



# EV CHARGER

AC Charger / ePro 100A

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# IMPORTANT SAFETY INFORMATION

This manual contains important instructions for EV CHARGER that shall be followed during installation, operation, and maintenance. Please review all warnings and cautions before installing and using the Wall Connector. For the safety of yourself and others, as well as to prevent damage to equipment and vehicles using the equipment, all personnel operating or in contact with the equipment should follow these instructions during installation, operation, and maintenance. It is important to read and understand the safety instructions in this manual.

- (1) "IMPORTANT SAFETY INSTRUCTIONS" and "SAVE THESE INSTRUCTIONS"
- (2) INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK

## Safety Messages

Safety messages are provided to help prevent personal injury and equipment damage. All safety messages are introduced by a single word indicating the hazard level.



**DANGER:** Indicates an imminently hazardous situation with a high risk level which, if the danger is not avoided, will cause death or serious injury.



**WARNING:** Indicates a potentially hazardous situation with a medium risk level which, if the caution is not obeyed, may cause minor or moderate injury or damage to the equipment.

The safety messages herein cover situations GoPro is aware of. GoPro cannot know, evaluate or advise you as to all of the possible hazards. You must be certain that any condition or service procedure encountered does not jeopardize your personal safety.



## WARNINGS

1. These instructions must be adhered to during the installation, operation, and maintenance of the unit.
2. EV Charger should only be installed by a qualified electrical professional.
3. This equipment must be grounded through a permanent wiring system or an equipment-grounding conductor.
4. Do not install or use this equipment near flammable, explosive, harsh, or combustible materials, chemicals or vapors.
5. When used near children, ensure constant supervision of this device.
6. Do not insert fingers into the electric vehicle connector.
7. Don't open or remove the front of EV Charger housing when the main power is on. With the power on, open or remove the cover, or operate, maintain, connect the charger will be a safety hazard and could result in injury.
8. The charger's socket (including the charging cable) and the housing must be regularly inspected for damage.

## IMPORTANT SAFETY INFORMATION

9. Use 90 °C wire copper conductors only.
10. Do not use the equipment if the flexible power cord or EV cable is frayed, broken or otherwise damaged, or fails to operate.
11. Do not use the equipment if the enclosure or the EV connector is frayed, broken or otherwise damaged, or fails to operate.
12. Do not operate the equipment outside its operating temperature range of -22 to 122 °F (-30 to 50 °C).
13. Incorrect installation and testing of the equipment could potentially damage the vehicle's battery, components, and/or the equipment itself.
14. Handle the equipment with care during transportation. Do not subject it to strong force or impact or pull, twist, tangle, drag or step on the equipment, to prevent damage to it or any components.
15. For NEMA plug-in version, use only the NEMA outlet (6-20 or 6-50 or 14-50).
16. Charger repair or replacement should only be carried out by an approved installer.
17. Do not remove safety symbols, warning labels, nameplates, signs, or markings.
18. For use with Electric Vehicles.
19. Ventilation Not Required.
20. Use Copper Conductors Only.
21. This device is intended only for charging vehicles not requiring ventilation during charging.



### CAUTIONS

1. When installing for the first time, switch off the power supply before connecting to the charger input. Do not connect with live power.
2. Make sure to turn off the power to EV Charger when operating, maintaining, or connecting the charger to main power.
3. Modifying the charger without authorisation will pose a safety risk and void your warranty.
4. Your EV Charger should only be connected to electric vehicles that are suitable for charging with EV charger. It should not be used for other loads such as power tools.
5. Always follow the electric vehicle manufacturer's instructions when using EV Charger.
6. EV Charger is not suitable for use in environments that pose an explosion risk due to ignition.
7. To reduce the risk of electric shock, connect only to properly grounded outlets.
8. To avoid a risk of fire or electric shock, do not use this device with an extension cord.
9. The lightning symbol on the nameplate means "Internal high voltage charged, there is a risk of electric shock, please do not open and touch".
10. Risk of electric shock. Do not remove cover or attempt to open the enclosure. No user serviceable parts inside. Refer servicing to qualified service personnel.
11. The maintenance spare parts used for this charger, services or repairs related to warranty should be carried out by service technicians who are authorized or confirmed from Gopro.
12. This product is covered by a 2-year warranty. During this period, we will provide replacement and repair in free when it is determined to product's quality issue.
13. Updates are required when software is updated.

