position.



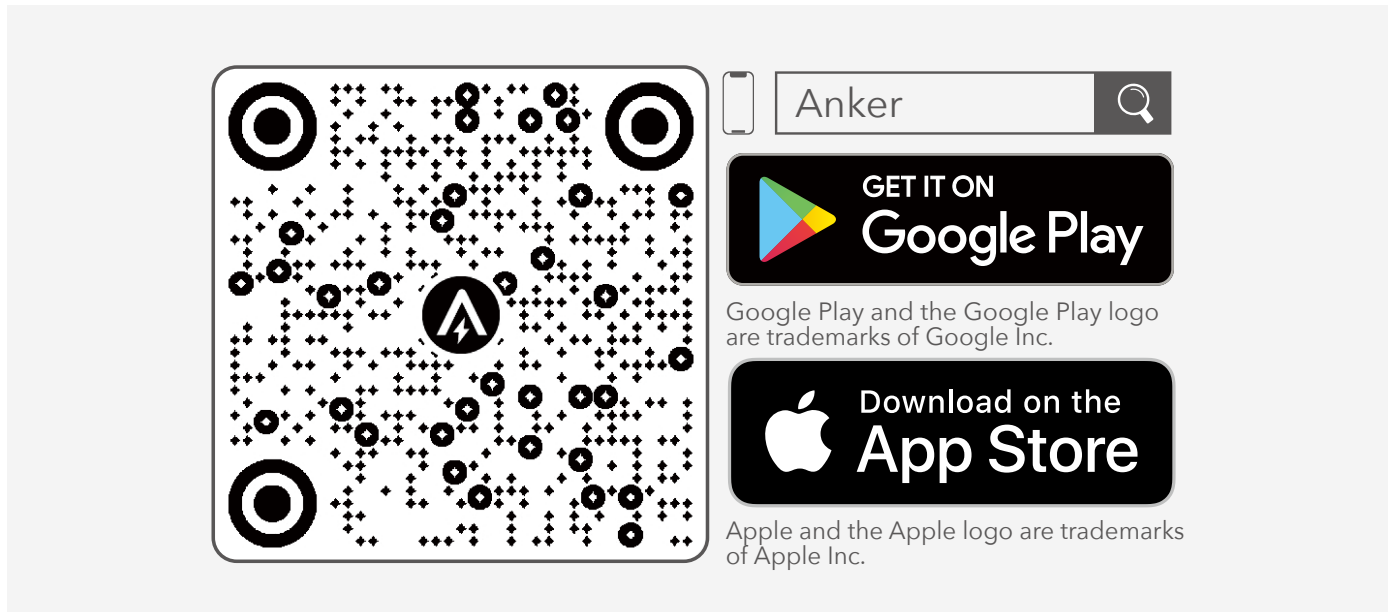


## 7. Anker App for Smart Control

The Anker App allows you to monitor and manage your EV charger easily. Please note that the user interface images displayed are for illustration purposes and may differ from your actual view based on the software version.

### 7.1 Download the Anker App

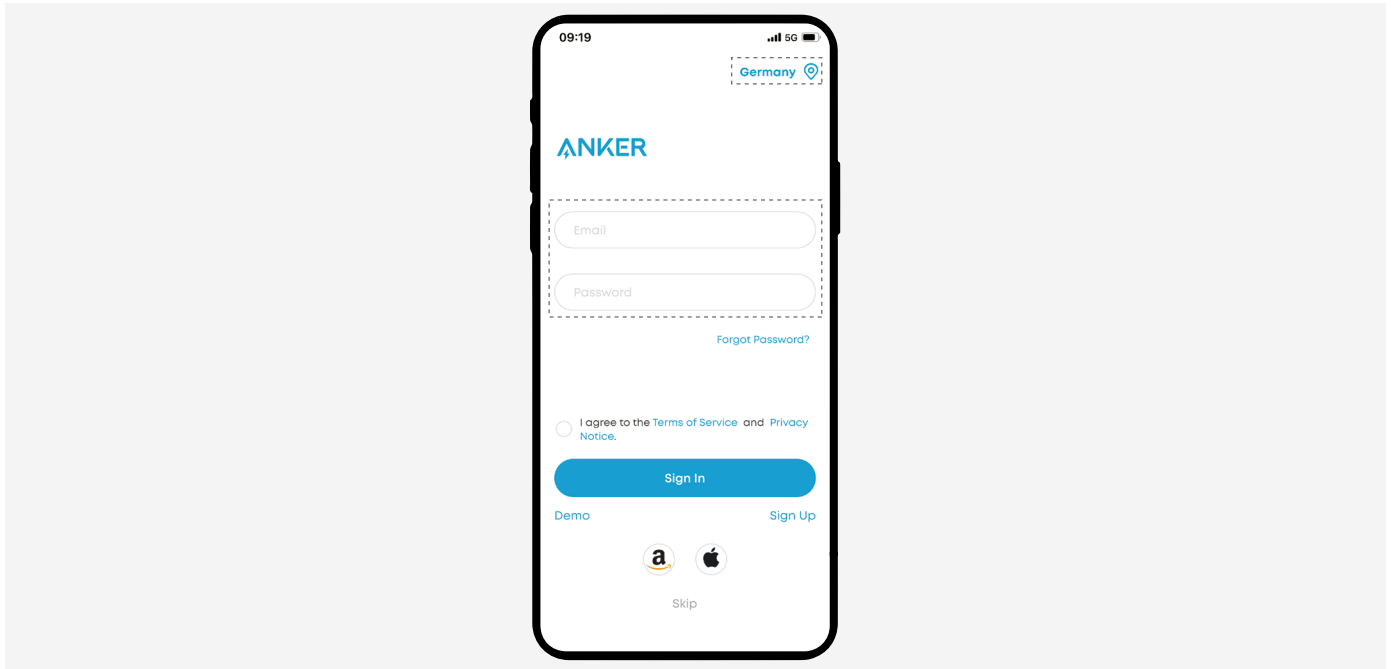
Download the Anker app from the App Store (iOS devices), from Google Play (Android devices), or by scanning the QR code.



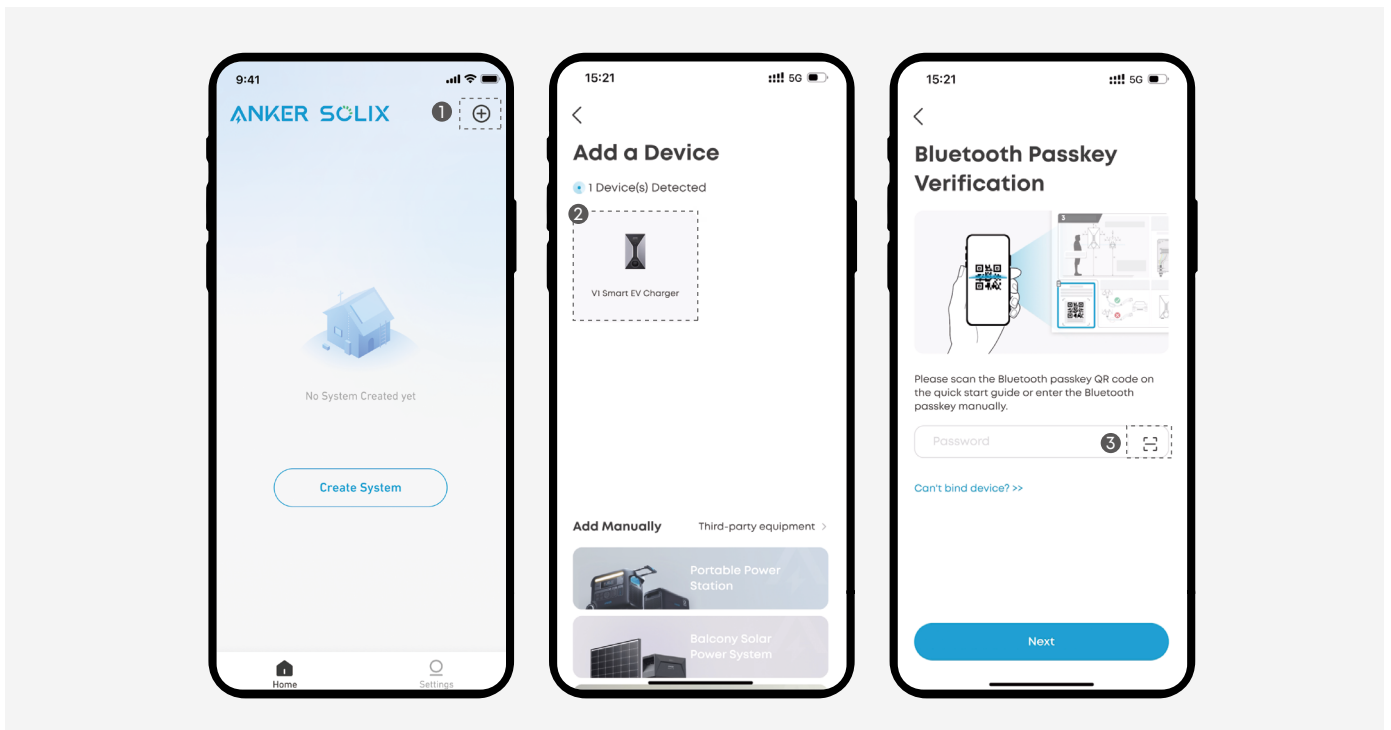
## 7.2 Add Your EV Charger

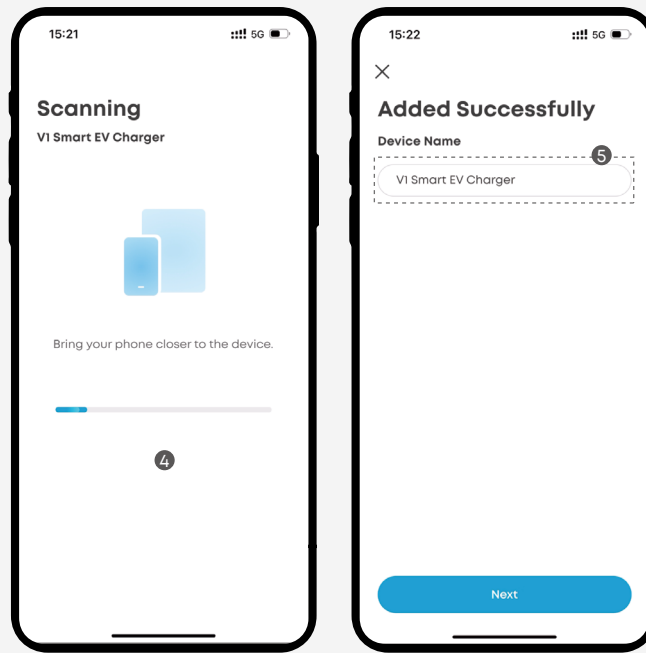
Begin by adding your EV charger to the system.

1. Sign in or create an account. Please note that the country or region selected **MUST** match where you live. An incorrect country or region may cause the device connection to fail.



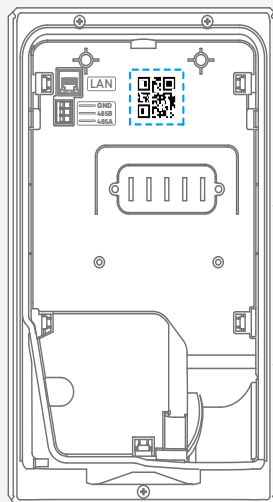
2. Scan or enter the Bluetooth passkey on the first page of the Quick Start Guide.



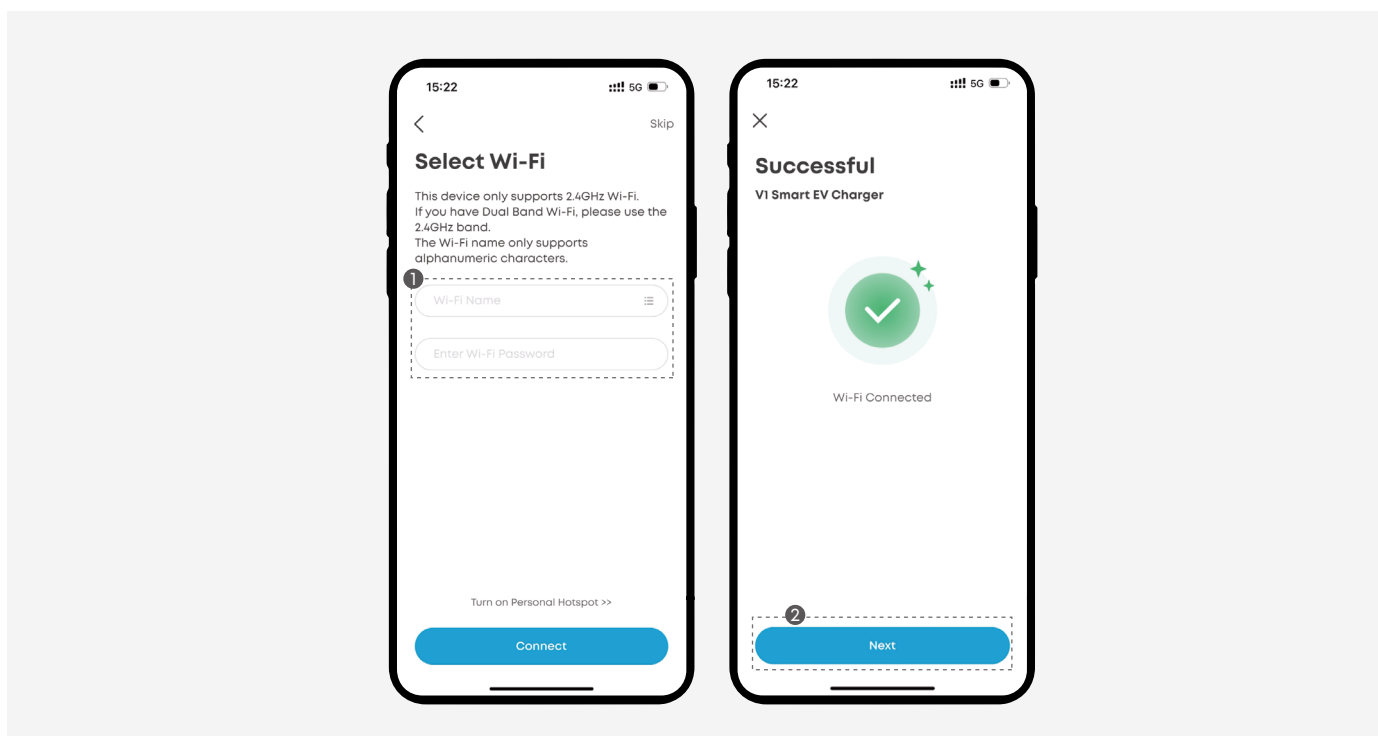


### 💡 Save Your Bluetooth Passkey

- Take a photo of your Bluetooth passkey for easy reference.
- You will need this passkey if you want to add the EV charger again in the future.
- The passkey can also be found on the back of the charger body.



### 3. Connect your EV charger to a Wi-Fi network.



💡 If you encounter connection issues, try the following:

- Confirm that your Wi-Fi router is working normally.
- Move your router closer to the EV charger.
- Verify that the Wi-Fi password is correct.

