UNI Plus

7 / 11 kW AC Charger

User Manual & Installation Instructions

www.e-faner.com

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Safty Instructions

Read this User Manual thoroughly before installing, maintaining, servicing, or replacing the UNI AC EV charger. Ignoring these instructions could lead to severe injury or death. Incorrect installation, testing or operation, could harm the charger or the vehicle's battery, and such damage is not covered under warranty. Keep this user manual for future reference.

Installation and Maintenance

- Do not install or use the charger near materials, chemicals, or vapors that are flammable, explosive, corrosive, or combustible.
- This device contains arcing or sparking components; do not expose it to flammable vapors to prevent explosion risks.
- Installation, adjustments, and maintenance must be performed by a qualified electrician or someone familiar with the construction and operation of this charger. Improper handling can lead to damage or severe injury.
- Ensure the wire type, diameter, current rating, and temperature rating meet local electrical standards and requirements.
- The charger must be connected to a grounded, metal, permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the charger.
- Turn off the charger's power supply before performing any maintenance work.
- Ensure to check that there are no unnecessary objects, such as screws and tools, left inside the charger's enclosure before closing the front cover.
- Never attempt to open, disassemble, repair, tamper with, or modify the charger. For repairs or replacement parts, contact E-FANER customer service.
- Using generators as power sources is prohibited, as it may damage the charger.

- If a network cable is required, its length must not exceed 30 meters.
- If crimp terminals are not used during installation, the product will not be covered under our warranty.

Operation

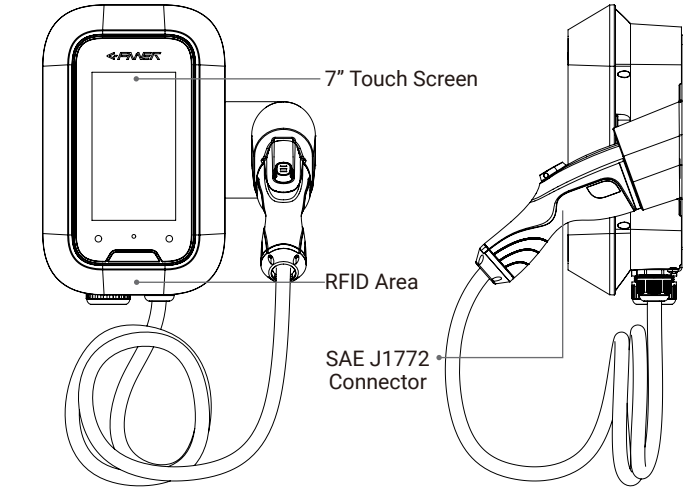
- Do not use this product if the flexible input power cable or EV charging cable shows signs of damage, such as fraying or broken insulation.
- Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
- Do not insert fingers or foreign objects into any part of the connector.
- Do not use the charger when exposed to severe rain, snow, or other extreme weather conditions.
- Ensure the charging cable is arranged properly to prevent it from being stepped on, tripped over, or otherwise damaged during use.
- Only pull the charging cable out of the charging socket by the charging connector.
- Do not leave the charging cable scattered on the ground after use. Remember to wrap it around the charger to reduce the risk of tripping and prevent damage to the cable.
- Do not remove the cover or attempt to open the enclosure, as there are no user-serviceable parts inside. For repairs, contact a qualified service provider.
- Always supervise the charger when used near children.
- This product is for electric vehicle use only, do not use it to charge or supply other devices.

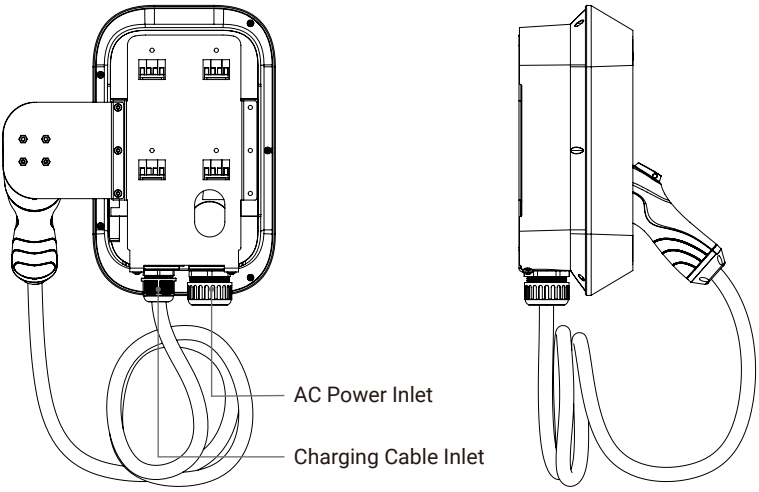
Transportation and Storage

- Handle the charger with care during transport. Do not drag, drop, or step on it.
- Do not lift or carry the device using the charging cable.