# PRODUCT OVERVIEW

## Environmental Conditions for Use

The environmental conditions for product operation are shown in the table below:

Environmental parameters				Environmental conditions for use	Transport environment condition	Storage conditions	Remark
Item		Parameters	Unit				
Climatic conditions	Temperature	Lowest	℃	-30	-30	-40	/
		Highest	℃	50	65	70	
	Humidity	Lowest relative humidity	%	5	5	5	Complies with UL991 environmental testing requirements 19-H5 testing requirements
		Highest relative humidity	%	95	95	95	
		Condensation	Yes/No	No	No	No	
	Altitude	Lowest	m	0	0	0	The upper limit of charging current at an altitude of 2000m will be reduced by 5% for every 1km increase in current, and the usage will be reduced
		Highest	m	2000	2000	2000	
	Atmospheric pressure	Lowest	kPa	80	80	80	
		Highest	kPa	110	110	110	
	Protection				Complies with UL50E TYPE3 dust proof, waterproof, external icing, and anti-corrosion environmental testing requirements.		

## Input Basic Characteristics

	Rated Value	Description
Model	ePro 100A	
Input/Output Voltage	240VAC / 60HZ	
Input/Output Current	16A 32A 40A 48A	ePro 100A-3.5kw (16A) ePro 100A-7kw (32A) ePro 100A-9.6kw (40A) ePro 100A-11.5kw (48A)
Power	3.5KW/16A 7KW/32A 9.6KW/40A 11.5KW/48A	

# PRODUCT OVERVIEW

## Protection function

Item	Indicator Requirements	EV Charger Action
Overvoltage Protection	>264V	When the voltage is higher than the protection voltage, the charger stops working and an error indicator light is displayed. When the voltage drops to 264V, the charger will automatically resume normal operation.
Undervoltage Protection	<204V	When the voltage is lower than the protection voltage, the charger stops working and an error indicator light is displayed. When the voltage rises to 204V, the charger will automatically resume normal operation.
Overcurrent Protection	≥110% rated output	Exceed 110% rated current for 3s, or exceed 125% rated current for 1s, the charger stops working and displays an error indicator light. Need to power off to check the power input fault, and restart the charger.
Leakage Protection	CCID 20	When leakage is detected, power off the charger. After exclude the leakage fault, restart the charger.
Grounding Protection	Yes	When the ground cable is disconnected or abnormal, the charging pile stops working and displays an error indicator light. Need to connect PE cable, then restart the charger.
Over Temperature Protection	>80°C	When the temperature exceeds the protection temperature, the charger will stop working and an error lighting indicator will be displayed. When the temperature drops to 60°C, the charger will automatically resume normal operation.
Lightning/Surge Protection	Yes	When a lightning strike/surge is detected, the charger is powered off. After troubleshooting, restart the charger.
Short Circuit Protection	No	/
Welding Protection	Yes	After detecting the relay bonding, the charging station is powered off. After troubleshooting, restart the charging station.

# PRODUCT OVERVIEW

## Communication Mode

Item	Communication Configuration	Remark
WiFi/Bluetooth	Option	APP ( abChargego APP ) Autonomous version
Ethernet	Option	/
4G (SIM)	Option	/
RFID	Option	/
OCPP1.6J	Option	/

## Troubleshooting Judgment

- 1. Power on LED not lit:** Check if the power input line is properly wired and if the entire machine is securely fastened to the mounting plate.
- 2. Power on and keep standby, unable to enter charging mode:** Check if the gun head is properly connected to the car charging interface. If the CP cable is not connected properly, it will cause the charging station to be unable to communicate with the car and unable to enter charging mode.
- 3. Overvoltage prompt:** Check if the incoming voltage of the power supply is higher than 264V
- 4. Undervoltage prompt:** Check if the incoming voltage of the power supply is lower than 204V
- 5. Overcurrent prompt:** Check if the load is stable, Check if the actual charging current is higher than the set maximum current value
- 6. Leakage warning:** Please immediately turn off the power and check if the power cord is damaged
- 7. Ground fault prompt:** Please immediately turn off the power and check if the order of the power supply lines is correct. Check if the grounding wire is properly connected.
- 8. Over temperature prompt:** Check if the power supply and load are stable, and if the ambient temperature is too high
- 9. Short circuit:** Please immediately turn off the power and check if the power cord is damaged or short circuited