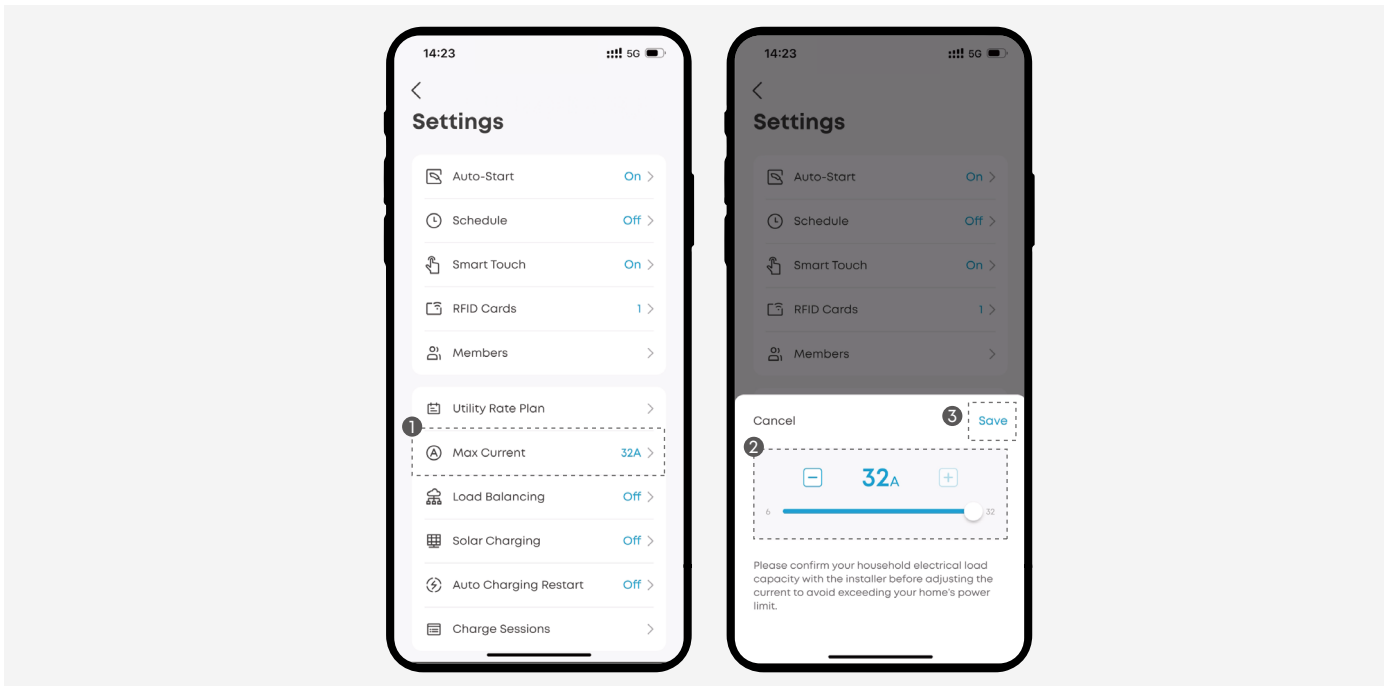
## 7.3 Max Current

Set the maximum charging current for your EV charger based on your home's electrical capacity.

- 💡
- Always confirm your home's load capacity with a qualified installer or electrician before adjusting the charging current.
  - Setting the current above your limit may cause safety risks or power outages.

## How to Set Up:

1. Tap **Max Current** on the settings page.  
(Range: 6A up to the EV charger's rated current)
2. Adjust the maximum current.
3. Tap **Save** to apply your setting.



## 7.4 Utility Rate Plan

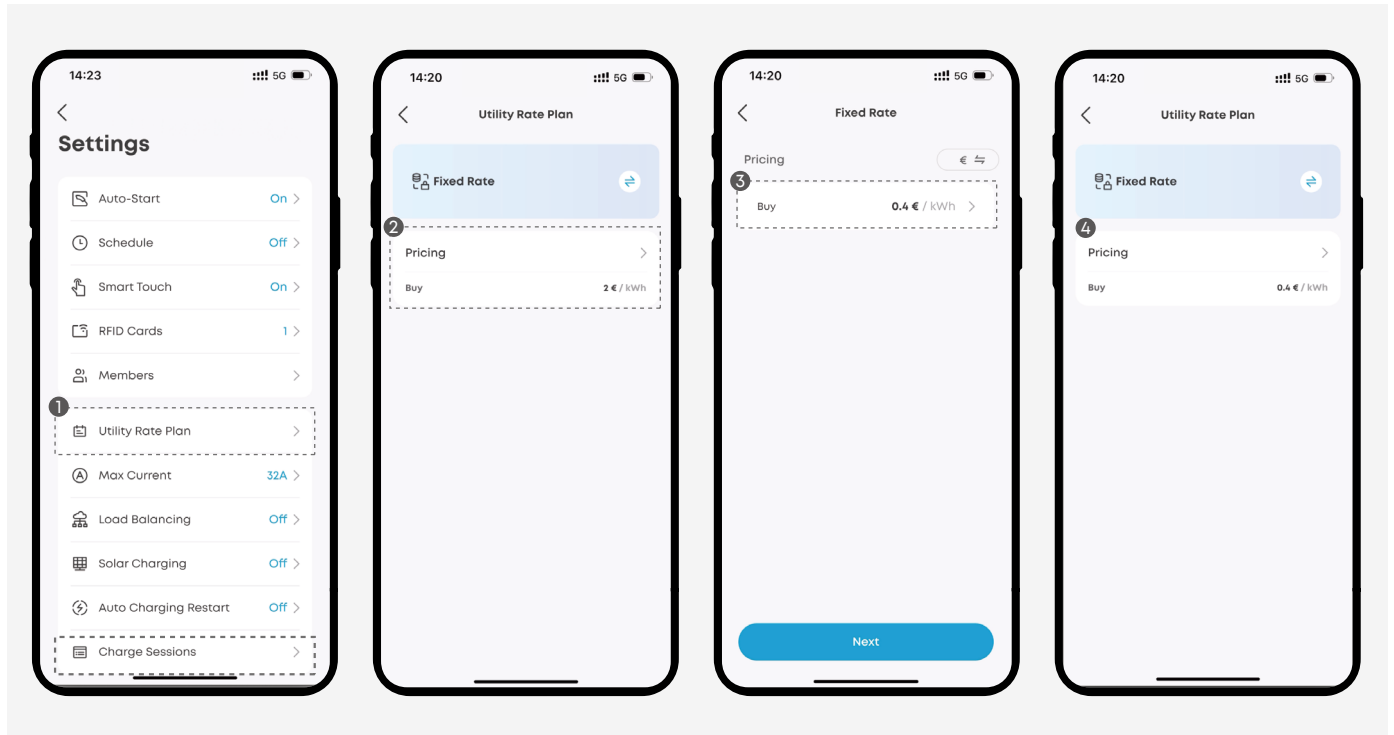
To view electricity costs, make sure the EV charger is connected to the Internet and a rate plan has been set up. Cost data will automatically refresh every 5 minutes.

Your EV charger supports three tariff structures. Choose the one that matches your household electricity contract.

## Fixed Rate

A fixed rate tariff means you pay the same price for electricity at all times. This is common for households where prices do not change throughout the day or year.

Go to **Utility Rate Plan > Pricing** and enter your electricity purchase price.



## Time of Use

A time of use (TOU) tariff reflects changing electricity prices throughout the day and year. Electricity prices are higher during high-demand periods, and lower during low-demand times. Some utilities also divide rates by season.

Electricity prices fluctuate throughout the day. Time periods can be categorized into:

|                       |                                                                                                                             |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Peak</b>           | <ul style="list-style-type: none"><li>• Most expensive</li><li>• During daytime when demand usually peaks</li></ul>         |
| <b>Mid-Peak</b>       | <ul style="list-style-type: none"><li>• Moderately priced</li><li>• Early evenings or midday, with average demand</li></ul> |
| <b>Off-Peak</b>       | <ul style="list-style-type: none"><li>• Cheapest</li><li>• Nights or early mornings when demand is low</li></ul>            |
| <b>Super Off-Peak</b> | <ul style="list-style-type: none"><li>• Lowest price</li><li>• Often very late at night or early morning</li></ul>          |

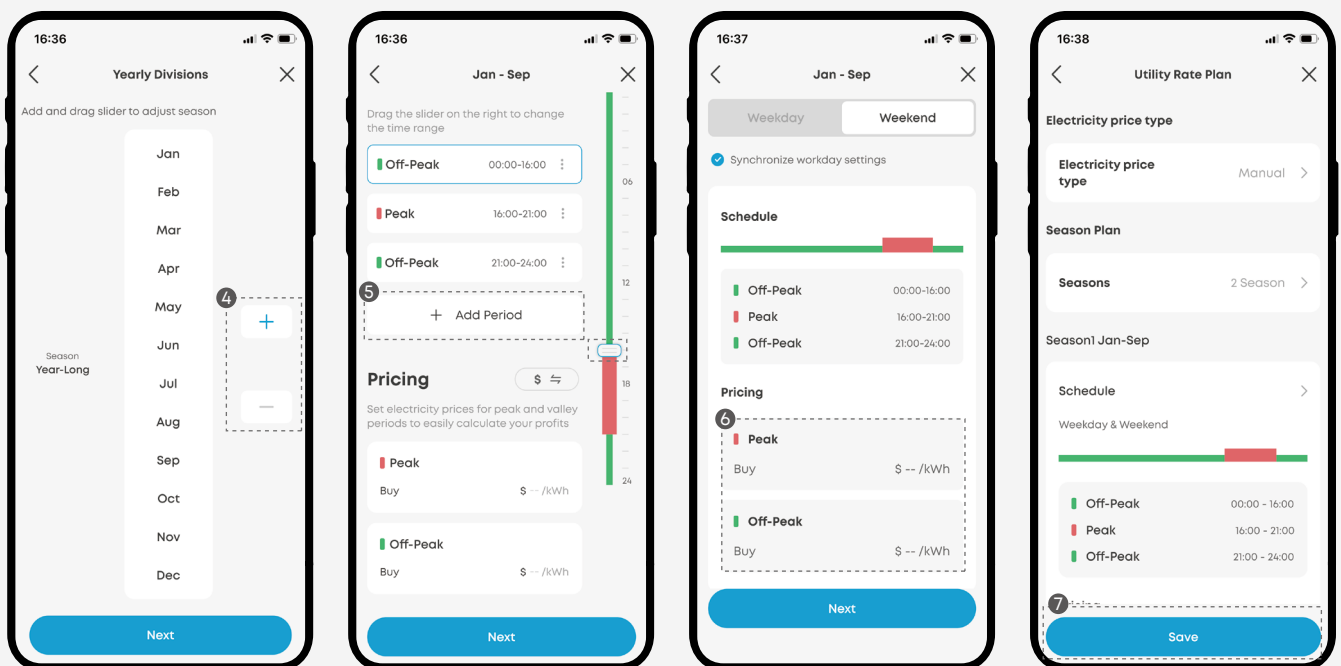
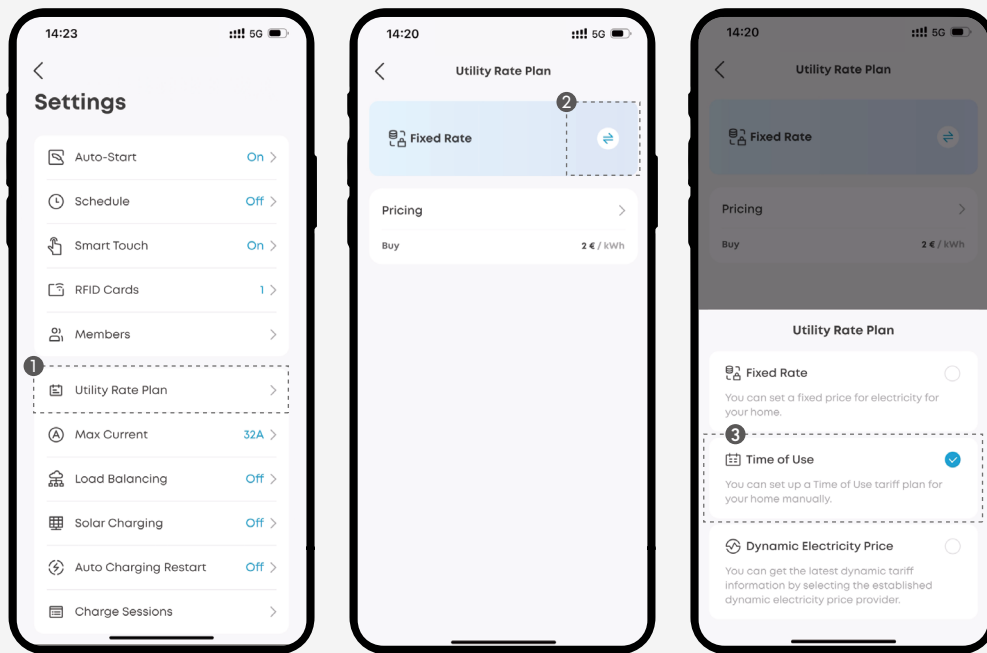
## How to Set Up

1. Tap **Utility Rate Plan** on the settings page in the Anker app.
2. Tap the switch icon.
3. Select **Time of Use**.
4. Choose a time structure.

Year-Long: Apply the same rates throughout the year.

Season: Use different rate plans for different seasons. Add or remove seasons as needed.

5. Edit time periods by dragging the slider. Tap **Add Period** to include additional periods. Repeat this for weekends if necessary.
6. Enter the price for each time period. Repeat for all time periods and seasons.
7. Review and save your settings.



## Dynamic Electricity Price

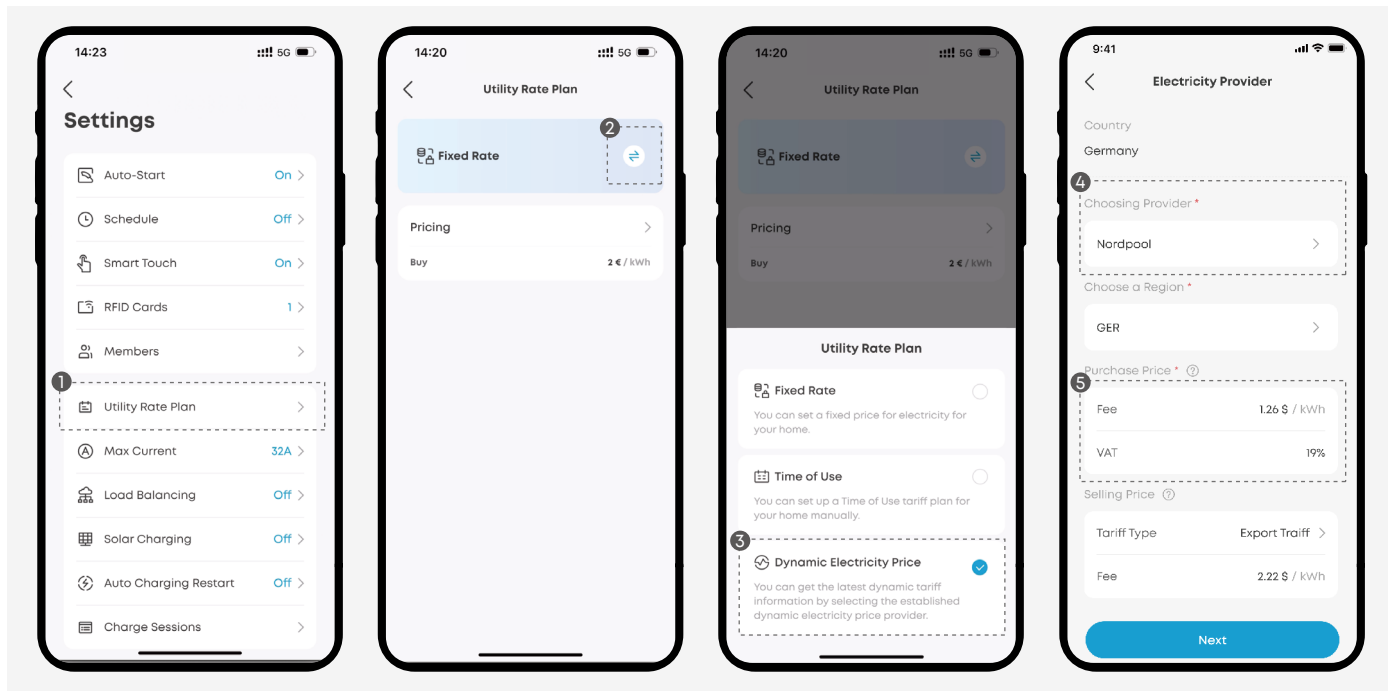
A dynamic tariff automatically fetches real-time electricity prices from your provider (such as Nord Pool), so your charging cost reflects the latest market price.