Product Overview

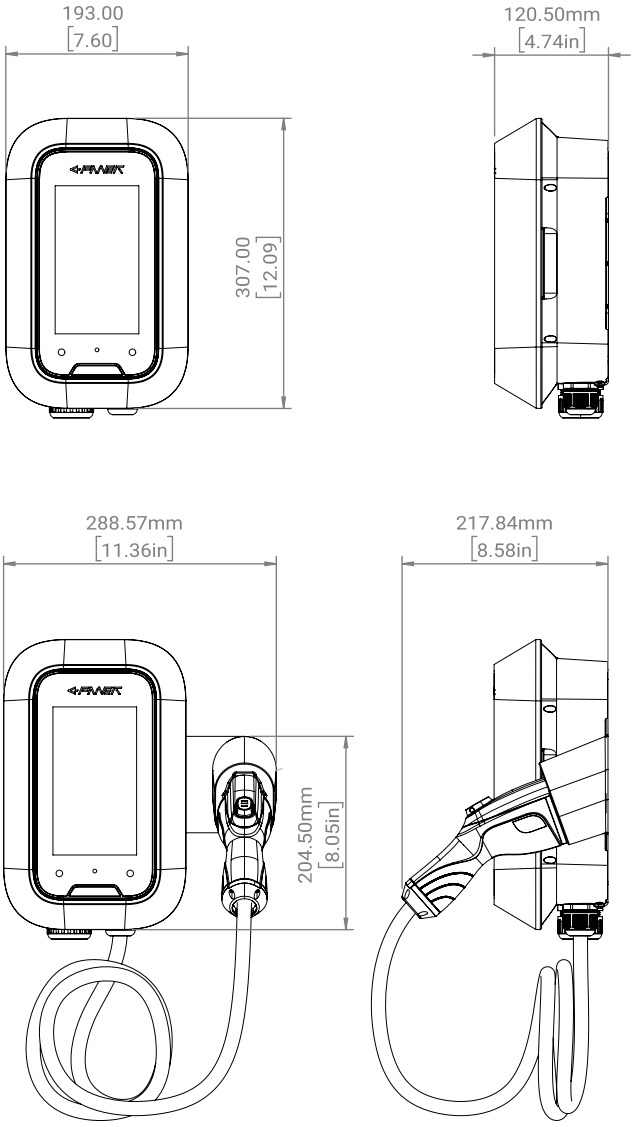
Interface



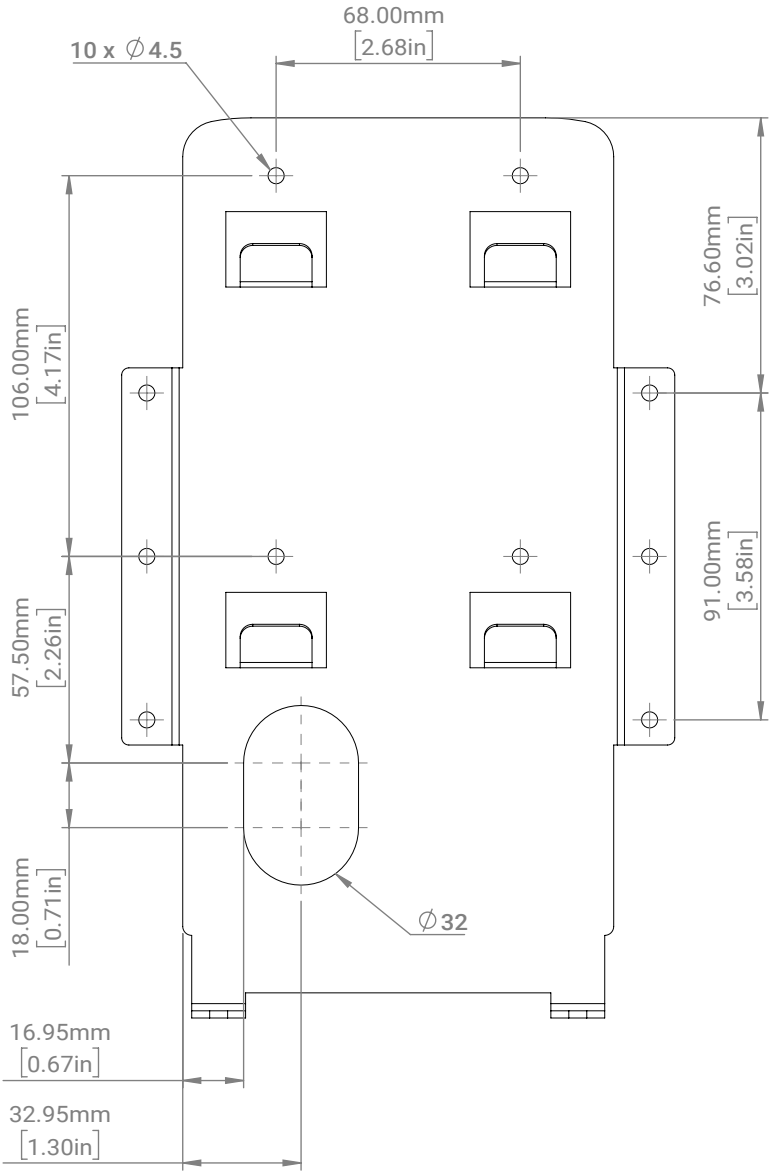


Dimensions

Main Size of the Charger



Wall-Mounted Bracket Dimensions

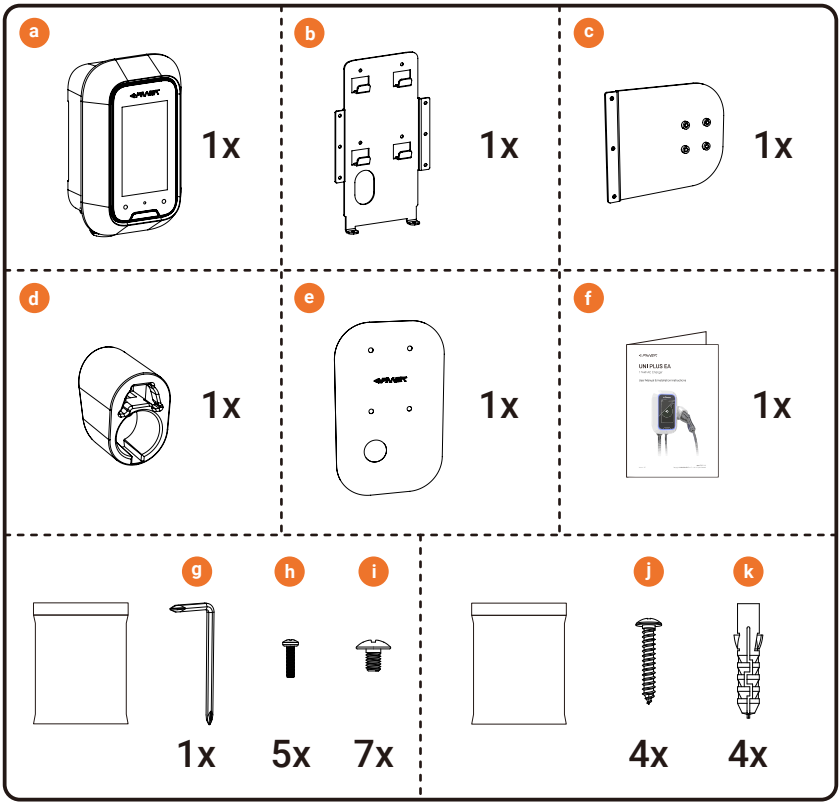


Specifications

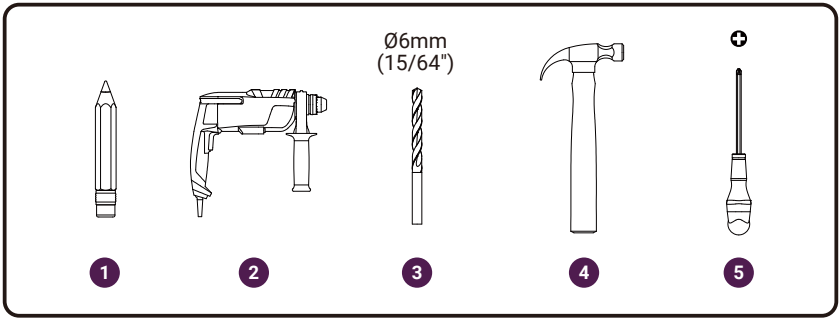
AC Input			
Frequency	60 Hz	Power Factor	>0.99
Voltage	200 Vac ~ 240 Vac	Total Harmonic Current	<5% (Rated input)
Current	32 ~ 50 A		
AC Output			
Voltage	200 Vac ~ 240 Vac	Voltage Accuracy	<±0.5%
Current	32 ~ 50 A	Max System Efficiency	>95% (Rated input and output)
Output Power	7 ~ 11 kW		
Working Environment			
Ambient Temperature	-40 °C to +50 °C		
Storage Temperature	-40 °C to +75 °C		
Working Humidity	0 ~ 95%		
Altitude	2000 m		
Certification			
Certification	CNS 15511 (VPC); IEC 61851; UL2594 / UL2231 / UL991		
Protection Class	IP55/IK10		
Function and Interface			
HMI	7” TEF touch screen LCD with tempered glass protection		
Communication	RJ45		
Charging Mode	Plug-and-Charge, RFID, QR Code, Password Start, Charging Schedule		
LED Status	Stand By, Ready, Charging, Fault, Alert		
Configuration			
Charging Connector	Type1 : 50 A , 240 V , 5 m ; Type 2 : 32 A , 240 V , 5 m		
Mechanical			
Dimensions	193 (W) x 307 (H) x 120 (D) mm		
Weight (Kg)	8 Kg (with charging connector)		
Protection			
Protection Items	Current overload protection, short circuit protection, over/under voltage protection.		
	Leakage protection, ground protection, lightning protection, relay sticking protection, overtemperature protection.		
Automatic Recovery	Automatic recharging after overvoltage, undervoltage, overcurrent, and overtemperature protection recovery.		

Installation

Packing List



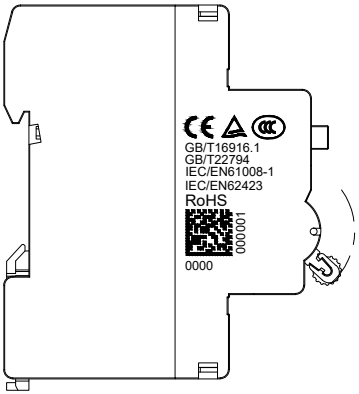
Required Tools

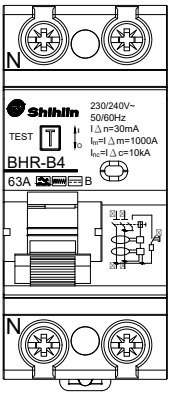


External RCD Specifications

Brand	Model	Product Name	Poles (P)	Rated Current (A)
Shihlin Electric	BHR+B4	Type B RCCB	2	63
	Rated Operating Voltage (VAC)	**Rated Frequency (Hz)**	**Residual Current Protection Type**	**Mounting Type**
	230/240	50/60	B 型	Standard DIN Rail (35 mm)

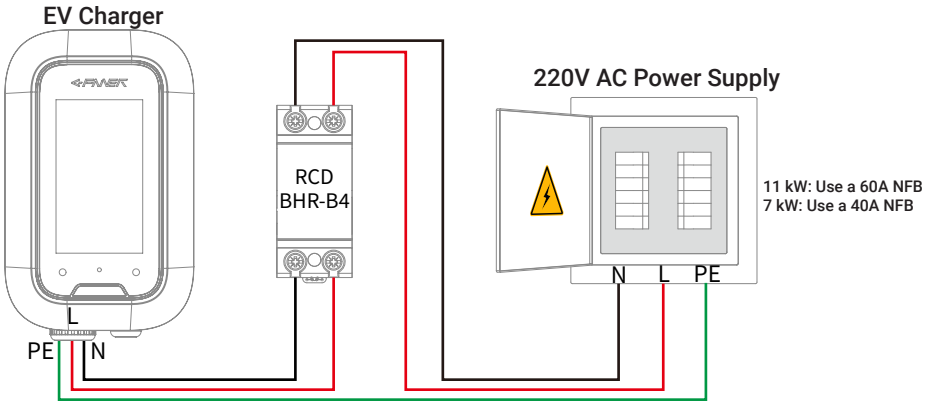
2P



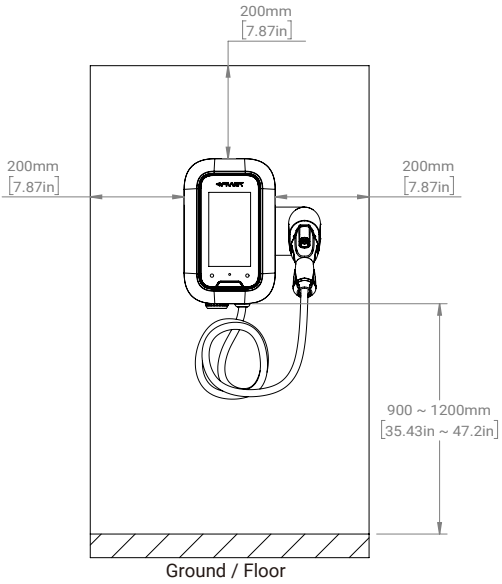


Recommended Power Cable Configuration

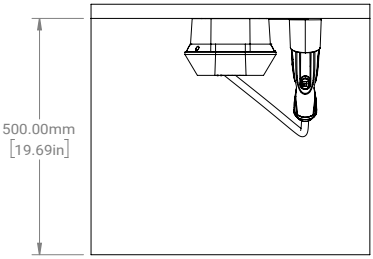
Power Cable	Cross-sectional Area (AC)	Current at 220 Vac	Max Power
L / N	16 mm² ~ 17 mm²	32 A / 50 A	7 kW / 11 kW
PE	8.3 mm² ~ 9 mm²	-	-



Recommended Installation Spacing



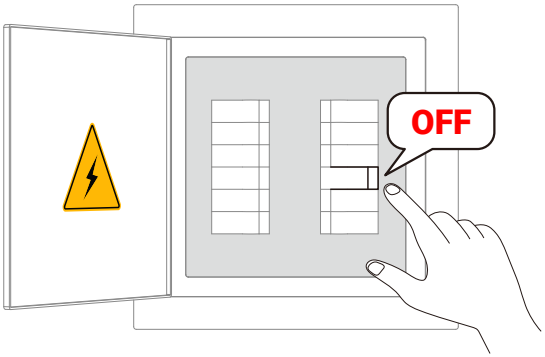
- **Front View**



- **Top View**

Before You Start

Disconnect electrical power before installing the charger.