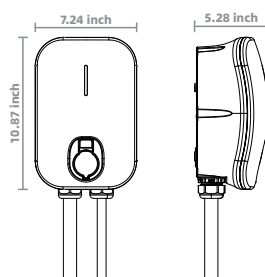
## Machine Parameters

Item	Parameter	Remark
Indicator Light	RGB LED	Idle/Standby/Running/Fault Power on initialization completed: White flashing 3 times (initialization incomplete operation invalid) Idle: Always light white Standby: Always light blue Full state: Green always on Car end suspension charging: yellow light always on Always light red Firmware upgrade: Sky blue flashing (including APP)
Startup Method	RFID or APP	Card swiping control: 1. Install a card after connecting the APP; 2. Start by swiping the card after inserting the gun; 3. Card swiping stops; APP control: 1. After inserting the gun, click to open the APP; 2. Click to close the APP;
Cooling Method	Natural Air Cooling	/
Charging Gun	SAE J1772 (TYPE 1)	/
Cable Length	18ft or 25ft	/
Installation Method	Wall Hanging	/
Installation Location	Indoor/Outdoor	/
Housing Material	PC	/
Enclosure Type & IK	TYPE 3/IK08	/
Certification	ETL/FCC/ES	/
Standard Compliance	UL 2594, UL2231-1, UL2231-2	/

## Product Appearance



## Product Size





# INSTALLATION STEPS

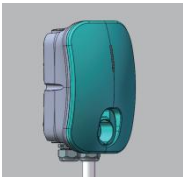

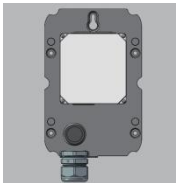

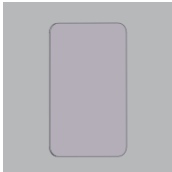
## Preparation before installing the charging column:

Install upstream MCB miniature circuit breakers

## TOOLS REQUIRED:

- Torx T20 screwdriver
- Philips #2 screwdriver
- Electric drill

## Assembly Attachment

	Attachment		Attachment
	EV Charger with back Plate x1		Countersunk Screw x1
	Back Plate x1		Expansion Screws x4
	RFID Card x2 Optional configuratio: ISO14443 TypeA		

## Step Overview

TURN OFF THE POWER SUPPLY.

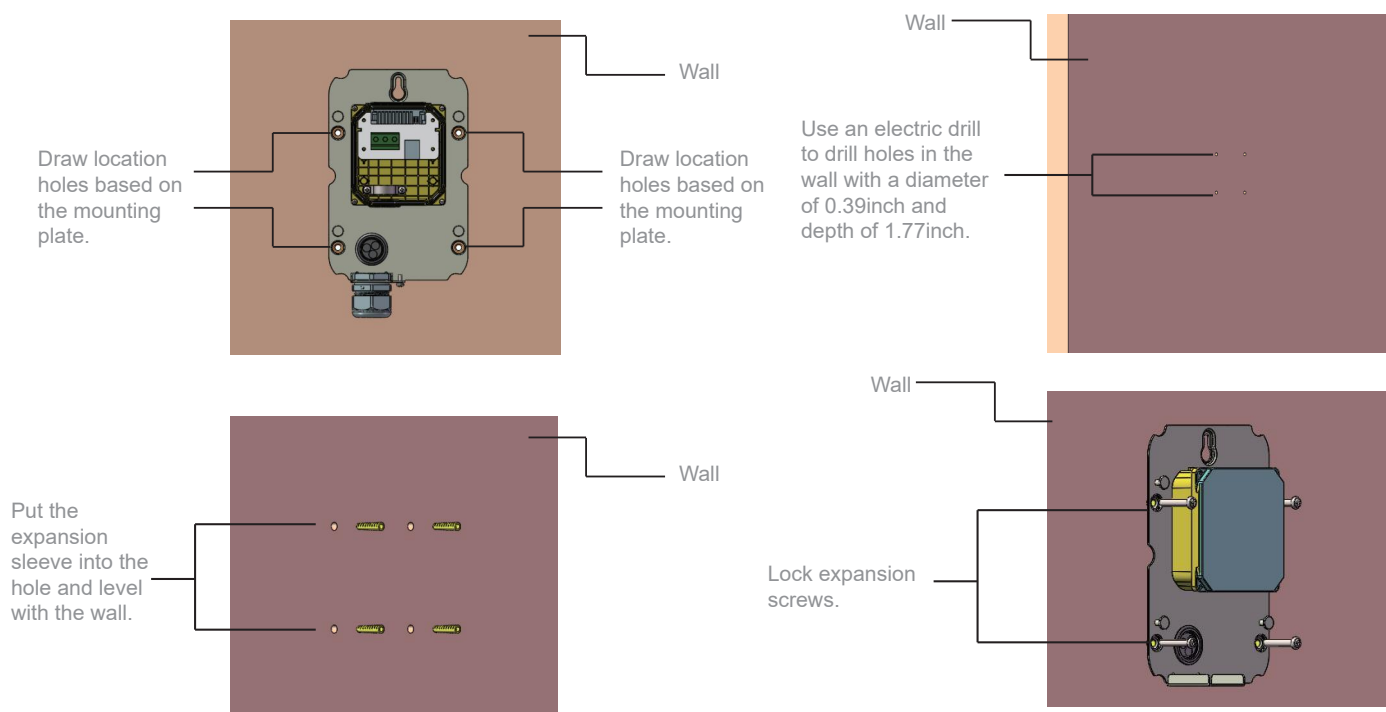
Then follow these steps to install the Charger:

1. Wall mounting & wiring
2. Install the charger
3. Verify the installation
4. Installer configuration

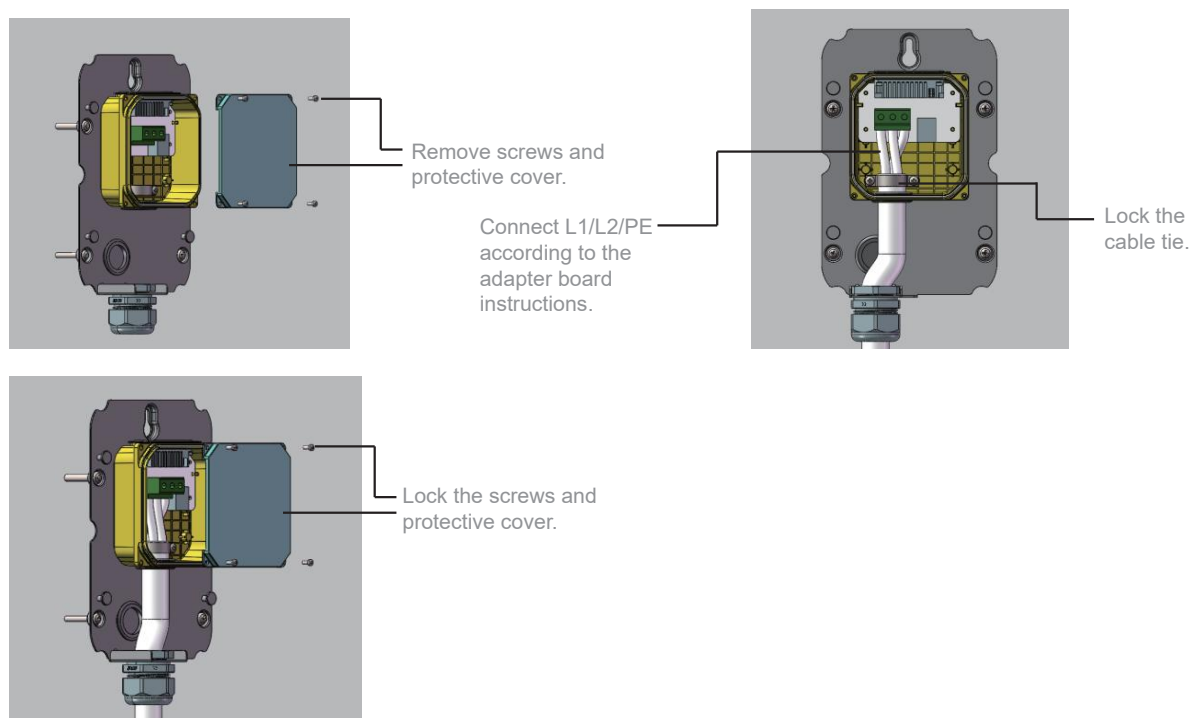
# INSTALLATION STEPS

## WALL MOUNTING & WIRING

1. Remove the backboard from the charging station and install it onto the wall (concrete or brick wall)



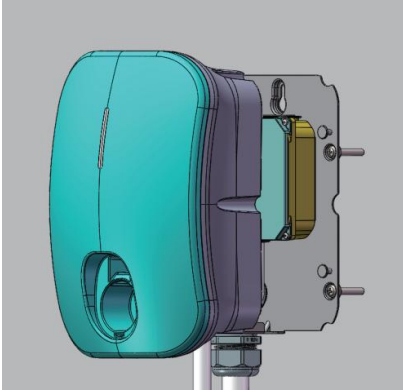
2. Connect the input power cord and follow the wiring instructions on the adapter board to connect L1/L2/PE. The torque for locking the wiring terminals is 1.2N/m.