### How to Set Up

1. Tap **Utility Rate Plan** on the settings page in the Anker app.
2. Tap the switch icon.
3. Select **Dynamic Electricity Price**.
4. Select Nord Pool as the electricity price data provider and choose your region.
5. Confirm or adjust the purchase price.

- **VAT:** Confirm the correct value-added tax rate for your area.
- **Fee:** Ensure it includes other applicable taxes, network fees, and levies.

Note: The combined total of the wholesale price, VAT, and fees should closely match the retail price on your electricity bill.





## 7.5 Load Balancing Mode

Load balancing monitors the home's load in real time and dynamically adjusts the EV charger's charging current. This prevents total power consumption from exceeding the main breaker rating, ensuring electrical safety and preventing power outages.

### Product Requirements

#### Option 1: EV Charger + Smart Meter

##### Supported Smart Meter Models

| Anker SOLIX                       | Third Party                  |
|-----------------------------------|------------------------------|
| · Anker SOLIX Smart Meter (A17X7) | · Shelly Smart Meter Pro 3EM |
|                                   | · Shelly Smart Meter 3EM     |

#### Option 2: EV Charger + Anker SOLIX X1

##### Supported Anker SOLIX X1 Power Module Models

| Hybrid Single-Phase Models | Hybrid Three-Phase Models |
|----------------------------|---------------------------|
| · X1-H3.68K-S              | · X1-H5K-T                |
| · X1-H4.6K-S               | · X1-H8K-T                |
| · X1-H5K-S                 | · X1-H10K-T               |
| · X1-H5K-S BE              | · X1-H10K-T BE            |
| · X1-H6K-S                 | · X1-H12K-T               |

### How It Works

#### 1. Real-Time Monitoring

The EV charger continuously tracks the total home load using one of the following methods:

##### Option 1: Connect to a Smart Meter

Directly connect your EV charger to a supported smart meter.

##### Option 2: Connect to Anker SOLIX X1

The EV charger receives real-time load data from your Anker SOLIX X1 energy storage system via the local network.

## 2. Automatic Current Adjustment

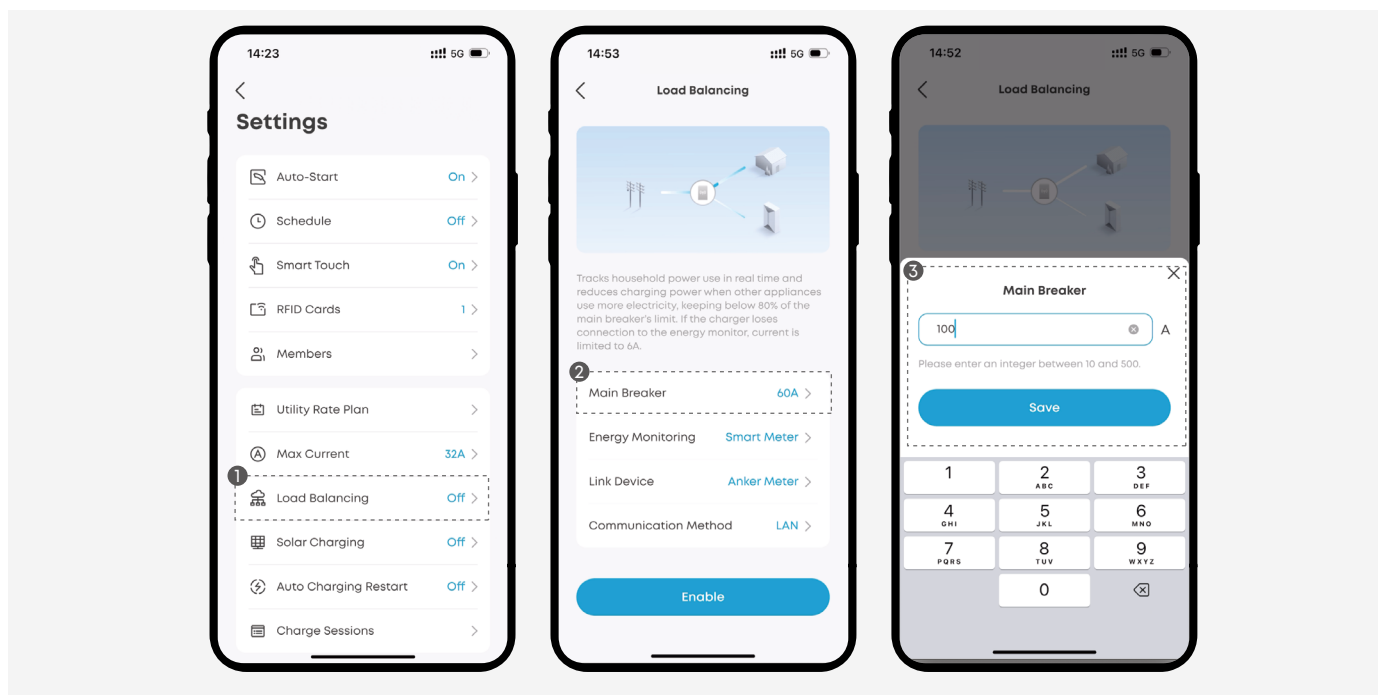
Based on the monitored home load and main breaker rating, the EV charger dynamically manages its charging current.

- **If home load is less than 80% of the main breaker rating:**  
The EV charger will increase the charging current (up to the set maximum).
- **If home load reaches or exceeds 80% of the main breaker rating:**  
The EV charger will decrease the charging current to prevent overload.
- **If the charging current drops to 6A and overload persists:**  
The EV charger will pause charging to ensure safety.
- **If home load drops below 80% of the main breaker rating and at least 6A is available:**  
The EV charger will resume charging automatically.
- **If communication with the smart meter or Anker SOLIX X1 is lost:**  
The EV charger will default to a safe, limited current (up to 6A).

## How to Set Up

### 1. Configure the main breaker rating.

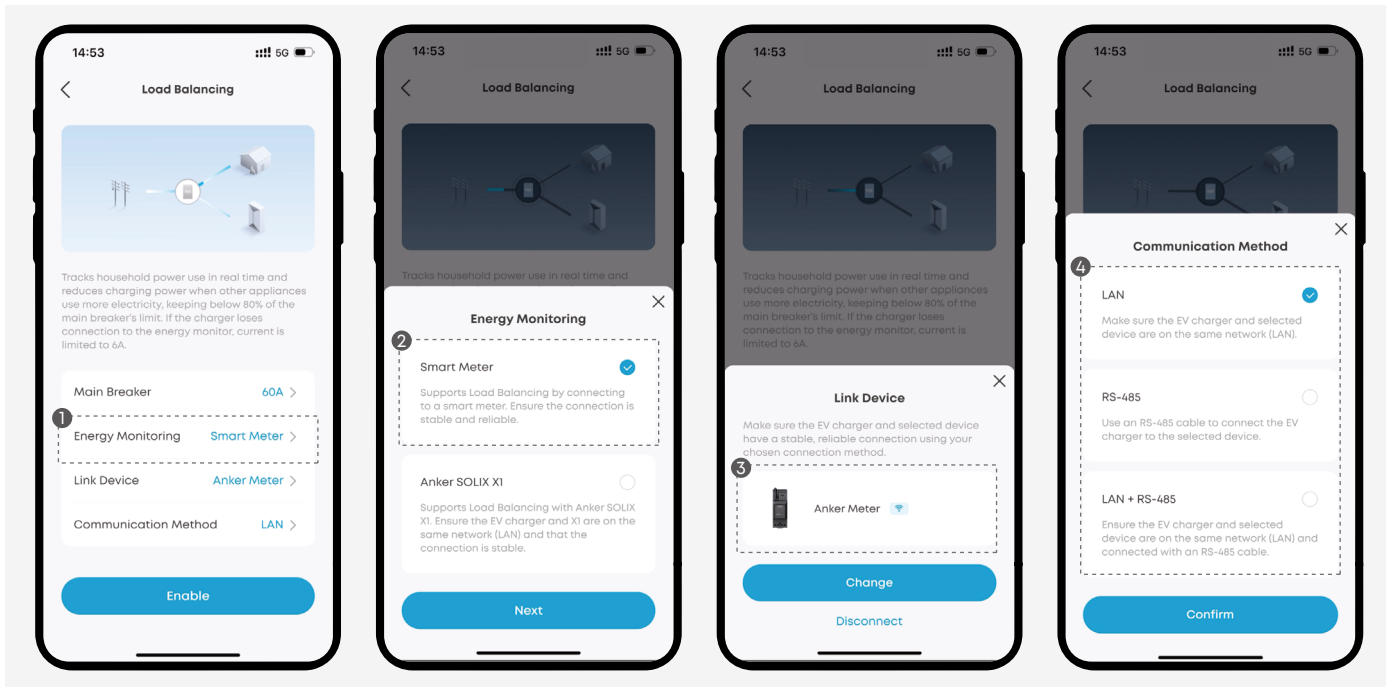
Go to **Load Balancing > Main Breaker** and enter the rated current of the main breaker.



## 2. Select your energy monitoring device.

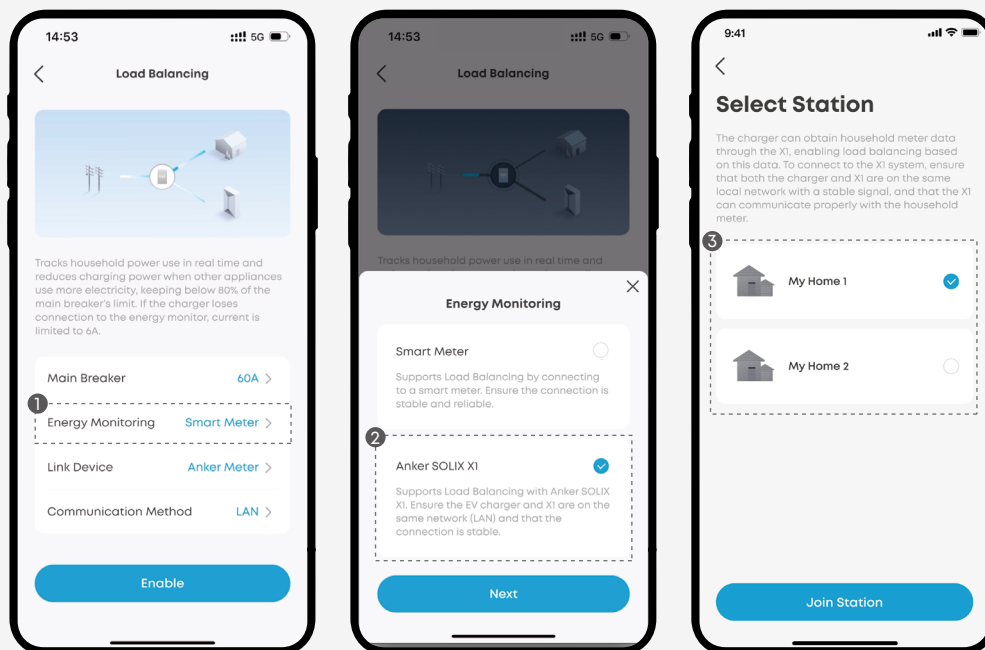
### Option 1: Smart Meter

- If the smart meter has been bound to your account, simply select it from the list. Otherwise, tap **Add New Device** to bind new devices and complete the network connection.
- For Anker SOLIX Smart Meter, set your communication method.
  - LAN: The EV charger and smart meter must be on the same local network.
  - RS-485: The EV charger and smart meter are connected via an RS-485 cable.
  - LAN + RS-485: The EV charger and smart meter are on the same local network and connected via an RS-485 cable.

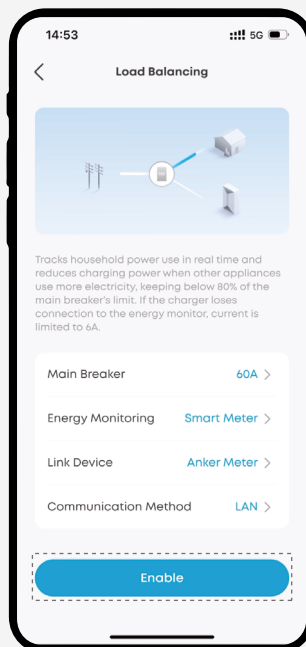


## Option 2: Anker SOLIX X1

Choose your connected Anker SOLIX X1 system (only one system supported). Ensure both Anker SOLIX X1 and your EV charger are on the same network.



3. Review your settings and tap **Enable**.



# 7.6 Solar Charging Mode

The EV charger adjusts charging power based on surplus solar energy to maximize renewable use.

## Product Requirements

### Option 1: EV Charger + Smart Meter + PV System

#### Supported Smart Meter Models

| Anker SOLIX                                                                       | Third Party                                                                                                   |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Anker SOLIX Smart Meter (A17X7)</li></ul> | <ul style="list-style-type: none"><li>• Shelly Smart Meter Pro 3EM</li><li>• Shelly Smart Meter 3EM</li></ul> |

### Option 2: EV Charger + Anker SOLIX X1 + PV System

#### Supported Anker SOLIX X1 Power Module Models

| Hybrid Single-Phase Model                                                                                                                      | Hybrid Three-Phase Models                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• X1-H3.68K-S</li><li>• X1-H4.6K-S</li><li>• X1-H5K-S</li><li>• X1-H5K-S BE</li><li>• X1-H6K-S</li></ul> | <ul style="list-style-type: none"><li>• X1-H5K-T</li><li>• X1-H8K-T</li><li>• X1-H10K-T</li><li>• X1-H10K-T BE</li><li>• X1-H12K-T</li></ul> |

## Optimal Operating Conditions

Solar charging delivers best results during summer or on clear, sunny days when sunlight is strong.

### How It Works

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solar Mode               | Solar mode enables your EV charger to use surplus solar energy for vehicle charging. There are two main options: Solar Only and Solar + Grid.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Solar Only               | <p>In Solar Only mode, the EV charger uses only surplus solar energy.</p> <ul style="list-style-type: none"><li>• When surplus solar energy is <b>6A or higher</b>, only solar power is used for charging.</li><li>• When surplus solar energy drops <b>below 6A</b>, charging pauses.</li><li>• When surplus solar energy rises back to <b>6A or higher</b>, charging continues using only solar energy.</li></ul> <p><b>Note:</b></p> <ul style="list-style-type: none"><li>• The EV charger may briefly use a small amount of grid power to check solar availability and prevent frequent relay switching.</li><li>• Some EVs will enter sleep mode when charging is paused. In these cases, charging will not automatically resume, even if surplus solar energy returns to 6A or higher. It is recommended to use Solar + Grid mode and set the minimum charging current to 6A.</li></ul> |
| Solar + Grid             | <p>Solar + Grid mode allows the EV charger to supplement solar energy with grid power to meet a preset minimum charging current.</p> <ul style="list-style-type: none"><li>• When surplus solar energy <b>meets or exceeds</b> the minimum charging current, only solar power is used for charging.</li><li>• When surplus solar energy <b>is below</b> the minimum charging current, grid power is added to maintain the minimum charging current.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Minimum Charging Current | <p><b>Single-Phase EV Charger</b></p> <p>The minimum current is set for single-phase charging.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

### Three-Phase EV Charger

- Auto phase switching disabled: The minimum current applies to three-phase charging.
- Auto phase switching enabled and phase changed: The minimum current applies to single-phase charging.
- Auto phase switching enabled and phase unchanged: The minimum current setting is not applicable in this case because solar power is sufficient and no grid power is required.