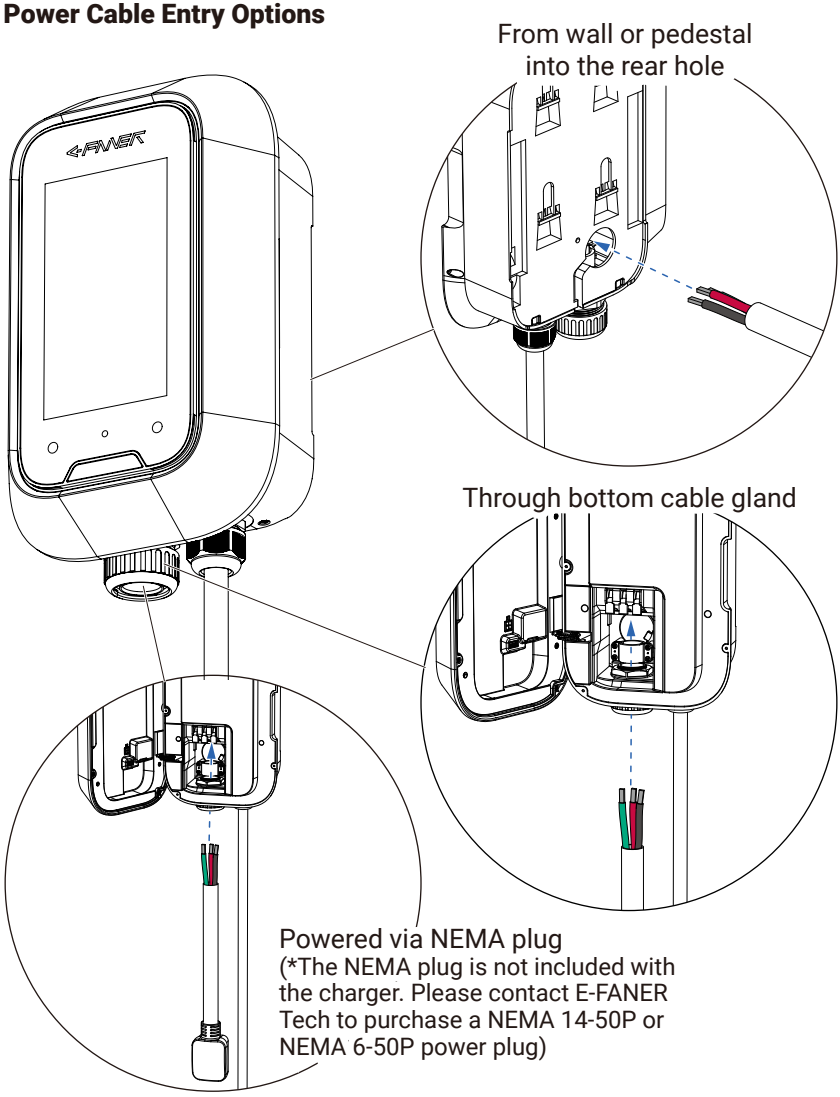
Cable Entry Options

Before installation, decide which hole to run the cable through into the charger.

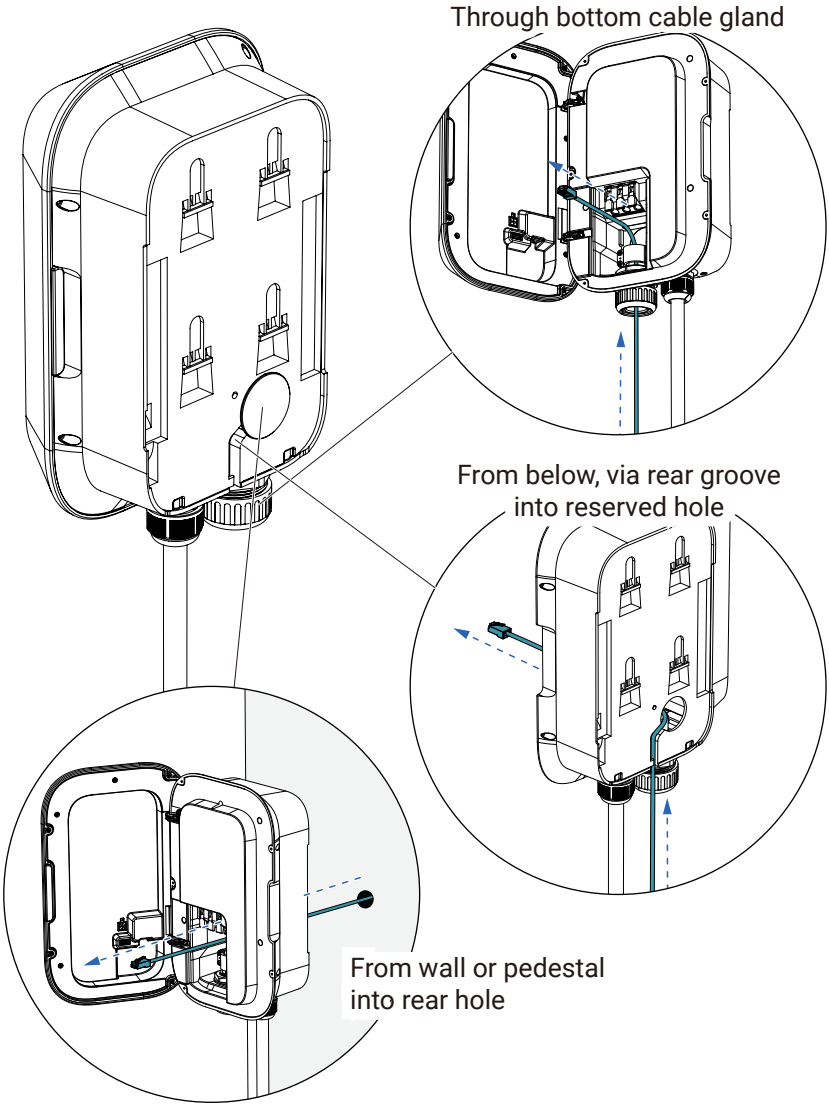
* Note: Power and network cable must use separate entry holes.

* When feeding the cable through the rear hole, the hole must be sealed with silicone after installation to achieve NEMA Type 3R protection.

Power Cable Entry Options



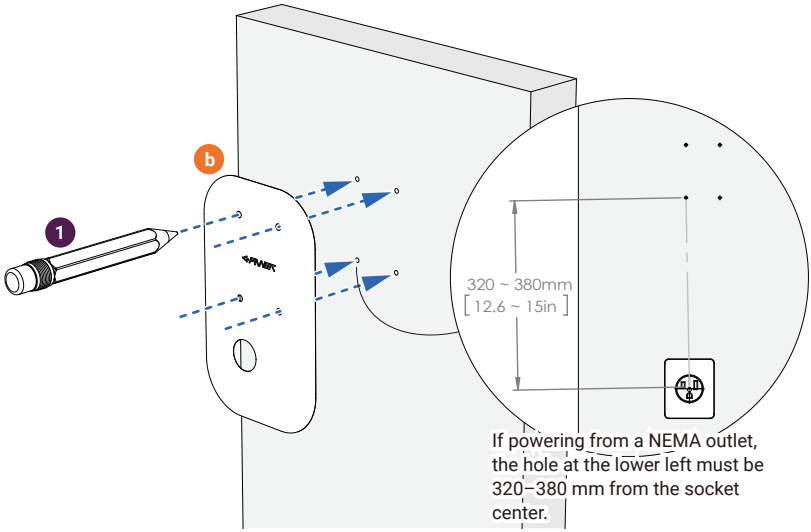
RJ45 Cable Entry Options



Installation Steps

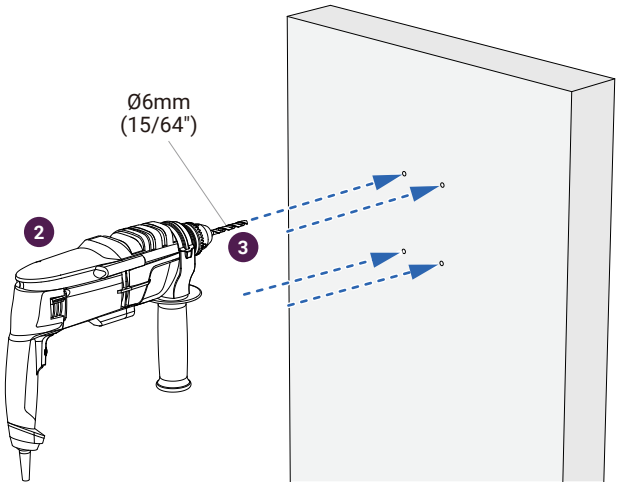
Step 1

Mark the positions of the four holes using the paper drill template.



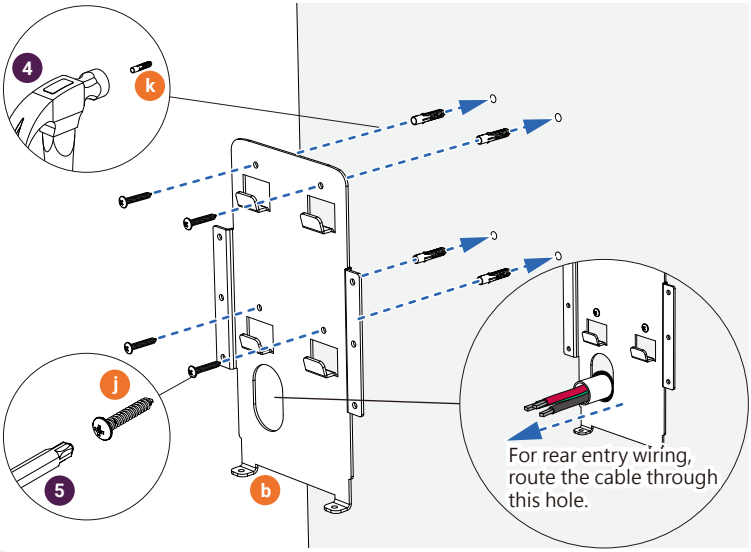
Step 2

Drill the four holes with a Ø6mm (15/64”) drill bit.



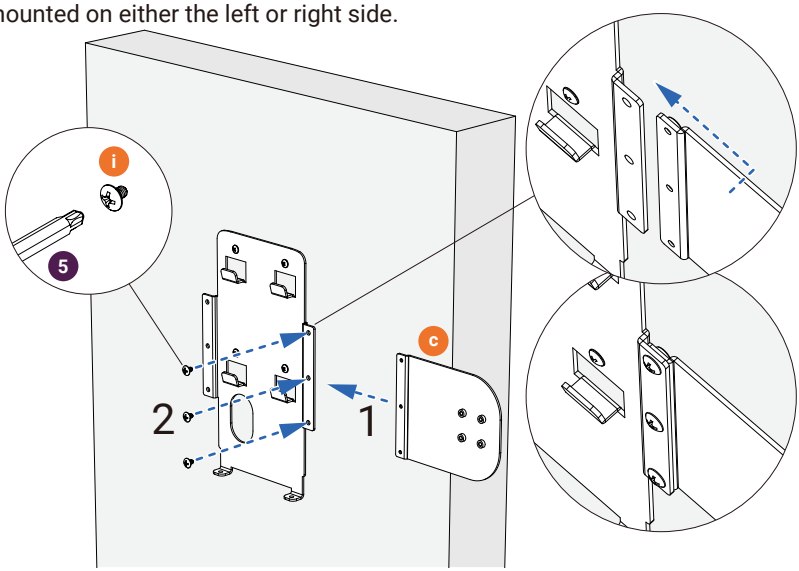
Step 3

Insert the four wall plugs, then install the wall-mount bracket with four tapping screws.



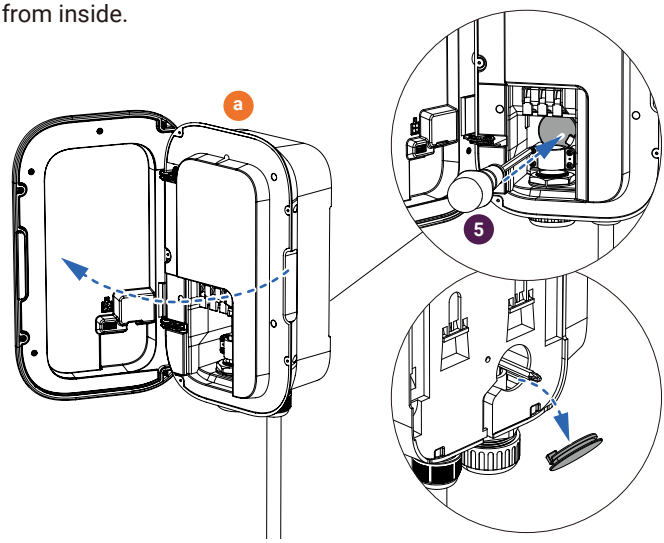
Step 4

Install the connector holder bracket using three M4x6 screws; it can be mounted on either the left or right side.

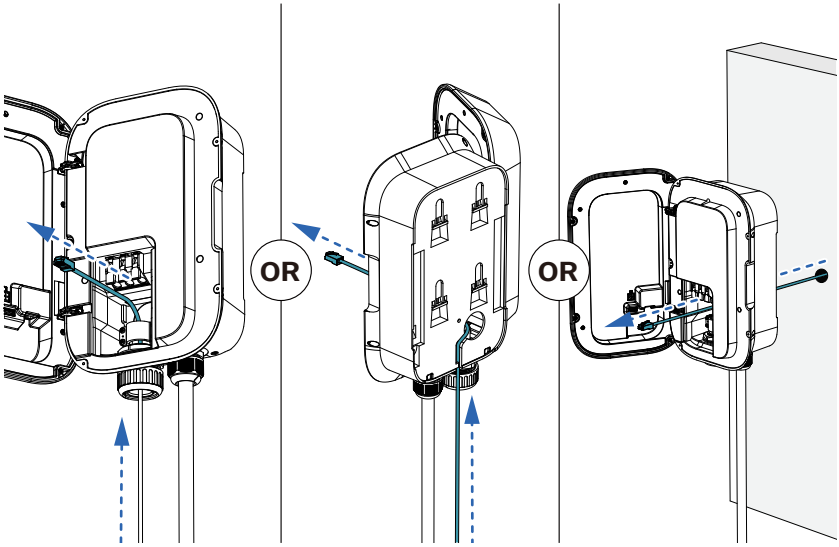


Step 5

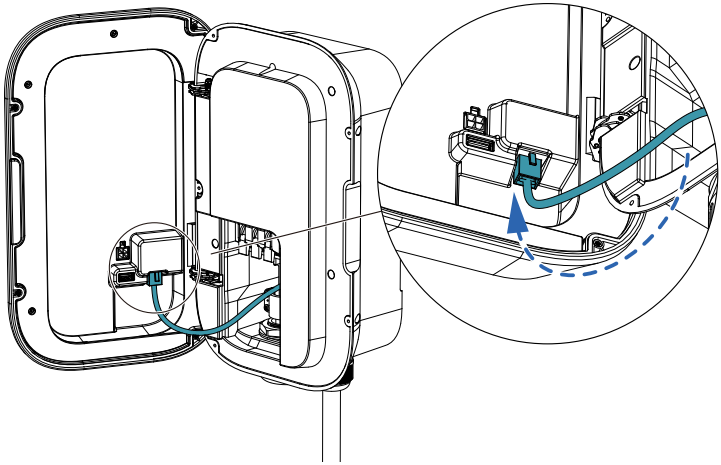
*Connect the RJ45 cable. If not needed, skip to Step 6.
Open the charger front cover. Using a screwdriver or similar tool, push out the rubber plug from inside.



The RJ45 cable can enter via the bottom cable gland, the rear groove, or directly from the wall into the rear opening.



Connect the RJ45 cable to the RJ45 port on the front cover.

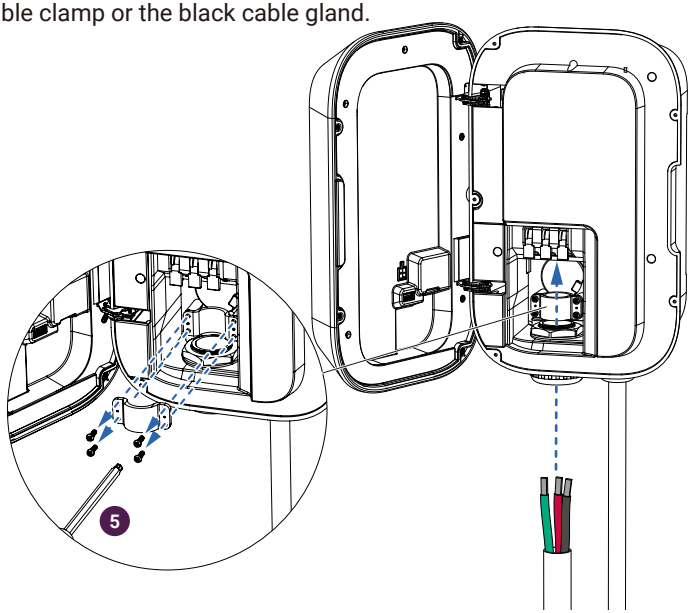


Step 6

Wire the power cable, there are three options:

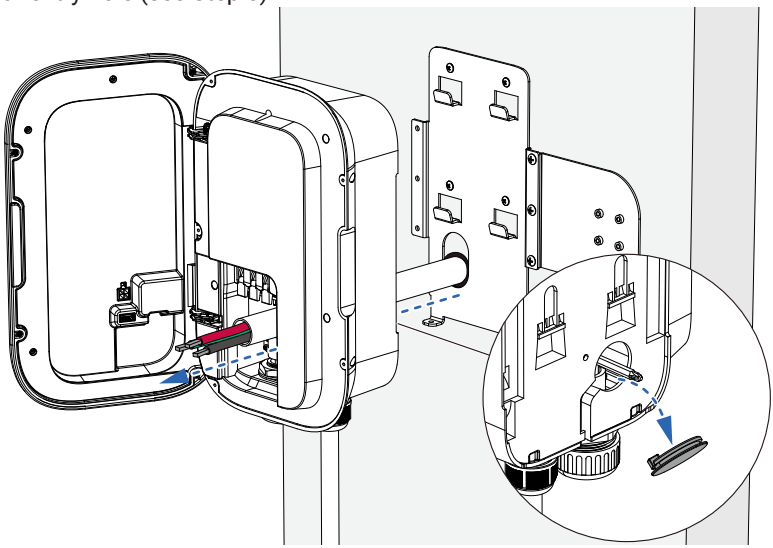
Entry Option 1: Through the bottom cable gland

Feed the power cable into the charger. If necessary, remove the white curved cable clamp or the black cable gland.