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Auto Phase Switching</b> | <p><b>This feature is only available on the three-phase EV charger.</b> It automatically switches between single-phase and three-phase charging based on solar availability.</p> <ul style="list-style-type: none"> <li>· If the current is 6A or higher on each of the three phases, the EV charger will use three-phase charging.</li> <li>· If the current drops below 6A on any of the three phases, the EV charger switches to single-phase charging to maximize solar use.</li> </ul> <p><b>Phase Switching Time</b></p> <ul style="list-style-type: none"> <li>· <b>EV Charger + Smart Meter:</b> Switching usually takes about 10 seconds. The status displays "Paused by charger."</li> <li>· <b>EV Charger + Anker SOLIX X1:</b> Switching may take about 20 seconds. The status displays "Paused by charger."</li> </ul> |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Energy Monitoring** The EV charger continuously monitors surplus solar energy using one of these methods.

**Option 1: Connect to a Smart Meter**

Connect your EV charger directly to a supported smart meter.

**Option 2: Connect to Anker SOLIX X1**

The EV charger receives real-time solar data from Anker SOLIX X1 over the local network.

**Note:**

**Communication Loss with Monitoring Device**

- If communication between the EV charger and the monitoring device is lost, the charging current is automatically limited to 6A.

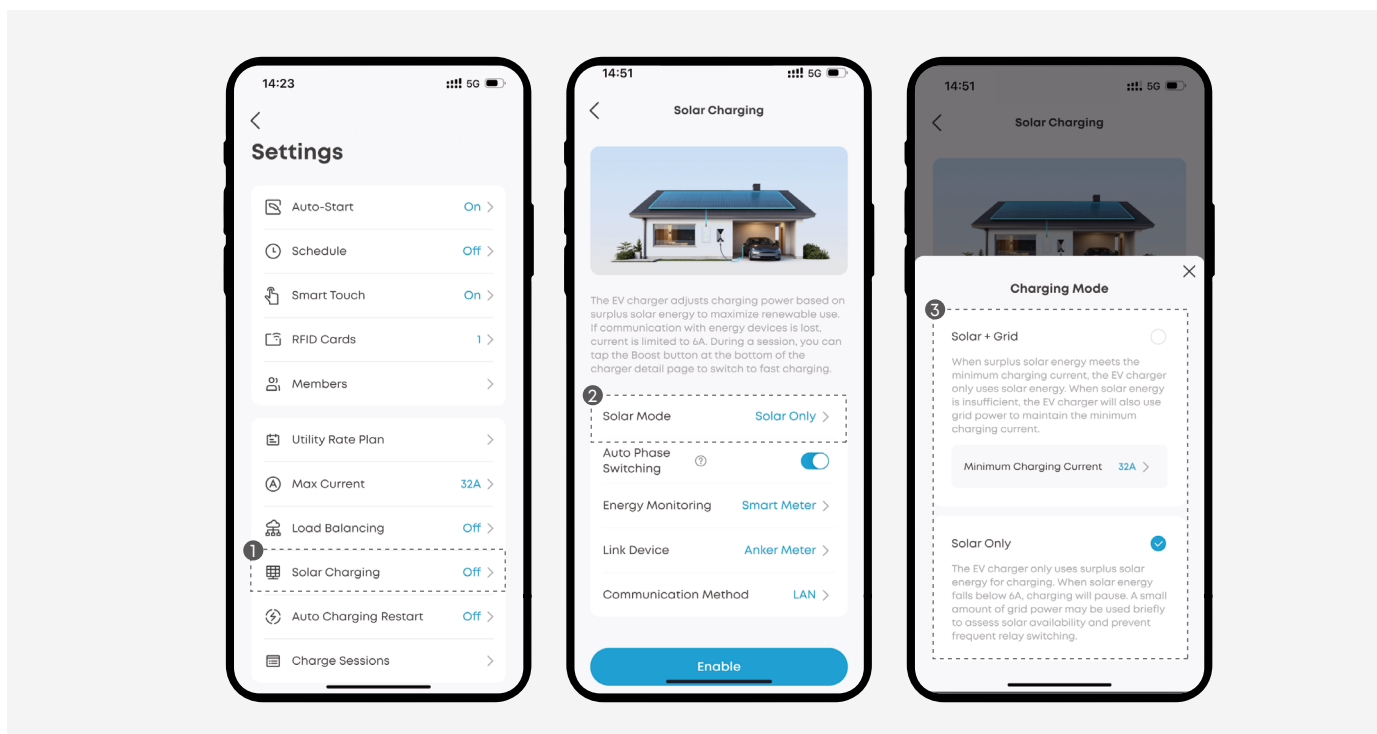
**Battery Discharge Settings (Anker SOLIX X1 Only)**

If using Anker SOLIX X1, you can configure battery discharge settings on the X1 system settings page. Battery discharge behavior depends on two factors: the discharge setting and the status of communication with the EV charger.

- **Battery Discharge Enabled:**  
Stored battery energy is available to power the EV charger.
- **Battery Discharge Disabled, Communication Active:**  
Stored battery energy will not power the EV charger, except for a minimal amount used to check solar energy availability.
- **Battery Discharge Disabled, Communication Lost:**  
Anker SOLIX X1 cannot receive status updates from the EV charger. In this case, the EV charger is treated as a regular load and may be powered by the stored battery energy.

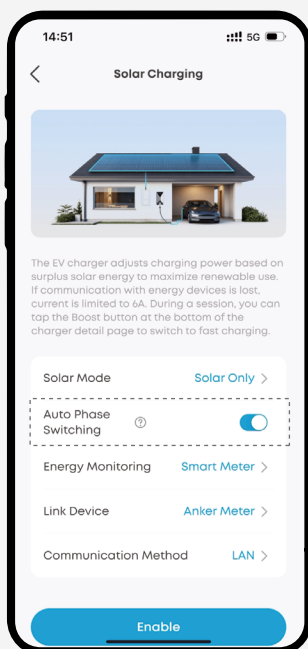
## How to Set Up

### 1. Select your preferred solar mode.



### 2. When using a three-phase EV charger, you can enable or disable **Auto Phase Switching**.

If this feature is enabled and there is insufficient solar power, three-phase charging will switch to single-phase charging.

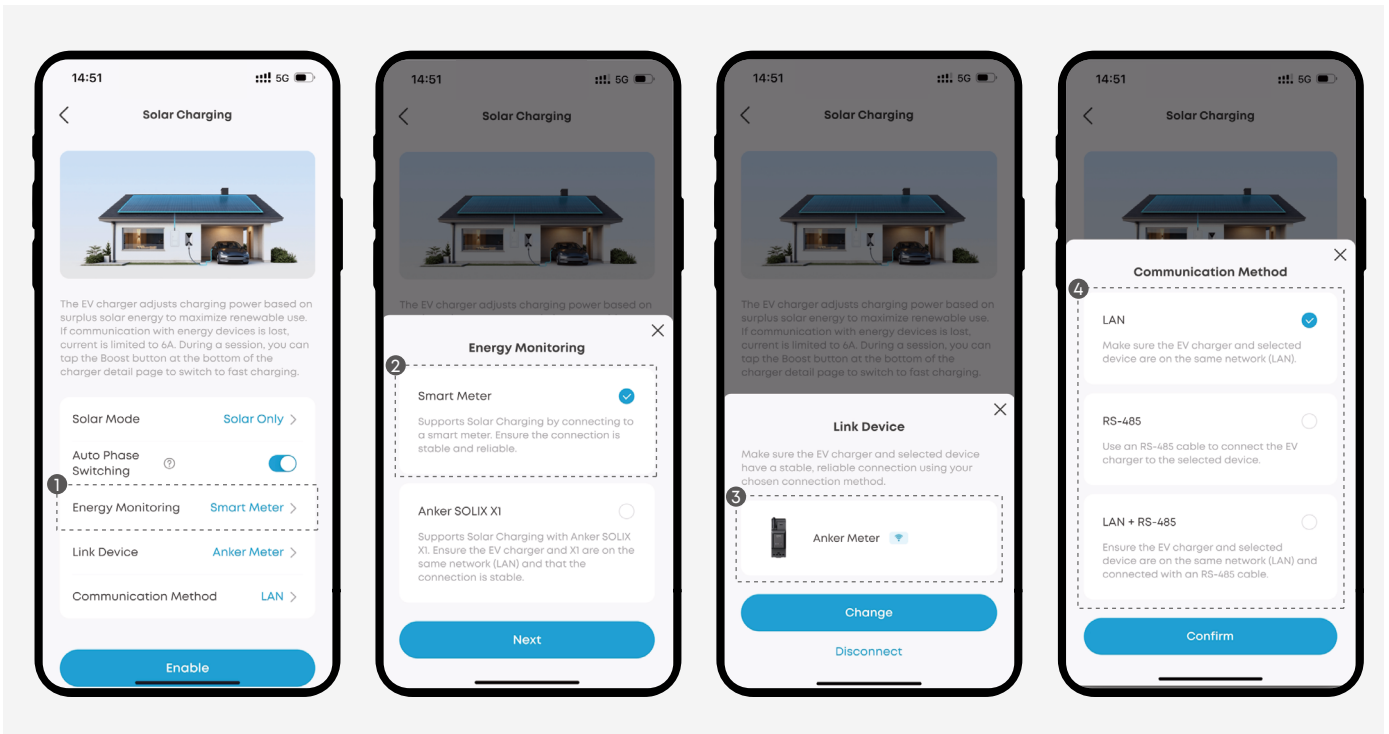




### 3. Select your energy monitoring device.

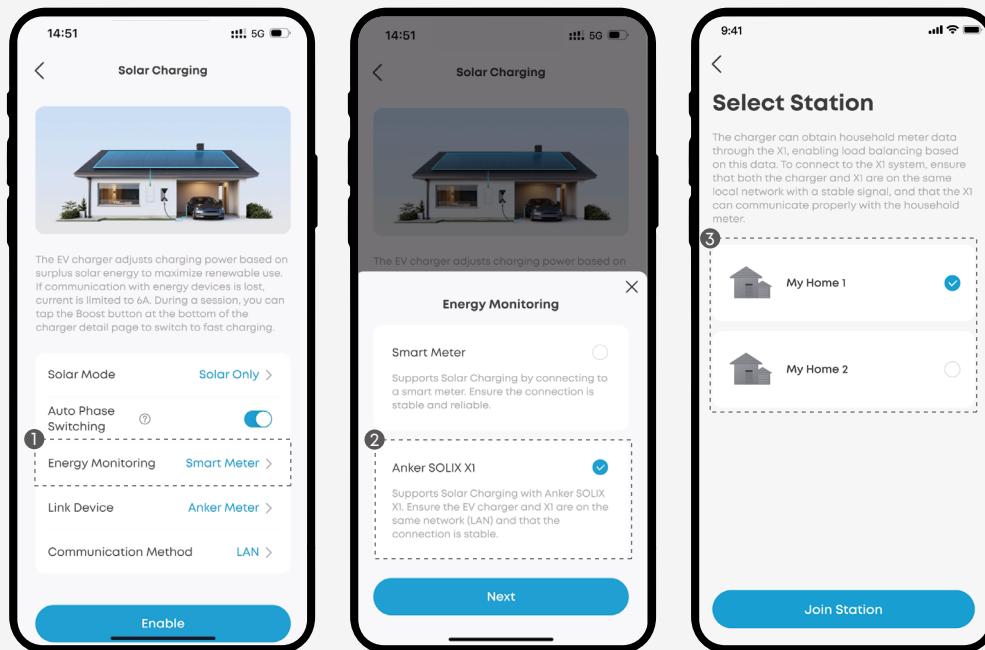
#### Option 1: Smart Meter

- If the smart meter has been bound to your account, simply select it from the list. Otherwise, tap **Add New Device** to bind new devices and complete the network connection.
- For Anker SOLIX Smart Meter, set your communication method.
  - LAN: The EV charger and smart meter must be on the same local network.
  - RS-485: The EV charger and smart meter are connected via an RS-485 cable.
  - LAN + RS-485: The EV charger and smart meter are on the same local network and connected via an RS-485 cable.

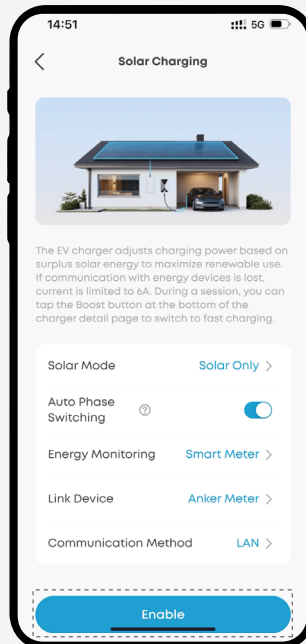


## Option 2: Anker SOLIX X1

Choose your connected Anker SOLIX X1 system (only one system supported). Ensure both Anker SOLIX X1 and your EV charger are on the same network.

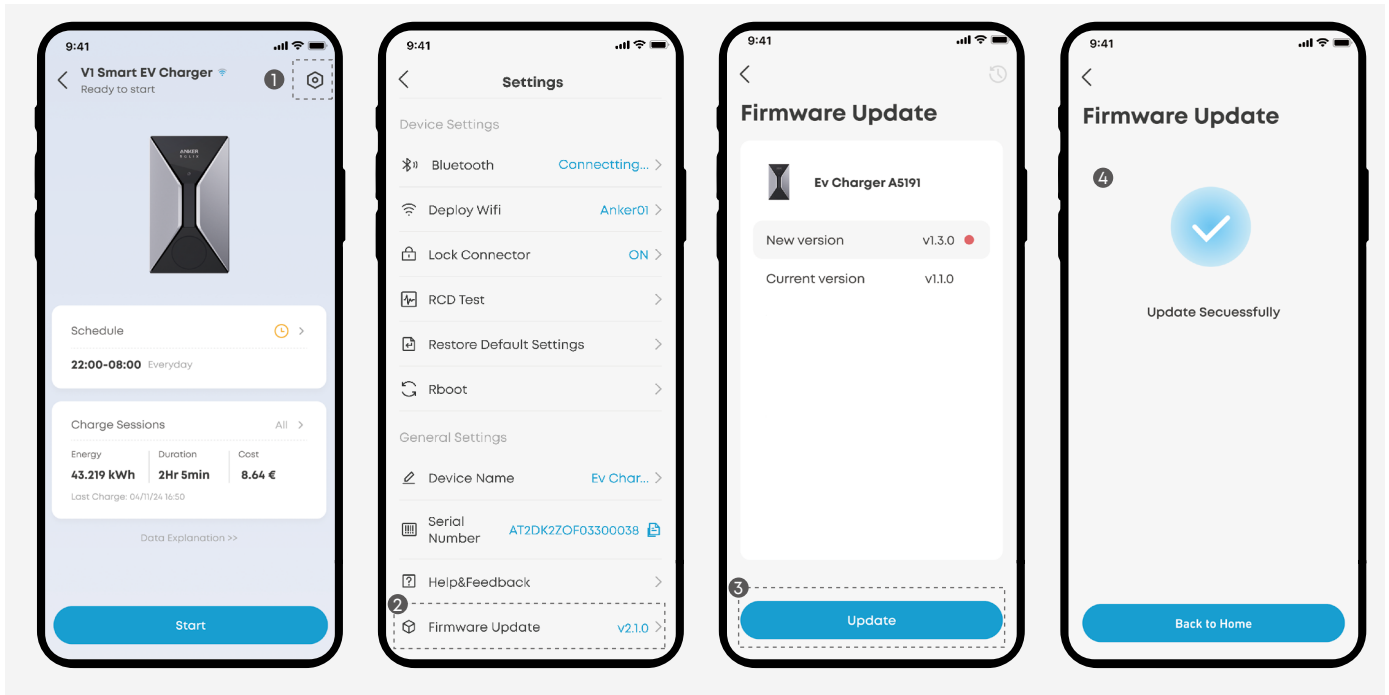


### 4. Review your settings and tap **Enable**.



## 7.7 Update Firmware

To ensure optimal performance, regularly update your EV charger's firmware.



- If the update fails, make sure the EV charger is powered on and connected to Bluetooth or a stable Wi-Fi network.
- The update process may take several minutes. Please wait patiently. Updating via Bluetooth may take longer than updating via Wi-Fi.

## 7.8 Member Sharing

Share management of your EV charger with multiple trusted members.

Members can adjust most settings, but do not have the following access.

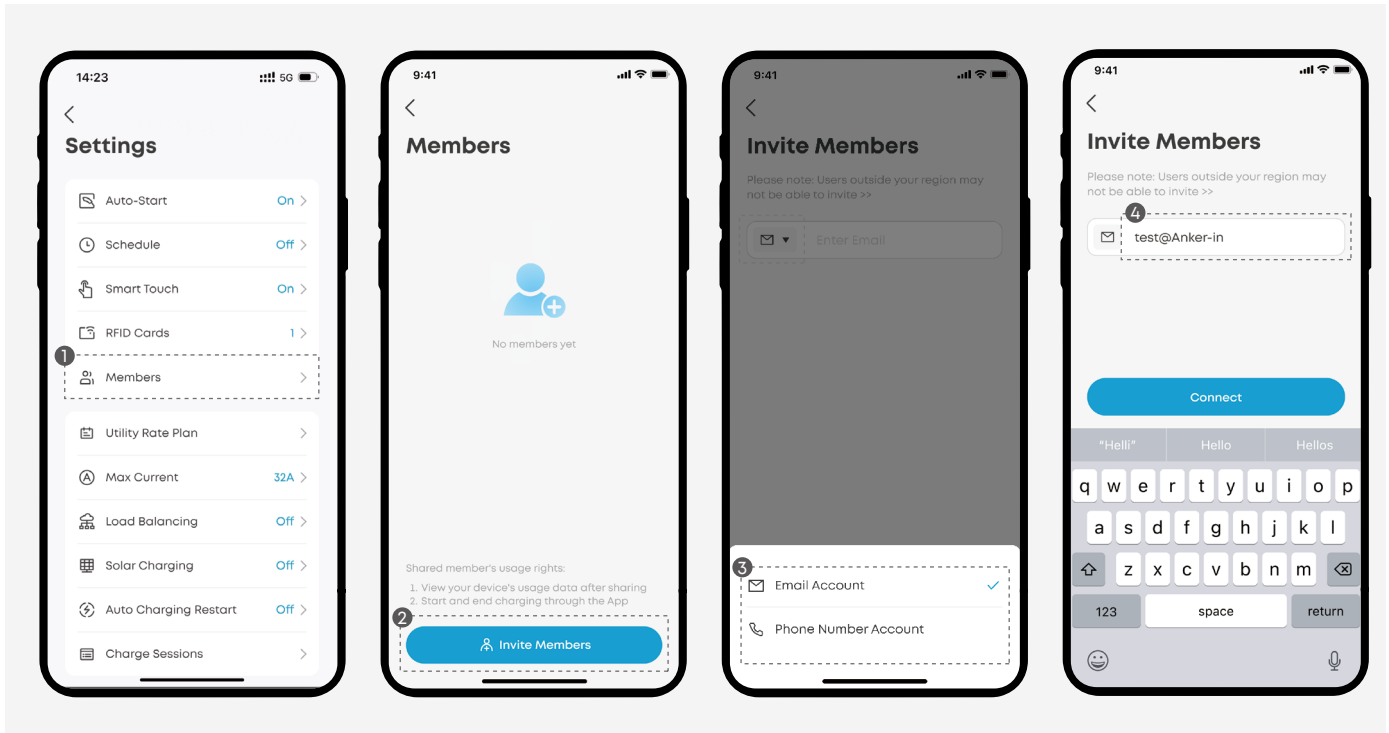
- Change the EV charger name or pricing.
- Link the EV charger to other devices.
- Manage or invite other members.

Requirements for each invited member:

- An account is registered for the Anker app.
- The Anker app is updated to the latest version.
- The account region matches your country or region settings. Invitations will not be received if the account region does not match.

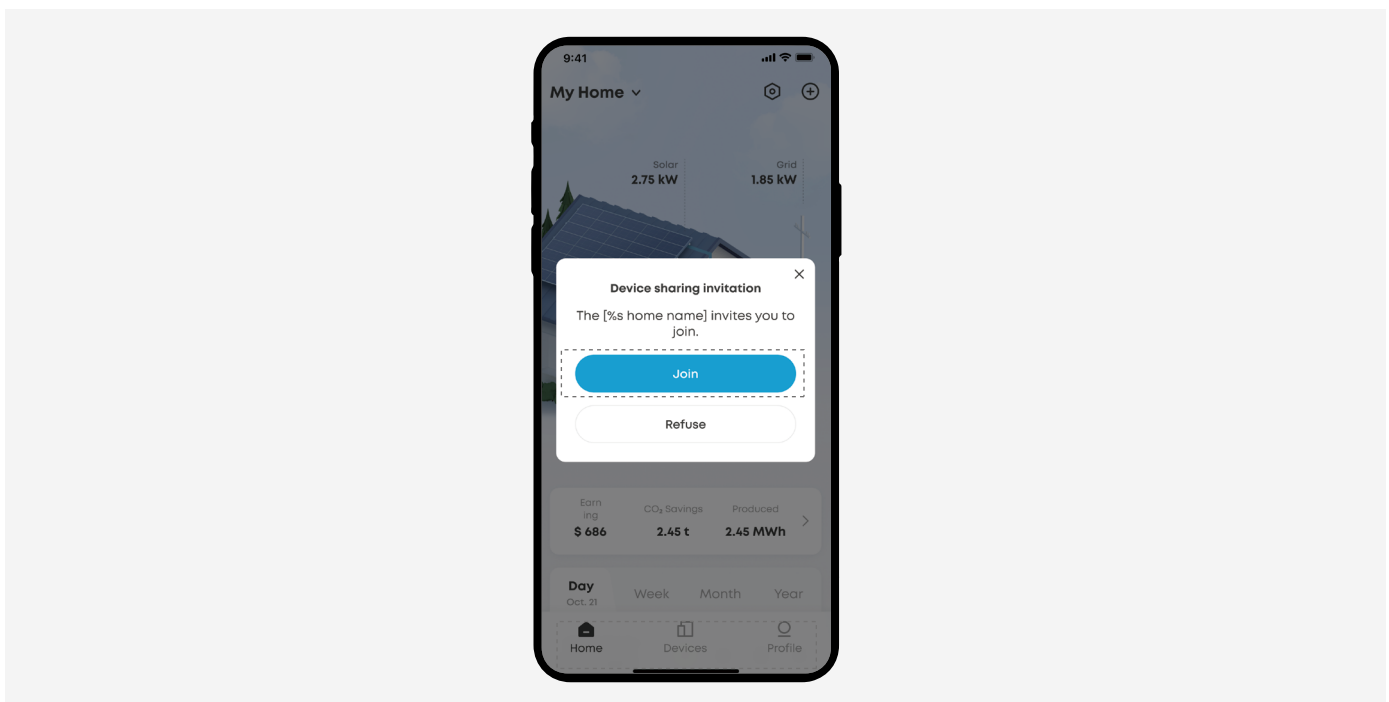
## On the Owner's (Your) App:

1. Tap **Member Sharing** on the settings page.
2. Select **Invite Members**.
3. Choose an account input format.
4. Enter the member's registered email address or phone number (as used in their Anker app account). Then wait for the member to accept the invitation.



## On the Member's App:

The member receives a sharing invitation pop-up. Tap **Join** to accept the invitation. The app may prompt for an update to the latest version for compatibility.



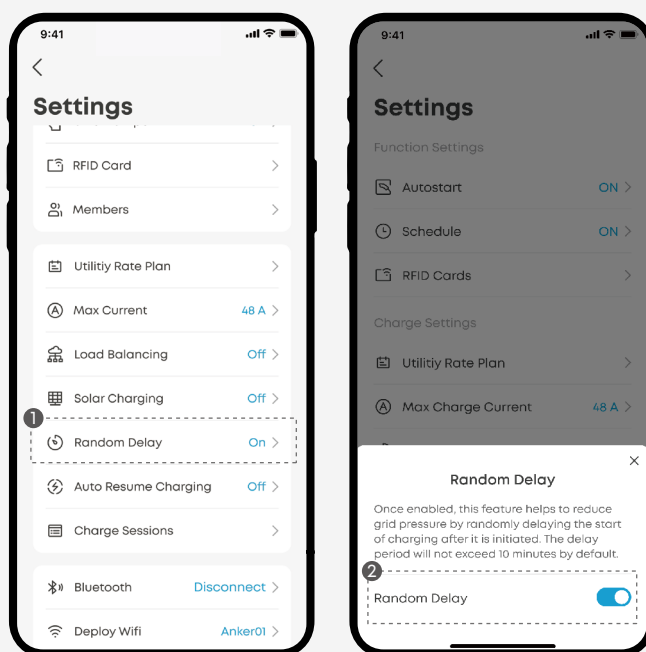
## 7.9 Random Delay (UK Only)

Random delay is required by UK EVSCP regulations to reduce stress on the power grid. It prevents a large number of EV chargers from starting at the same time, which helps balance electricity demand on the grid.

When this feature is enabled, the EV charger will automatically introduce a random delay (up to 10 minutes) before charging begins.

- 💡 · All charging methods can activate random delays.
- When this feature is enabled, the EV charger will randomly delay charging by up to 10 minutes.

Random delay is enabled by default. You can disable it in the app if needed.



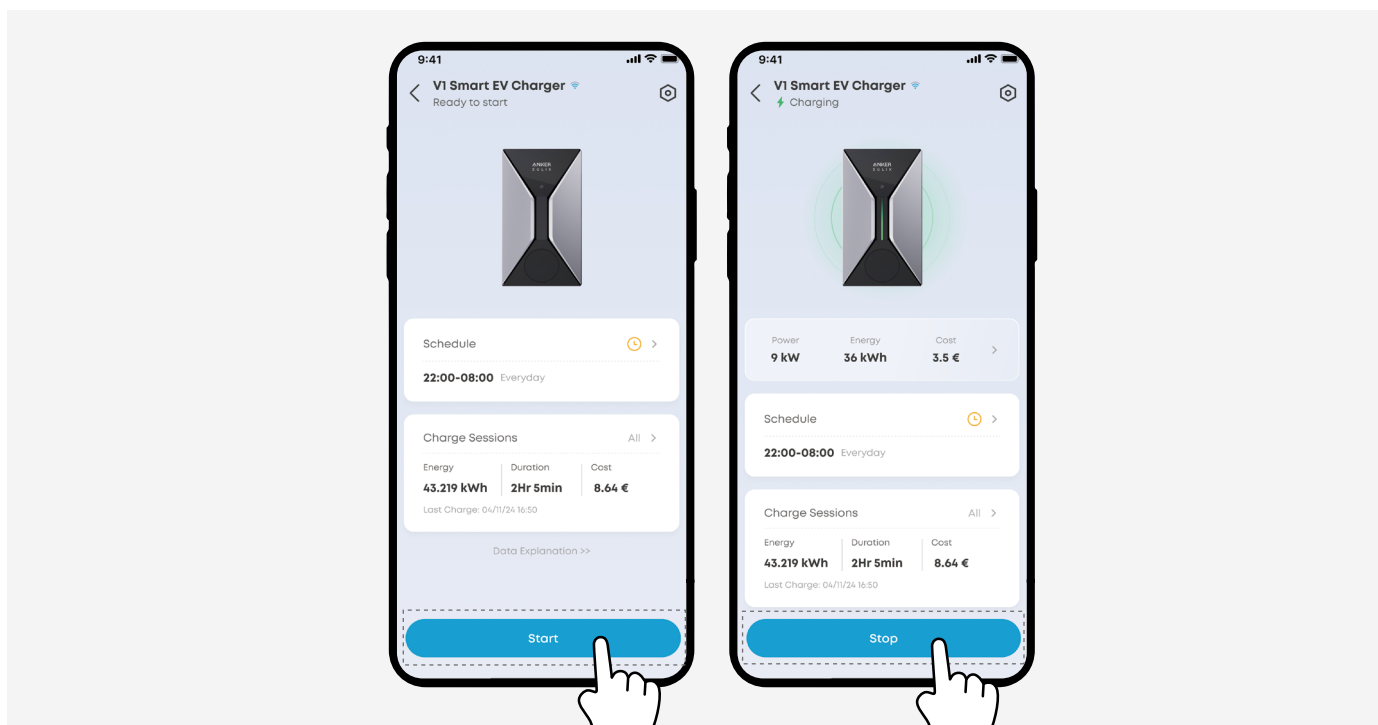
## 8. Charge Your Vehicle

There are five ways to begin charging your vehicle.

### Method 1: App Control

Open the Anker app. Tap **Start** to begin charging and **Stop** to end the session.

💡 Ensure that Bluetooth or Wi-Fi is enabled on your device and the EV charger is connected properly.