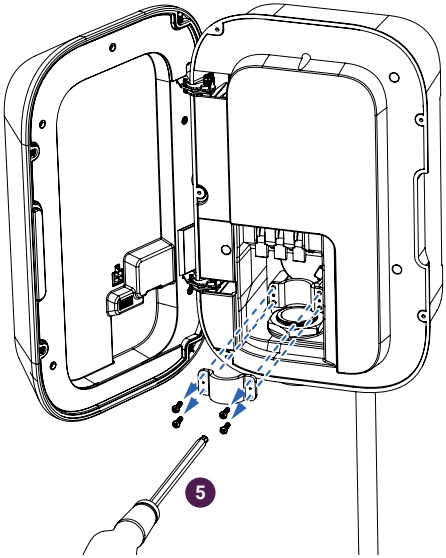
Entry Option 2: Through the rear opening

Push out the rear rubber plug from inside, then route the power cable through the rear entry hole (see Step 5)

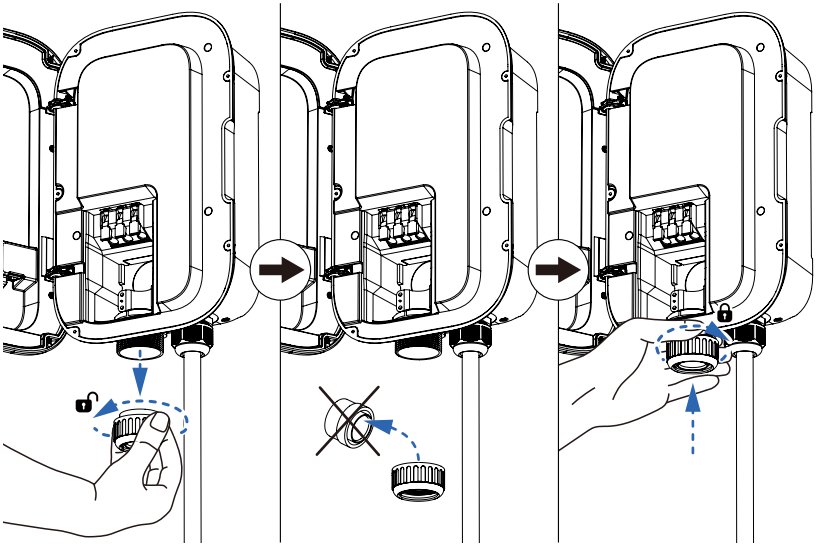


Entry Option 3: Via NEMA plug

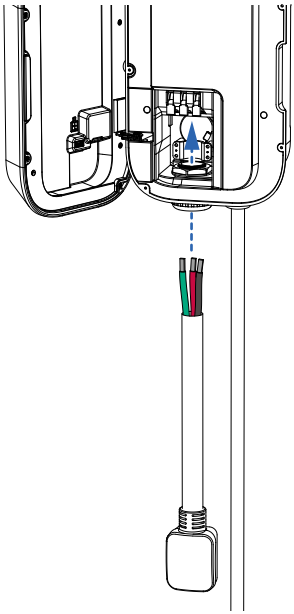
Remove the curved cable clamp.



Unscrew the cable gland cap, remove the inner ferrula, then reinstall the cap.

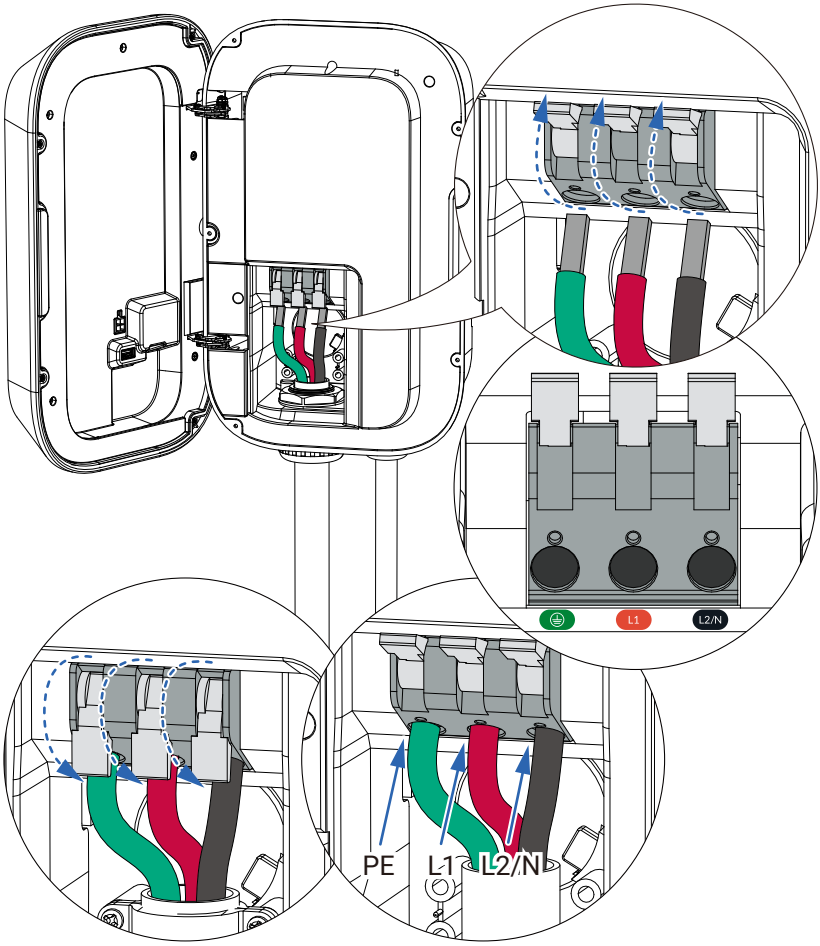


Feed the NEMA plug cable through the cable gland and pull it into the charger.



Step 7

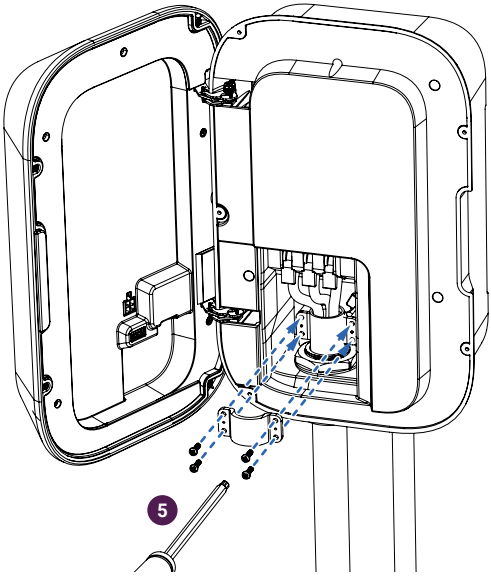
Lift the three WAGO levers, insert each wire into the corresponding terminal according to the icons on the cover, then push the levers down to secure them. (If crimp terminals are not used during installation, the warranty will be void.)



Recommended power cable installation options:

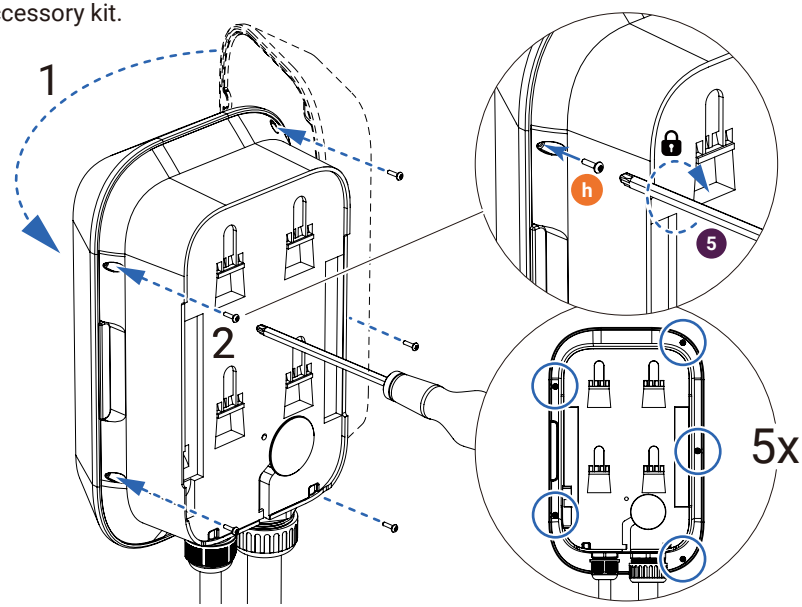
Solid conductor	Fine-stranded conductor	Fine-stranded conductor; with insulated ferrule	Fine-stranded conductor; with uninsulated ferrule	Strip length
1.5 ~16 mm² (16 ~ 6 AWG)	1.5 ~16 mm² (16 ~ 6 AWG)	1.5 ~10 mm²	1.5 ~10 mm²	12 ~ 13 mm (0.47 ~ 0.51 in)

If the white cable clamp was removed earlier, reinstall it.



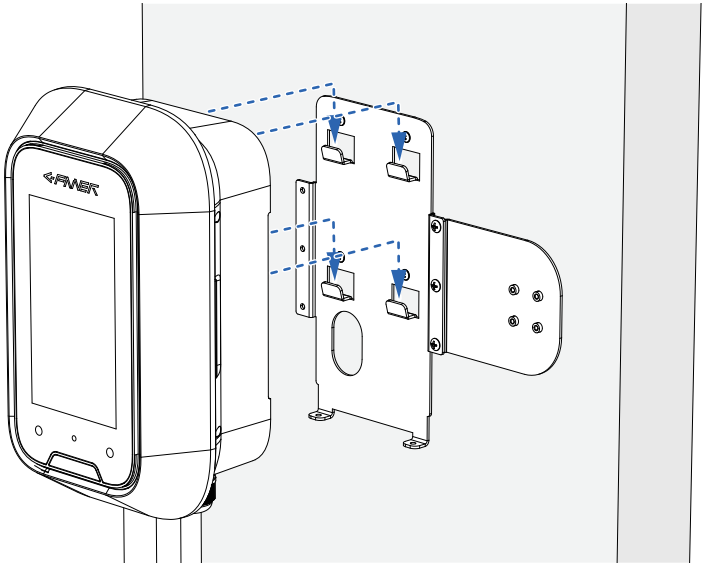
Step 8

Close the front cover and secure it using the five M2.5 screws provided in the accessory kit.



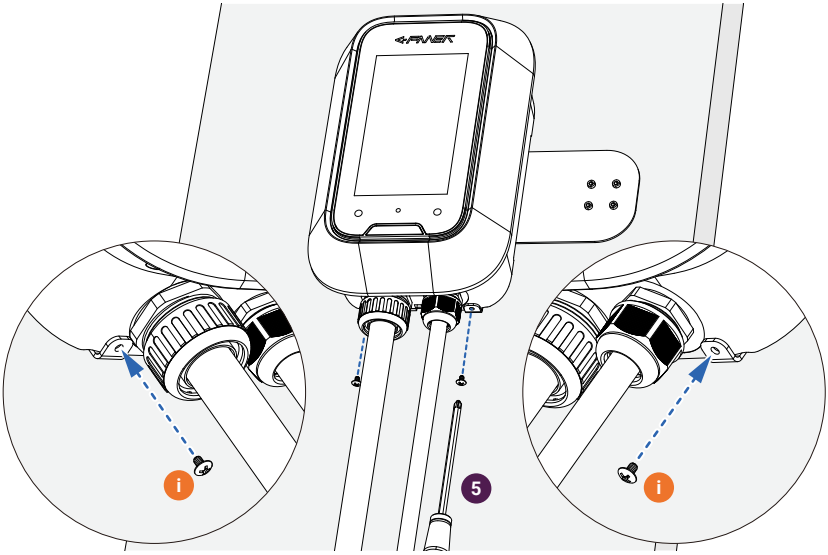
Step 9

Hang the charger onto the wall-mount bracket.



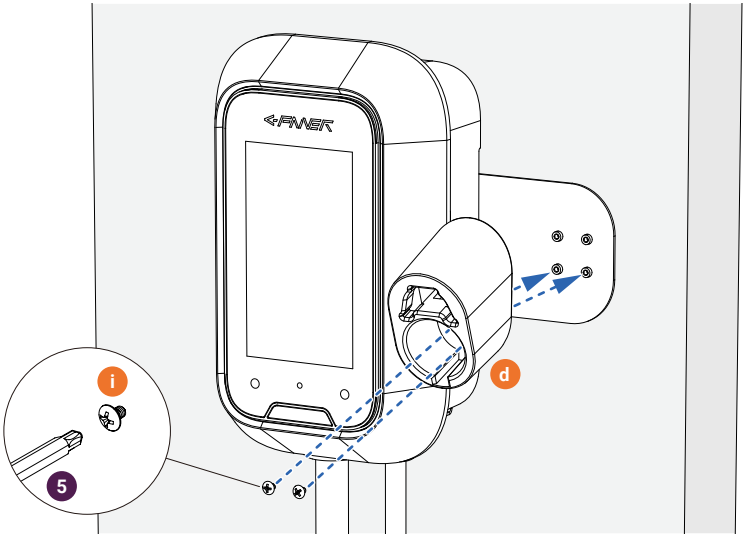
Step 10

Secure the charger to the wall-mount bracket from the bottom using two M4×6 screws.



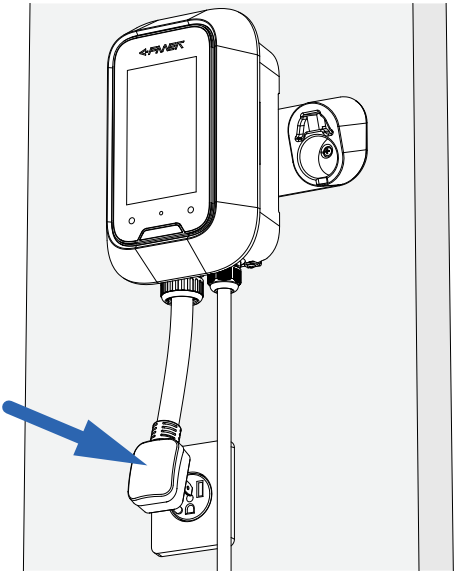
Step 11

Use two M4 screws to fix the connector holder to the bracket.



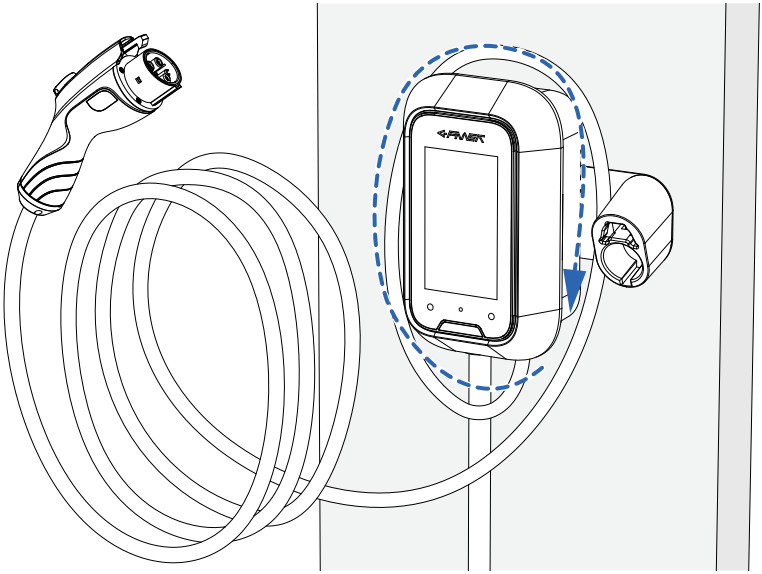
Step 12

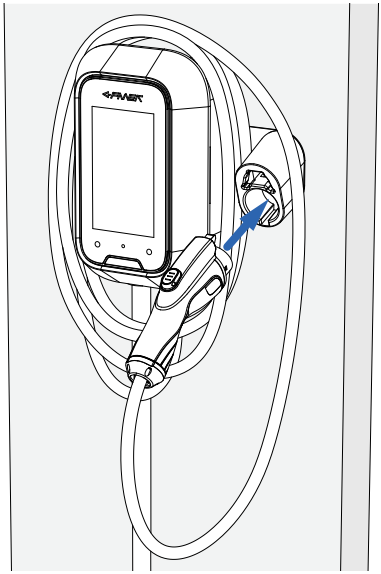
If a NEMA plug cable was installed earlier, plug it into the outlet.



Step 13

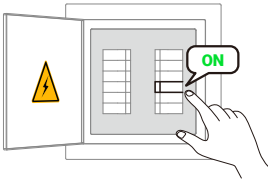
Wrap the charging cable around the charger to prevent it from lying on the ground, and insert the charging connector into the holder.





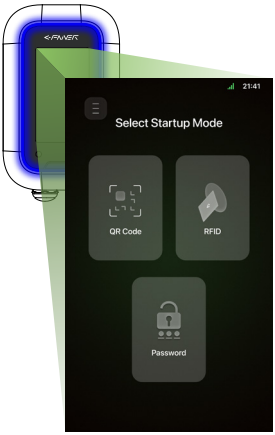
Setup Instructions

Powering and Start Up



Check that all installation and wiring are secure and properly connected. Then, switch on the circuit breaker and wait for power.

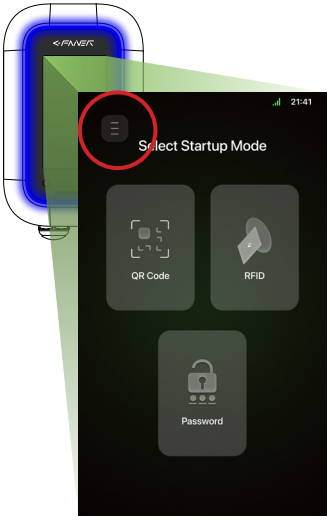
After the charger is energized at the circuit breaker, the charger will begin to start up and perform a series of self-checks. The charger should illuminate white steaming light during this process.

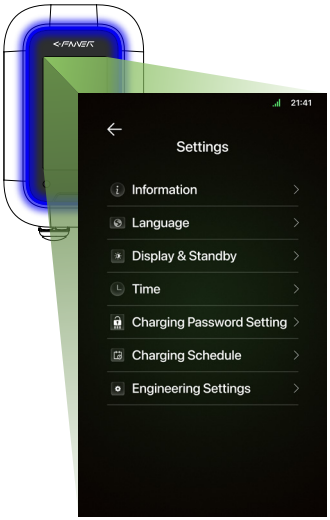


After powering on, a Startup Mode selection menu will appear. The available startup modes depend on the settings in Engineering Setting. At this time, the charger will remain with a steady blue light.