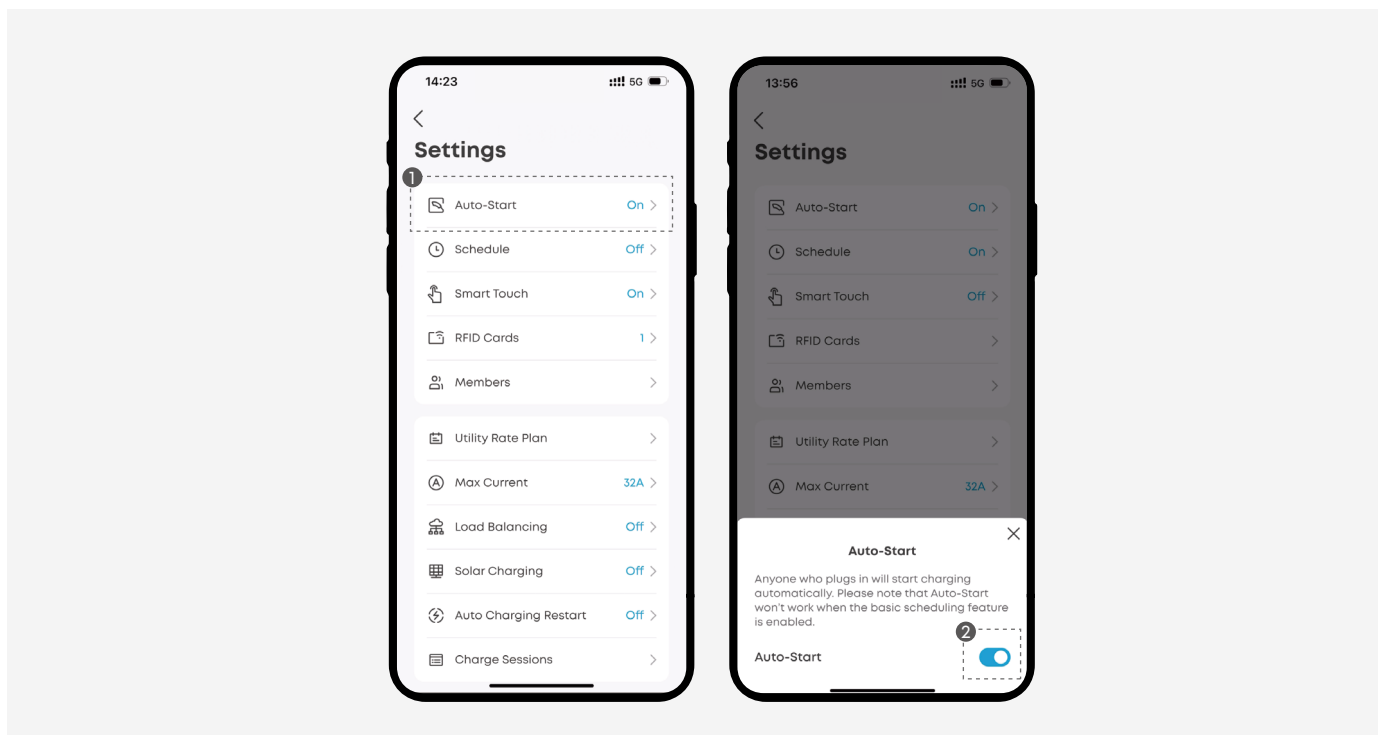


## Method 2: Auto-Start

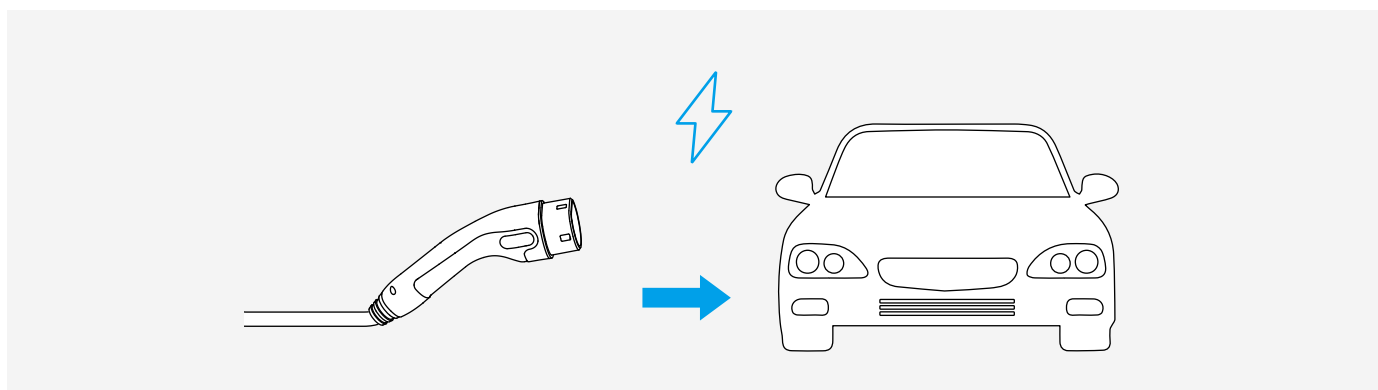
Anyone who plugs in will start charging automatically. Auto-start will not work when the normal schedule mode is enabled.

### How to Set Up

1. Enable **Auto-Start** in the Anker app.



2. Insert the charging connector into the charging port. Charging will begin automatically.



## Method 3: Schedule

The schedule feature allows you to control when your EV charger operates. You can set fixed charging times or let the system automatically schedule charging based on your electricity costs and driving needs.

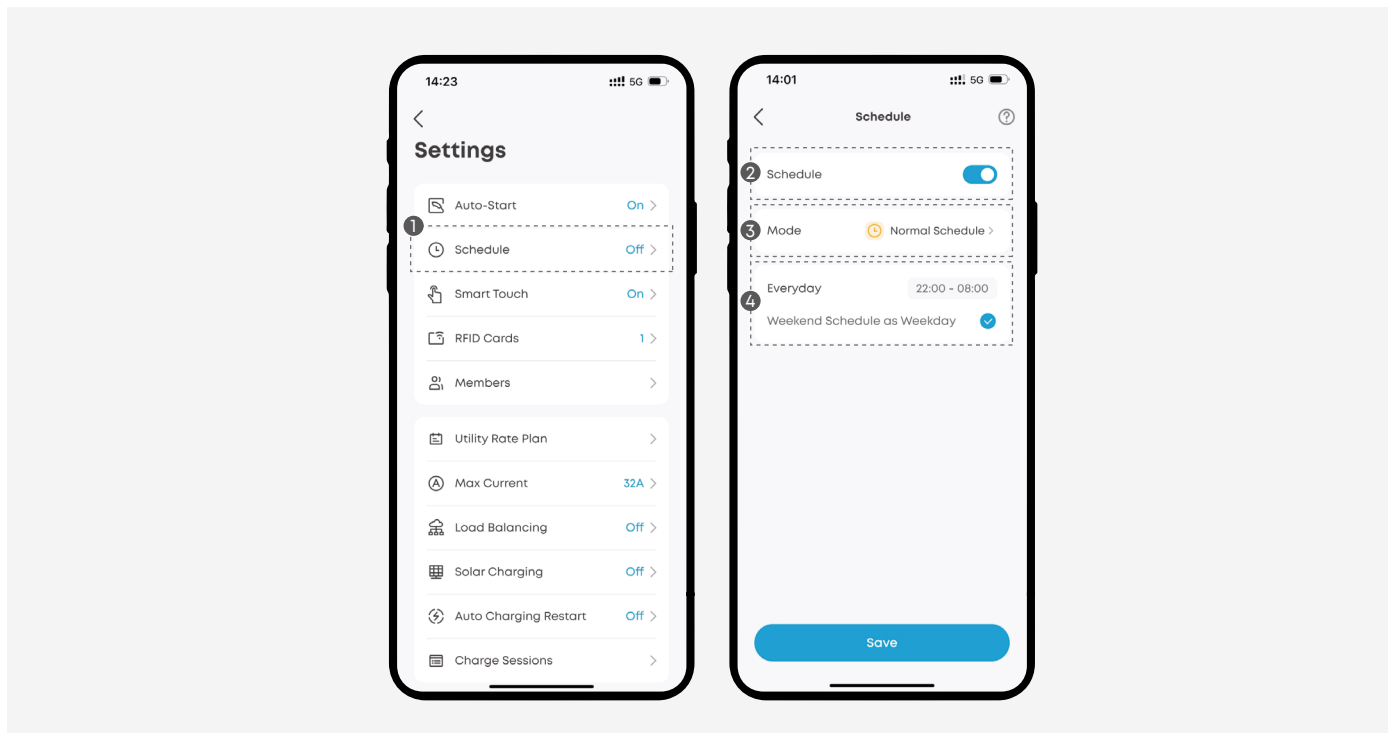
### Normal Schedule

Normal schedule mode lets you set specific times for your EV charger to operate. Use this mode if you want predictable charging periods, such as overnight or during off-peak hours.

- 💡 · The EV charger will follow your selected schedule, even if it is offline.
- Once the connector is plugged in, charging starts automatically during your scheduled hours.

#### How to Set Up:

1. Tap **Schedule** on the settings page in the Anker app.
2. Enable the **Schedule** feature.
3. Select **Normal Schedule**.
4. Set your preferred time slots for charging.



### Smart Charging

Smart charging automatically schedules charging at the most cost-effective times, based on your driving plans and local electricity prices. This helps you reduce energy costs by charging when rates are lowest.



## How It Works

- **Activation**

Any charging method can activate smart charging when the EV charger is connected to the network.

- **Charging Strategy**

- The charging plan is updated every 5 minutes using cloud-based data. Your vehicle will charge until it reaches the target charge level before the set departure time.
- Charging is mainly scheduled during periods of low electricity prices. If surplus solar energy is available before these periods, it will be used for charging.

- **Notes**

- Ensure the EV charger remains connected to the network during smart charging.

- **Automatic Switching**

When both smart charging mode and solar charging mode are enabled:

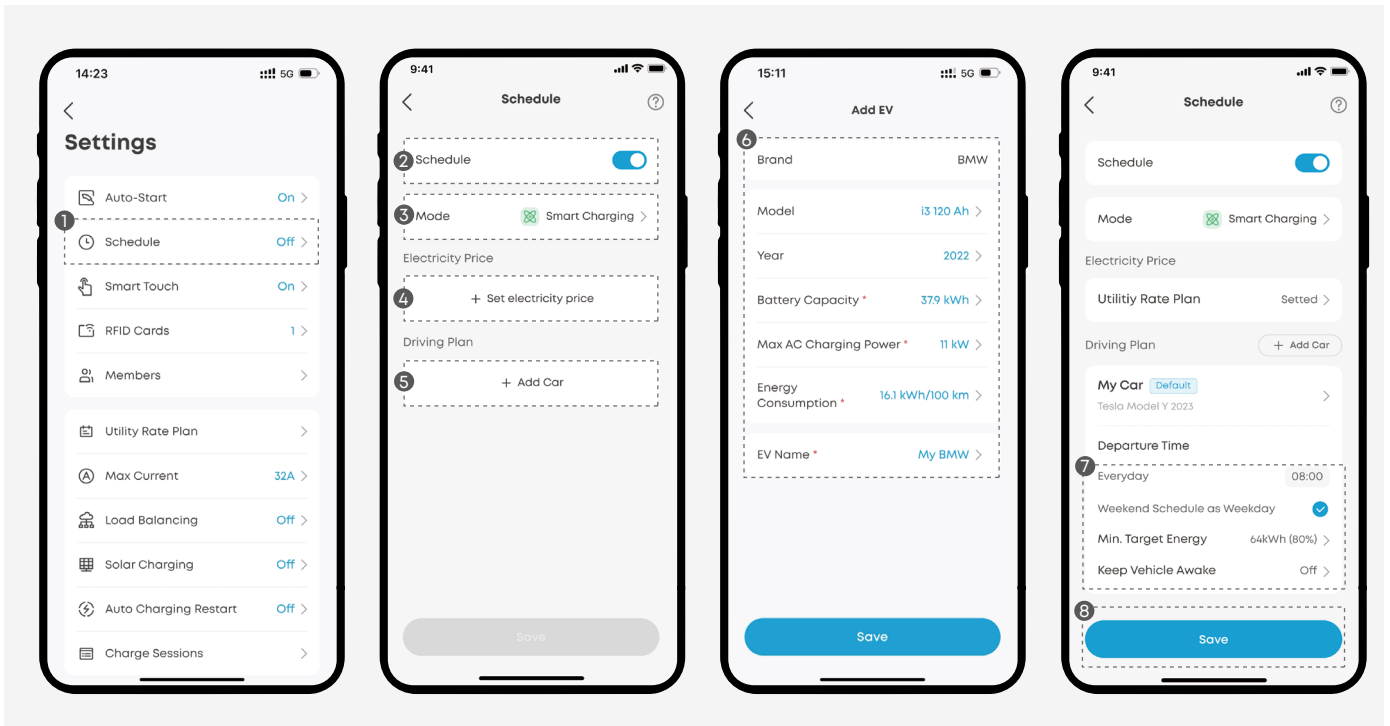
- If surplus solar energy is available, the EV charger will prioritize utilizing solar energy for charging.
- If solar energy is insufficient, the EV charger will use grid power during off-peak hours to complete charging.

- **Keep Vehicle Awake**

- During smart charging, the EV charger pauses when electricity prices are high. Some vehicles may enter sleep mode during these pauses, preventing charging from resuming when prices drop.
- When the Keep Vehicle Awake feature is enabled, the EV charger supplies a minimum charging power during high-price periods. This prevents your vehicle from entering sleep mode, allowing charging to restart automatically when prices are lower.
- Using this feature may slightly increase your electricity costs.

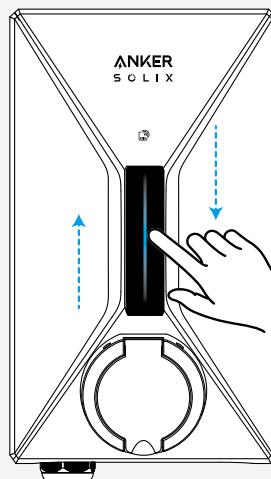
## How to Set Up

1. Tap **Schedule** on the settings page in the Anker app.
2. Enable the **Schedule** feature.
3. Select **Smart Charging**.
4. Select your utility rate plan and complete the follow-up settings.  
For instructions, refer to the section “7.4 Utility Rate Plan”.
5. Choose **Add Car**.
6. Enter your vehicle information.
7. Complete your driving plan.
8. Review your settings and tap **Save**.



## Method 4: Smart Touch

Smart touch lets you control charging with simple finger gestures.



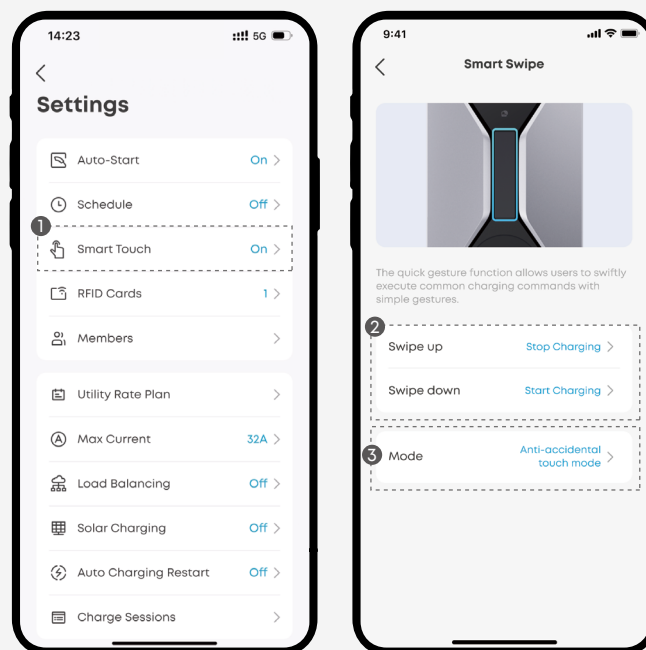
## How to Set Up

1. Tap **Smart Touch** on the settings page in the Anker app.
2. Assign a function to a gesture.

| Gesture               | Function       | Description                                                                                                     |
|-----------------------|----------------|-----------------------------------------------------------------------------------------------------------------|
| Swipe Up / Swipe Down | Start Charging | Begin charging immediately.                                                                                     |
|                       | Stop Charging  | Stop charging immediately.                                                                                      |
|                       | Boost          | If solar charging or smart charging is on, you can switch immediately to fast charging for the current session. |
|                       | Disabled       | The gesture will not perform any function.                                                                      |

3. Select your desired touch mode.

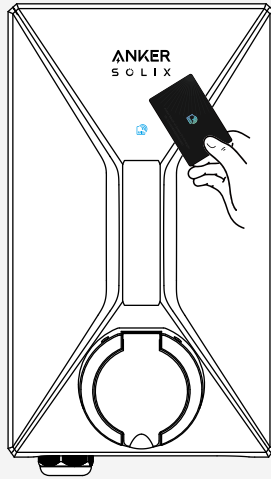
|                    |                                                                                                                                                                                                   |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Anti-Mistouch Mode | If the EV charger is exposed to rain, enable this mode to avoid false triggers. Press and hold one end of the light bar until it lights up, then slide to the other end to activate the function. |
| Simple Mode        | If the EV charger is not exposed to rain, enable this mode. Simply slide up or down on the display to activate functions.                                                                         |