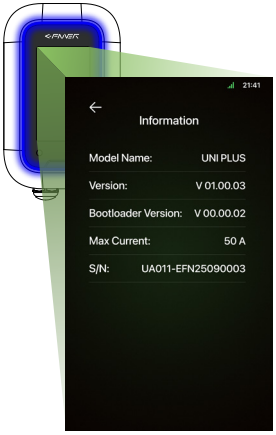
General Settings

Tap the settings icon at the top left of the standby screen to enter the settings menu.



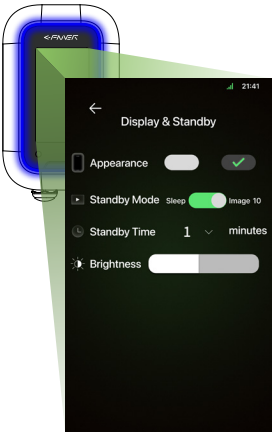


All options in this settings interface are user-accessible. (Engineering settings can disable those not meant for general users.)
There are the following types of options:



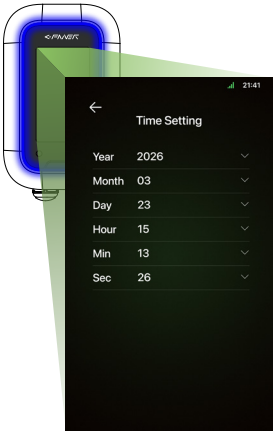
View Charger Information

- You can view the charger model, firmware version, currently set maximum current, and charger serial number.



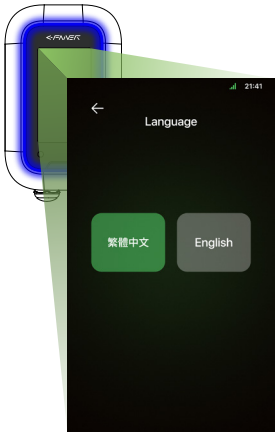
Display and Standby settings

- Appearance: switch between light theme or night theme
- Standby Mode: switch to sleep mode or image slideshow
- Time to enter standby screen
- Adjust screen brightness



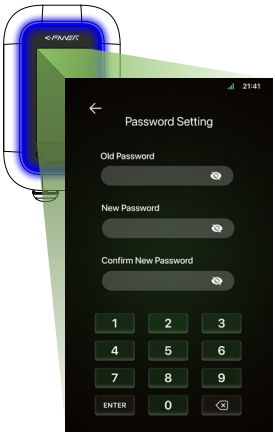
Time Setting

- Set the charger's clock time; if connected to a network, the time will update automatically.



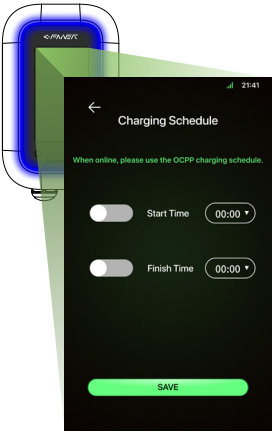
Language Setting

- Current language options are Traditional Chinese and English.



Password Setting

- Change the password of Password Start. The default password is six zeros (000000).

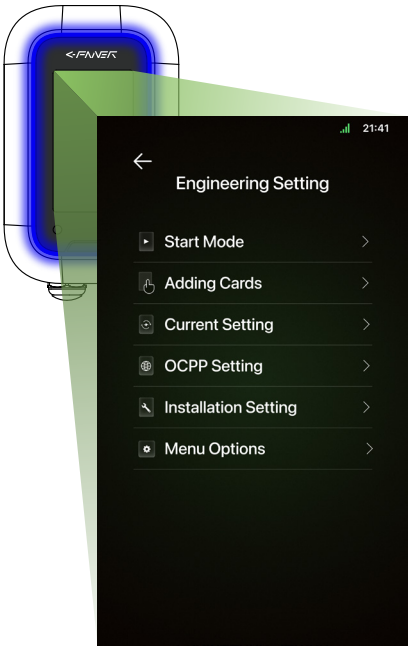


Charging Schedule

- Schedule charging by specifying start and end times.

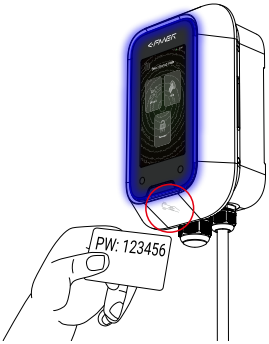
Engineering Setting

Some settings can only be changed in Engineering Setting.



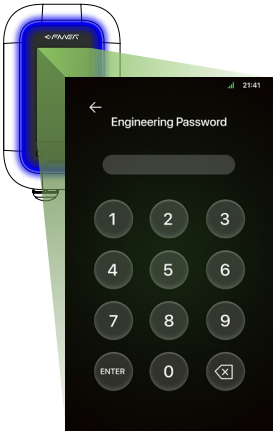
Entering Engineering Setting

There are two ways to enter Engineering Setting:



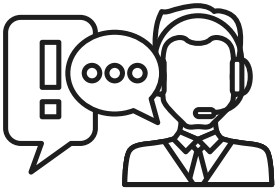
1. Tap the Engineer Card

- When the charging connector is not connected to the vehicle, tap the engineering card on the sensing area below the charger to enter the password input interface (if the charging connector is already connected, tapping the engineering card will have no effect).
- Different operators must use their corresponding Engineer Card to enter Engineer Setting.

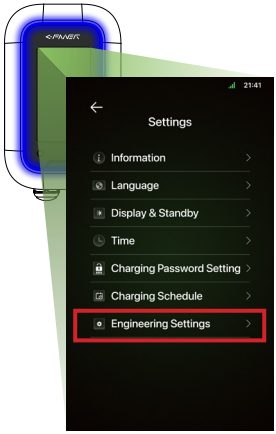


- Enter the password of the engineering card to access Engineering Setting.

2. If the engineer card is lost



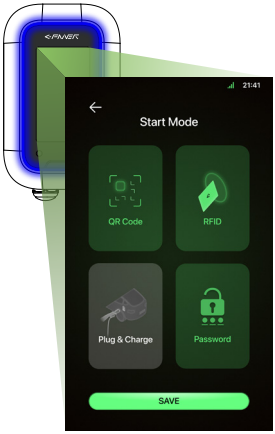
- Contact E-FANER Tech to obtain a password, the password is valid for 10 minutes.
- Since the password is time-sensitive, please confirm that the "time setting" is correct before obtaining the password.



- On the “Settings” page, tap “Engineering Settings” at the bottom, enter the password to access.

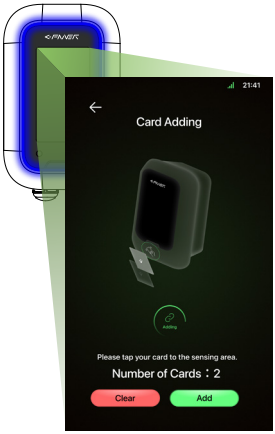
Engineering Setting

In Engineering Setting, the following configurations are available:



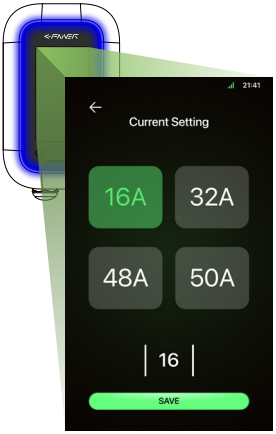
Start Mode setting

- Enable the desired charging mode. (If "Plug & Charge" is selected, other modes will be disabled automatically.)
- After making changes, the charger will restart automatically.



Add RFID card

- Place the RFID card on the RFID area at the bottom of the charger, then tap “Add.” The card will be added for use in RFID mode.



Maximum current setting

- For UNI AC series chargers, the maximum output current can be set directly via the screen.

OCPP Setting

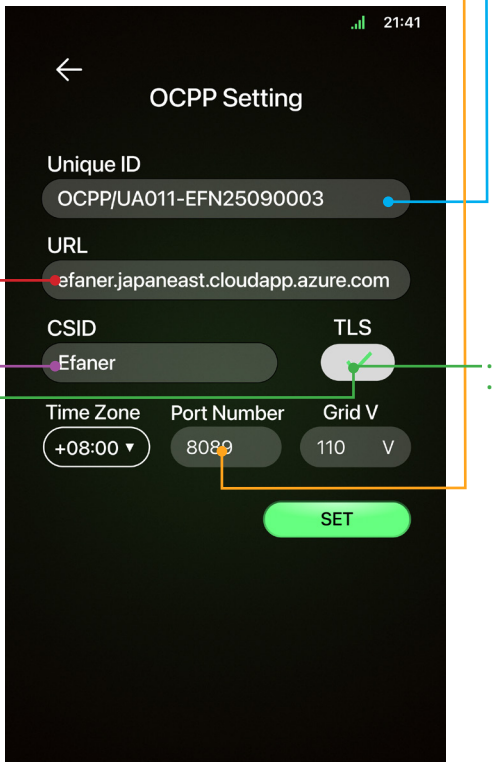
Example OCPP URL:

wss://tail.wincharge.net:9002/tail/ocppv16/Testxxx

server _address

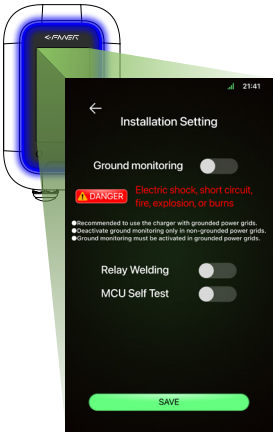
Port Number

path/ChargePointID



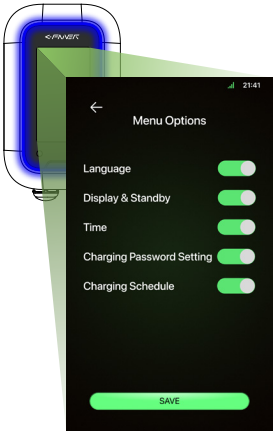
• Checked: Encrypted (WSS://)
• Unchecked: Not encrypted (WS://)

Enter the operator ID



Installation Setting

- Select whether to turn off ground protection.



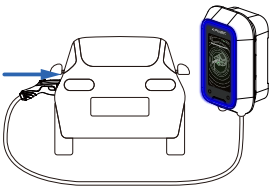
Menu Options

- Show or hide the options on the settings page.

Operation

Start Mode

To start the charging process, select the charging mode set in Engineering Settings. There are 3 available Start Mode:

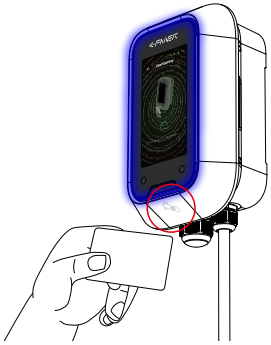


1. Plug-and-Charge

- The charging station will automatically start charging once the charging connector is properly connected.

2. QR Code

- Scan the QR code with your phone to connect to the backend, complete user authentication, and start charging.



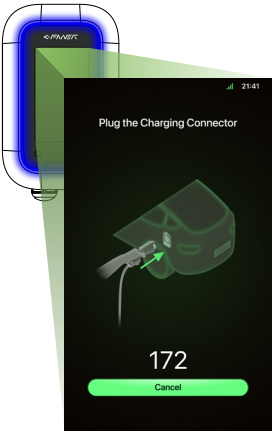
3. RFID

- Tap the RFID card on the sensing area at the bottom of the charger. Charging will start once the card is successfully detected.

3. Password Start

- Enter the set password to start the charging process.
- The default password is six zeros (000000)

Start Charging

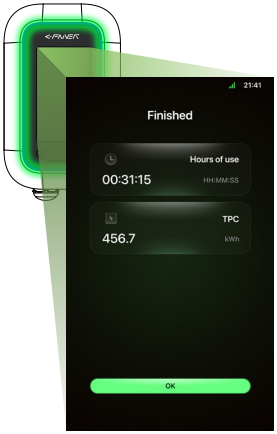


- After successfully initiating the charging process, if the charging connector has not yet been plugged into the car, a reminder will appear.

- After the charging process starts, please wait a few seconds for the vehicle to get ready. The charger will flash blue during this process.

- Once ready, charging will begin, and the charger will show a green breathing light while the session is in progress.

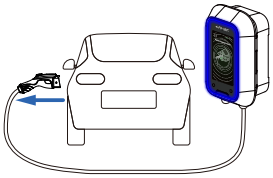
Stop Charging



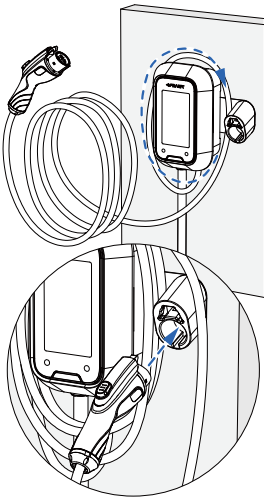
Step 1. To stop charging, choose one of the following methods:

1. Tap “Stop” on the charger screen to manually end the session.
2. Wait for the charging session to complete; no further action is needed.

The charging LED will turn solid green when the session stops.



Step 2. Unplug the charging connector from the EV’s charging port.



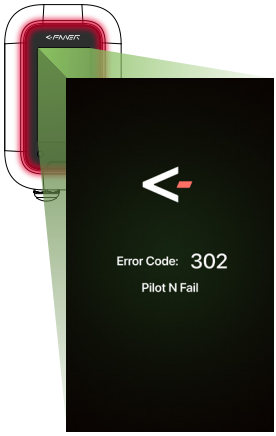
Step 3. Arrange the cable and charging connector properly.

Wrap the cable around the charger so it won't scatter on the ground, and plug the charging connector back into the socket of the EV charger.

LED Status Description

Work Status	White	Blue	Green	Red
Startup	Streaming	-	-	-
Standby	-	Solid	-	-
Preparing to Charge	-	Flashing	-	-
Charging	-	-	Breathing	-
Charging Completed	-	-	Solid	-
Error	-	-	-	Solid

Error Code and Troubleshooting

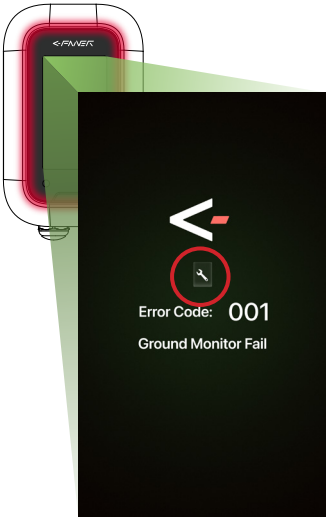


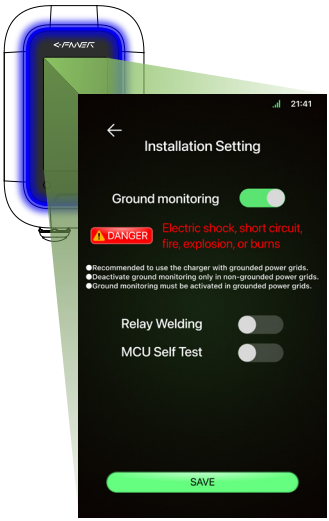
When an error occurs, the LED will illuminate solid red, and the screen will display the error code along with a description of the issue.

Error Code List

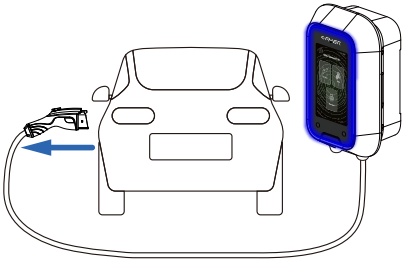
Error Code	Description	Recommended Actions
Error 301	Pilot P Abnormal Fail	Unable to connect to the vehicle. Remove the charging connector and reboot the charger.
Error 302	Pilot N Fail	Unable to connect to the vehicle. Remove the charging connector and reboot the charger.
Error 101 or 404	Leakage Current Fail	Have an admin or electrician check the connector, cable, station, and charge port for water damage and ensure no conductor wires touch the ground.
Error 001	Ground Monitor Fail	Verify the charger is properly grounded.
Error 081	OTP	Remove the station from the wall mount, confirm correct conductor size and secure the terminal block.
Error 381	Meter Fail	Remove the charging connector and reboot the EV charger.
Error 015	OCP	Lower the vehicle's charge current setting.
Error 021	OVP	Use a multimeter to check if the input voltage is too high.
Error 401	Relay Welding Fail	Remove the connector and reboot the station.
Error 201	Leakage Current Self Test Fail	Contact E-FANER support.
Error 022	UVP	Use a multimeter to check if the input voltage is too low.

If Error Code 001 occurs, a wrench icon will appear in the center of the screen. Tap it to enter the page for turning off ground protection.





If the red light flashes **once** without an error message appearing, it indicates Relay Welding Detect. Please unplug the charging connector and restart the charger.



Maintenance and Warranty

Maintenance

- Gently wipe the surface of the wall-mount charger with a slightly damp cloth to remove dust and dirt.
- Do not use organic solvents or volatile liquids to clean the charger housing, as they may cause damage and pose a fire hazard.
- If the charger will not be used for a long period of time, turn off the power switch inside the power box with dry hands.

Warranty

The warranty period for this EV charger is three years from the delivery date, the customer service can provide more information on the terms of warranty.

Follow These steps to obtain warranty service:

1. If you believe your charging station is defective during the warranty period, contact Customer Service at:

efaner0105@e-faner.com

2. In your email, please provide the following information:

- A detailed description of the issue with the charging station
- The model number and serial number of the charging station
- Proof of purchase
- Shipping information

3. If E-FANER determines that the defect is covered under warranty and the warranty is still valid, you will be instructed to ship the defective charging station to E-FANER. The unit must be returned in its original packaging or a secure container designed to prevent damage during shipping. E-FANER will repair or replace the defective unit free of charge and return it to you at E-FANER's expense.

Exclusions from Warranty:

- Failure to provide a valid proof of purchase.
- The product has exceeded the warranty period.
- Damage caused by improper use, maintain, or store the product.
- Damage or malfunction caused by foreign objects entering the unit.
- Damage caused by disassembly or repairs performed by unauthorized personnel.
- Damage caused by unavoidable external factors (e.g., lightning, excessive voltage, earthquakes, fires, floods, or other natural disasters).
- Malfunction or damage caused by other unavoidable external factors.
- Damage caused by using an unauthorized power source or incorrect voltage.
- Not using crimp terminals during installation

Please scan the QR code to check the latest version of the user manual.

Contact:

E-FANER Tech Co., Ltd.

E-mail: efaner0105@e-faner.com

Tel: +886-2 2708 8810

Address: 14 F., No. 125, Sec. 2, Keelung Rd., Xinyi Dist., Taipei City 110607, Taiwan (R.O.C.)

Website: www.e-faner.com