## Method 5: RFID Card

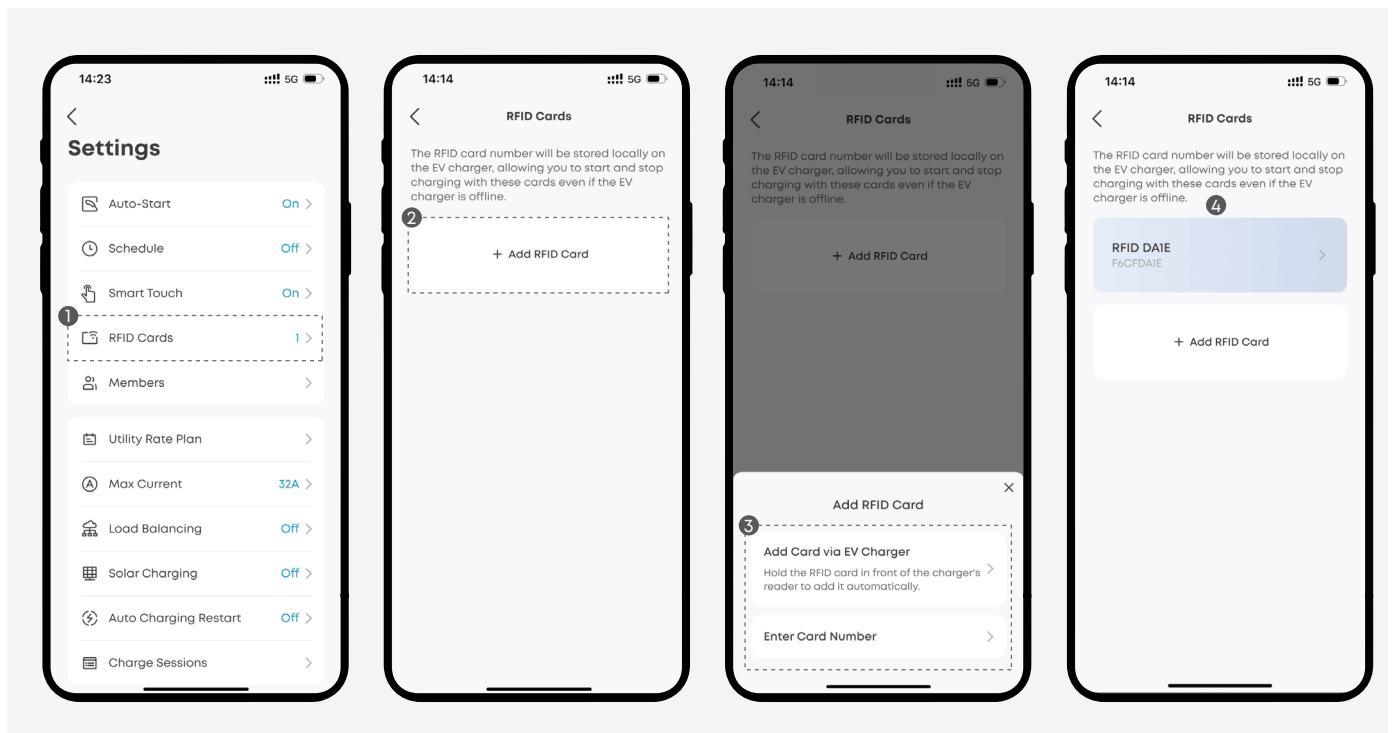
The RFID card number will be stored locally on the EV charger, allowing you to start and stop charging with these cards even if the EV charger is offline. Up to 10 RFID cards can be added per charger.

- 💡 · Only authorized cards will work.
- Keep your card clean and avoid bending or scratching.



### How to Set Up

1. Tap **RFID Cards** on the settings page in the Anker app.
2. Select **Add RFID Card**.
3. Choose your preferred way to add a card.
  - Hold the RFID card in front of the RFID reader on the EV charger.
  - Manually enter the card ID printed on the back of your card.
4. When the RFID card is added, you can view or manage it in the app.



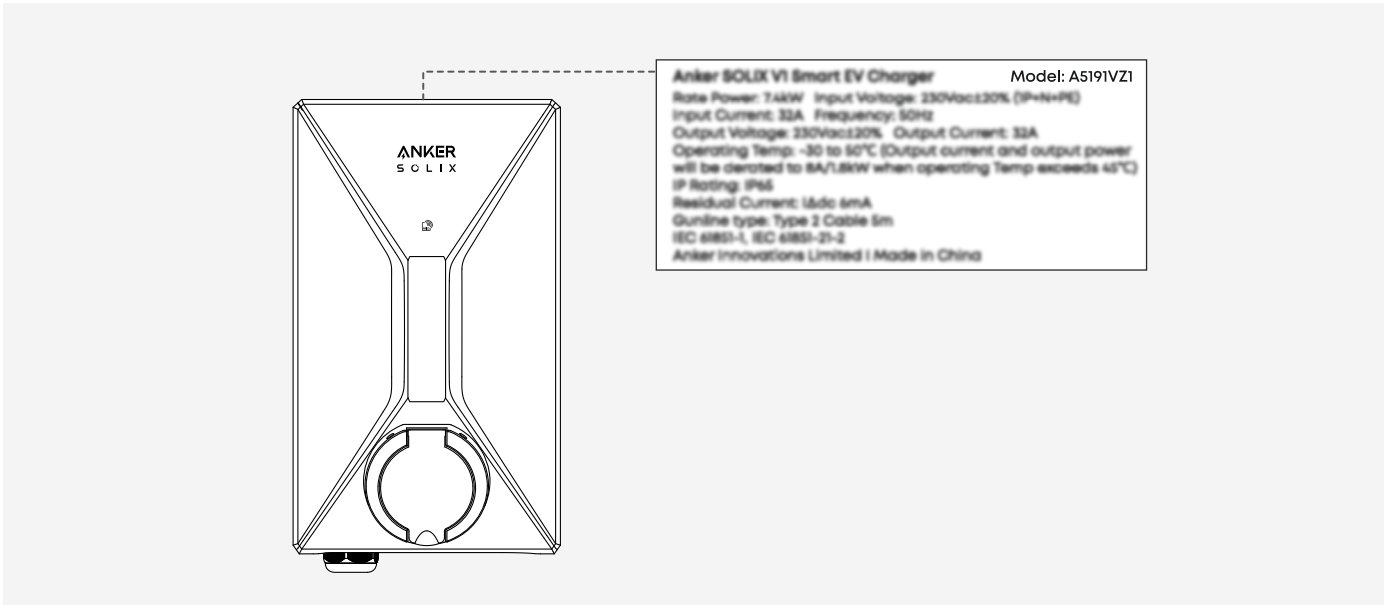
5. Hold your card close to the RFID reader on the EV charger. Charging will start or stop after authentication.

## 9. Specifications

Specifications are subject to change without notice.

### 9.1 Model-Specific Specifications

You can find the model on the nameplate of your EV charger.



| Socket Versions                |                        |                        |                            |
|--------------------------------|------------------------|------------------------|----------------------------|
| Model                          | A5191VZ0               | A5191VZ2               | A51913Z0                   |
| Connector Type                 | Type 2 Socket          | Type 2 Socket          | Type 2 Socket with Shutter |
| Rated Power                    | 7.4kW                  | 7.4kW                  | 7.4kW                      |
| Nominal Voltage                | 230V ±20%<br>(1P+N+PE) | 230V ±10%<br>(1P+N+PE) | 230V ±20%<br>(1P+N+PE)     |
| Nominal Current                | 32A                    | 32A                    | 32A                        |
| Standby Self-Consumption       | < 6.5W                 | < 7.5W                 | < 6.5W                     |
| Weight                         | 2.43 kg                | 2.43 kg                | 2.43 kg                    |
| Conductor Cross-Sectional Area | 3 × 6 mm <sup>2</sup>  | 3 × 6 mm <sup>2</sup>  | 3 × 6 mm <sup>2</sup>      |
| Cable Protection               | Cable E-Lock via App   |                        |                            |
| IP Rating                      | IP55                   | IP55                   | IP55                       |
| Dimensions (W × H × D)         | 211 × 360 × 125 mm     |                        |                            |

| Socket Versions                |                         |                        |                            |
|--------------------------------|-------------------------|------------------------|----------------------------|
| Model                          | A5191GZ4                | A5191GZ2               | A51913Z1                   |
| Connector Type                 | Type 2 Socket           | Type 2 Socket          | Type 2 Socket with Shutter |
| Rated Power                    | 11kW                    | 22kW                   | 22kW                       |
| Nominal Voltage                | 400V ±20%<br>(3P+N+PE)  | 400V ±20%<br>(3P+N+PE) | 400V ±20%<br>(3P+N+PE)     |
| Nominal Current                | 16A                     | 16A                    | 16A                        |
| Standby Self-Consumption       | < 6.5W                  | < 6.5W                 | < 6.5W                     |
| Weight                         | 2.68 kg                 | 2.68 kg                | 2.68 kg                    |
| Conductor Cross-Sectional Area | 5 × 2.5 mm <sup>2</sup> | 5 × 6 mm <sup>2</sup>  | 5 × 6 mm <sup>2</sup>      |
| Cable Protection               | Cable E-Lock via App    |                        |                            |
| IP Rating                      | IP55                    | IP55                   | IP55                       |
| Dimensions (W × H × D)         | 211 × 360 × 125 mm      |                        |                            |

| Cable Versions                 |                        |                        |                        |
|--------------------------------|------------------------|------------------------|------------------------|
| Model                          | A5191VZ1               | A5191VZ3               | A5191TZ1               |
| Connector Type                 | Type 2 Cable<br>(5 m)  | Type 2 Cable<br>(5 m)  | Type 2 Cable<br>(7 m)  |
| Rated Power                    | 7.4kW                  | 7.4kW                  | 7.4kW                  |
| Nominal Voltage                | 230V ±20%<br>(1P+N+PE) | 230V ±10%<br>(1P+N+PE) | 230V ±20%<br>(1P+N+PE) |
| Nominal Current                | 32A                    | 32A                    | 32A                    |
| Standby Self-Consumption       | < 6.5W                 | < 7.5W                 | < 6.5W                 |
| Weight                         | 4.65 kg                | 4.65 kg                | 5.45 kg                |
| Conductor Cross-Sectional Area | 3 × 6 mm <sup>2</sup>  | 3 × 6 mm <sup>2</sup>  | 3 × 6 mm <sup>2</sup>  |
| IP Rating                      | IP65                   | IP65                   | IP65                   |
| Dimensions (W × H × D)         | 211 × 360 × 120 mm     |                        |                        |

| Cable Versions                 |                         |                        |                        |
|--------------------------------|-------------------------|------------------------|------------------------|
| Model                          | A5191GZ7                | A5191GZ3               | A5191TZ2               |
| Connector Type                 | Type 2 Cable<br>(5 m)   | Type 2 Cable<br>(5 m)  | Type 2 Cable<br>(7 m)  |
| Rated Power                    | 11kW                    | 22kW                   | 22kW                   |
| Nominal Voltage                | 400V ±20%<br>(3P+N+PE)  | 400V ±20%<br>(3P+N+PE) | 400V ±20%<br>(3P+N+PE) |
| Nominal Current                | 16A                     | 32A                    | 32A                    |
| Standby Self-Consumption       | < 6.5W                  | < 65W                  | < 6.5W                 |
| Weight                         | 4.95 kg                 | 4.95 kg                | 5.88 kg                |
| Conductor Cross-Sectional Area | 5 × 2.5 mm <sup>2</sup> | 5 × 6 mm <sup>2</sup>  | 5 × 6 mm <sup>2</sup>  |
| IP Rating                      | IP65                    | IP65                   | IP65                   |
| Dimensions (W × H × D)         | 211 × 360 × 120 mm      |                        |                        |

## 9.2 Common Specifications

The specifications below apply to all models.

| Input and Output              |                                                                                                 |
|-------------------------------|-------------------------------------------------------------------------------------------------|
| Nominal Frequency             | 50 Hz                                                                                           |
| Vehicle Connection            | Type 2                                                                                          |
| Supported Earthing Scheme     | TN, TT                                                                                          |
| Connectivity                  |                                                                                                 |
| Protocol                      | OCPP 1.6J                                                                                       |
| Communication                 | Wi-Fi, Ethernet, Bluetooth, RS485                                                               |
| Authorization Methods         | RFID, App, Bluetooth                                                                            |
| User Interface                |                                                                                                 |
| Status Indication             | RGB LED and App                                                                                 |
| Working Mode                  | Auto-Start, Normal Schedule, Smart Charging                                                     |
| Charging Mode                 | Solar Only Mode, Solar and Grid Mode                                                            |
| Load Balance Mode             | Compatible with Anker SOLIX Smart Meter, Shelly Smart Meter Pro 3EM, and Shelly Smart Meter 3EM |
| Protection                    |                                                                                                 |
| Residual Current Detection    | DC 6mA                                                                                          |
| Residual Current Device (RCD) | External RCD Type A (30mA) Required<br>(In Accordance with Local Regulations)                   |
| Flammability Standard         | UL94                                                                                            |
| Overcurrent Protection        | Yes                                                                                             |
| Over-Temperature Protection   | Yes                                                                                             |
| Others                        |                                                                                                 |
| Operating Temperature         | -30°C to 50°C                                                                                   |
| Application Environment       | Outdoor / Indoor                                                                                |

|                         |                               |
|-------------------------|-------------------------------|
| Relative Humidity       | 5% to 95% RH (Non-Condensing) |
| Operating Altitude      | 2,000 m                       |
| Mounting Option         | Concrete / Wooden Walls       |
| Impact Protection Level | IK10                          |
| Noise                   | 30 dB                         |
| Warranty                | 3 Years Limited               |
| Product Lifespan        | 8 Years                       |

### Certification and Compliance

|                                     |                                                                                                                                   |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Safety and Health                   | IEC 61851-21-2:2018/5.1                                                                                                           |
| Electromagnetic Compatibility (EMC) | IEC 61000-4-3:2006, IEC 61000-4-3:2006/AMD1:2007, IEC 61000-4-3:2006/AMD2:2010, EN 301489-17 V3.2.4:2020, EN 301489-1 V2.2.3:2019 |
| Chemical                            | RoHS, REACH                                                                                                                       |

### Network Configuration Instructions

Bluetooth Low Energy (BLE) Status: When the equipment is not yet connected to a network, it will automatically enable BLE broadcasting and activate BLE services to provide Bluetooth network configuration capabilities.

**Note:** During the BLE configuration process, ensure your network environment is stable and follow the instructions to complete the setup.

#### Port 5353

The primary function of port 5353 (TCP/UDP 5353) in a network is to implement the mDNS protocol for mutual discovery between devices on the local area network (LAN).

Application Scenarios: Multi-device linkage, self-consumption scenarios, and energy scheduling strategies in the LAN.

Access the device via hostname.local on the same local area network without traditional DNS configuration.

mDNS Protocol Characteristics: Using UDP protocol, port 5353 is its standard port, compatible with the standard DNS query format.

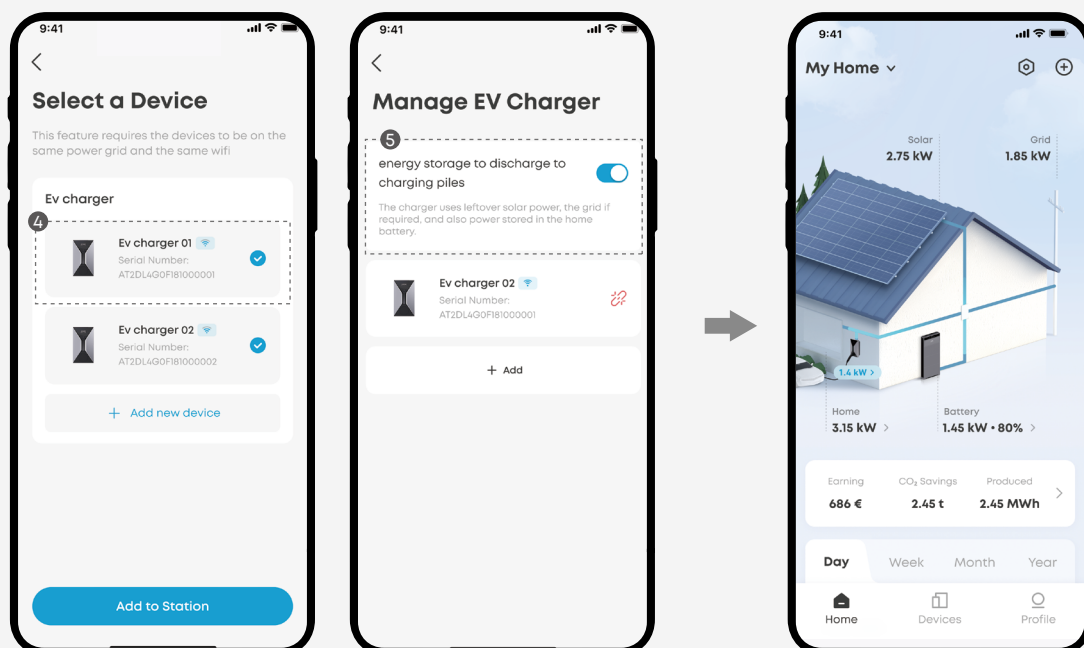
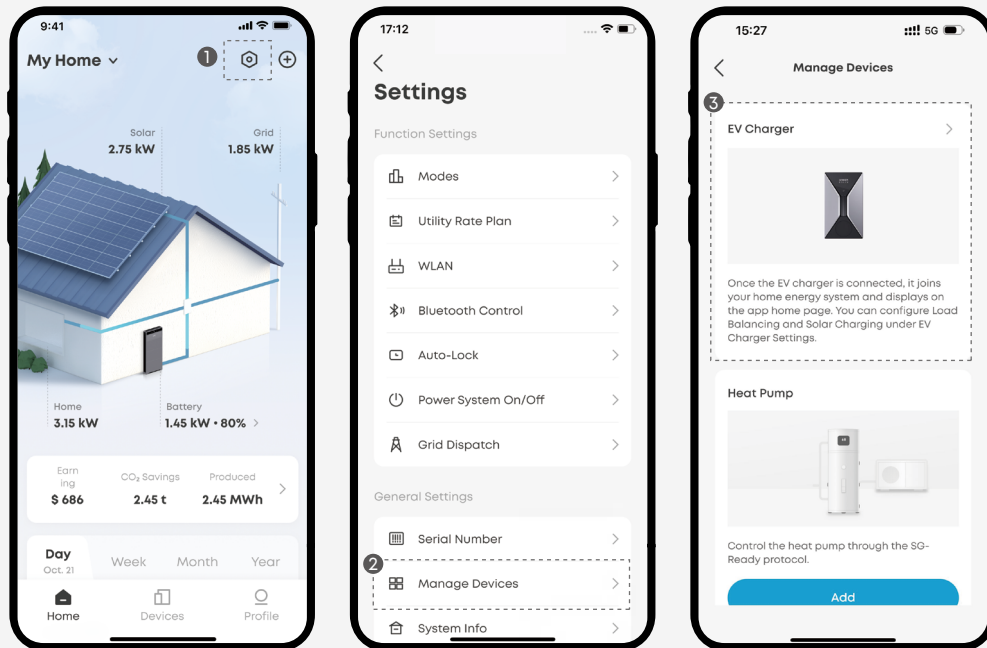
| Radio               | Feature                    | Operating Spectrum/Power         |
|---------------------|----------------------------|----------------------------------|
| IEEE 802.11-2.4 GHz | b/g/n Adaptive             | 2400 MHz to 2483.5 MHz ≤20.0 dBm |
| BLE                 | GFSK 1 Mbps, 2 Mbps        | 2402 MHz to 2480 MHz 6.65 dBm    |
| RFID                | 3~10 cm (1~4 inch), 1 Kbit | 13.56 MHz                        |



## 10. Appendix

### Appendix A. Add Your EV Charger to Anker SOLIX X1

1. Open the Anker app. On the home screen, tap the settings icon.
2. Select **Manage Devices** from the menu.
3. Go to the EV charger device page.
4. Choose your EV charger from the list.
5. Enable battery discharge if you want the EV charger to use stored battery energy.

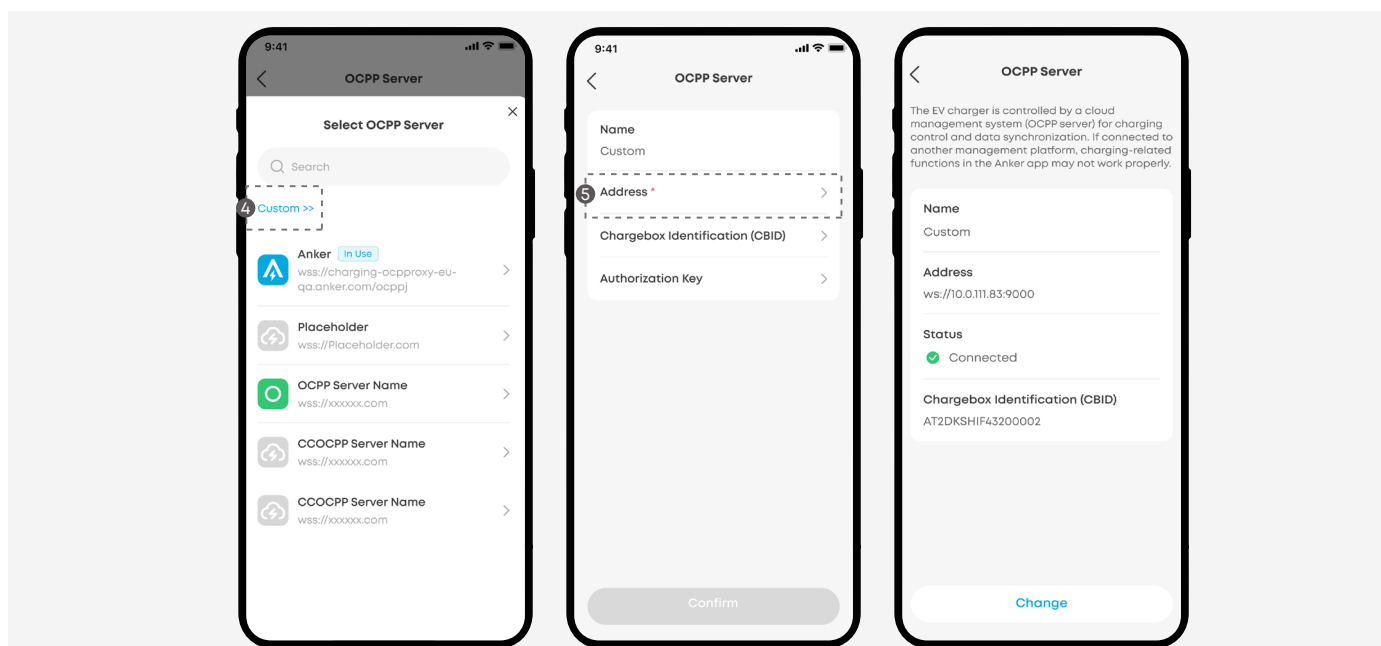
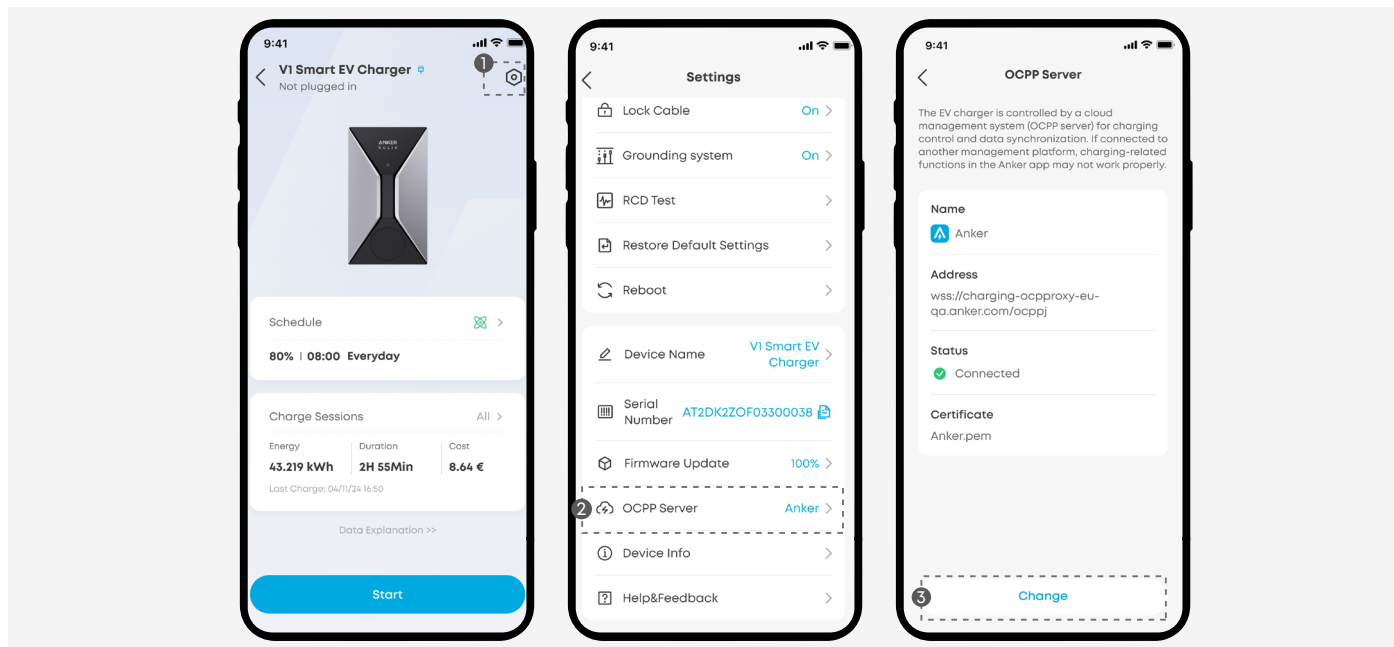


## Appendix B. Set up the OCPP Server

The EV Charger supports the OCPP (Open Charge Point Protocol) versions 1.6 JSON, for communicating with a central management system via Ethernet or Wi-Fi. The EV Charger operates as a client and receiving commands for remote start/stop and firmware updates, and sending charging status reports to the OCPP server.

To set up the OCPP server:

1. Open the Anker app, select your EV Charger, and tap the settings icon
2. Select **OCPP Server** from the menu.
3. Tap **Change** to enter the **Select OCPP Server** page.
4. Select **Custom** to configure a custom OCPP server.
5. Enter the **Address** of the custom OCPP server and confirm your settings.
6. After configuration, the connection status between your EV Charger and the OCPP server will be displayed.



- 💡 · When there is an ongoing charging session, the OCPP server cannot be changed. Please complete the ongoing session before proceeding.
- Some features may not function as expected when the charger is connected to a third-party OCPP server. If any issues occur, please contact the third-party platform for support or switch back to the Anker server in the settings.

## Appendix C. Activate Modbus TCP Communication

The EV Charger supports Modbus TCP communication protocol for integrating with external monitoring or control systems through Wi-Fi or Ethernet. This allows energy management systems or supervisory controllers to start or stop charging, monitor charger status, collect operational data, and control charging operations.

| Mode       | Interface      | Role   | Port     |
|------------|----------------|--------|----------|
| Modbus TCP | Ethernet/Wi-Fi | Server | Port 502 |

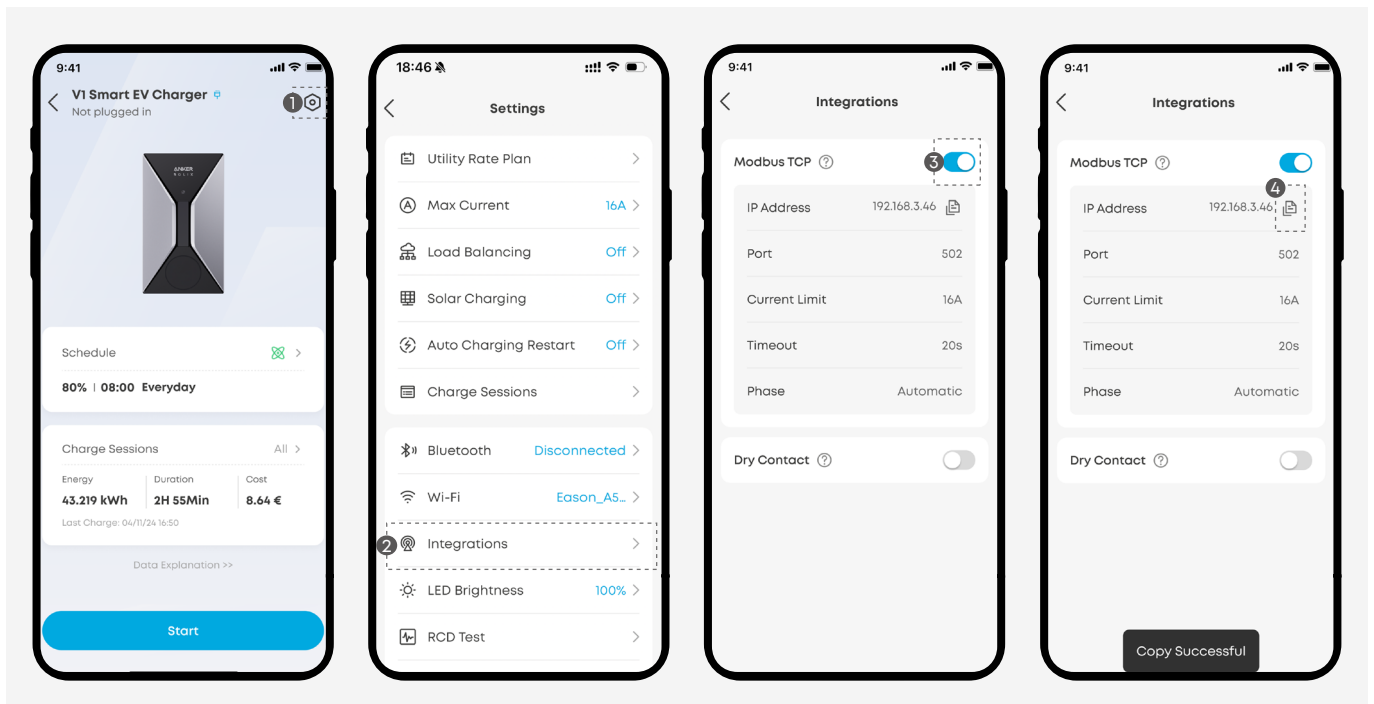
### Remarks:

- Supports up to two clients connected simultaneously (e.g., EMS and debugging tool).
- Real-time update interval: 1 second.

For the detailed function codes and register mappings, please refer to [Anker SOLIX V1 Smart EV Charger Modbus Protocol](#).

### To activate Modbus TCP:

1. Open the Anker app, select your EV Charger, and tap the settings icon.
2. Select **Integrations** from the menu.
3. Enable the **Modbus TCP** function by toggling the switch.
4. Copy the automatically obtained IP address to connect with external systems.
5. **Current Limit**, **Timeout**, and **Phase** that are configured via the connected system will be synchronized on this page within the following ranges:
  - **Current Limit**: 0-16A/32A (depends on the rated current of your EV Charger);
  - **Timeout**: > 5s;
  - **Phase**: Fixed Single-phase/Fixed Three-phase/Automatic



- 💡 · If both Wi-Fi and Ethernet are connected, the system will prioritize Ethernet for IP address display.
- When **Phase** is set to **Automatic**, the charger follows its own control strategy automatically.