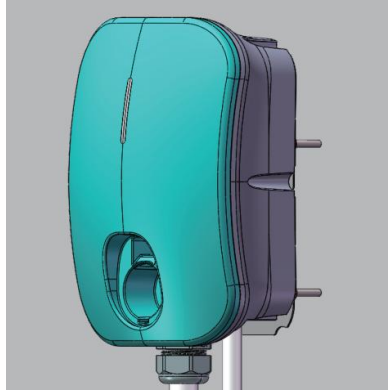
# INSTALLATION STEPS

## INSTALL THE CHARGER

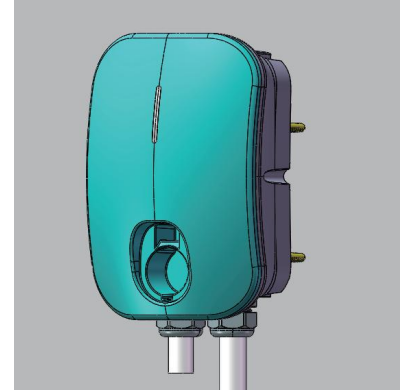
1. Install the charger to the backplate.



1.Align the charging pile with the mounting plate.

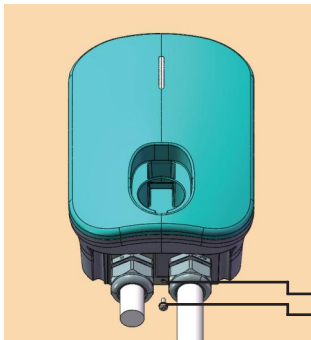


2.The charging pile is embedded in the mounting plate and does not encounter resistance.

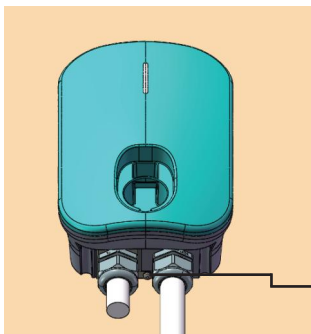


3.Push the charging pile down from the top until you hear a snapping sound.

2.Fix the charger and backplate with screw.



Align the screw with the locking hole of the mounting plate.



Lock screws, Complete installation.

## VERIFY THE INSTALLATION

1. Verify the power cables are wired properly.
2. Close the upstream MCB (miniature circuit breaker) to connect the power to the charging station, and you should see that the LED lights turn green in sequence.

# INSTALLATION STEPS

## Instructions for use

### Start charging

1. Remove the connector from the socket.
2. Insert the connector into the electric vehicle charging port.
3. Choose one of the following methods to start the charging session:
  - If the automatic start function is enabled, once the connector is properly connected, the charger will automatically start charging.
  - If you set a charging schedule in the abChargego application, the charger will automatically start the charging session according to the schedule.
  - If the RFID function is enabled, please click on your RFID card on the RFID reader.

Annotation: Make sure your electric car is charging. The charging indicator light on the charger should flash green. If you suspect that the vehicle is charging improperly, please try reconnecting the charging cable or contact customer support.

### Stopping Charging

Annotation: If the electric vehicle charging cable is disconnected during the charging process, the charger will automatically disconnect the power supply. This will stop all charging operations.

When your vehicle is fully charged, the charger will automatically disconnect the power. To stop charging, you can choose one of the following two methods:

1. Wait for the charging session to end, and no further action is required in case of planned charging or automatic start.

The charging indicator light will remain green.

Alternatively, if the RFID function is enabled, please click on the RFID card on the RFID reader again.

2. Remove the connector from the electric vehicle and place it back into the socket.

# INSTALLATION STEPS

## Compliance

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with part 15 of the FCC rules and contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

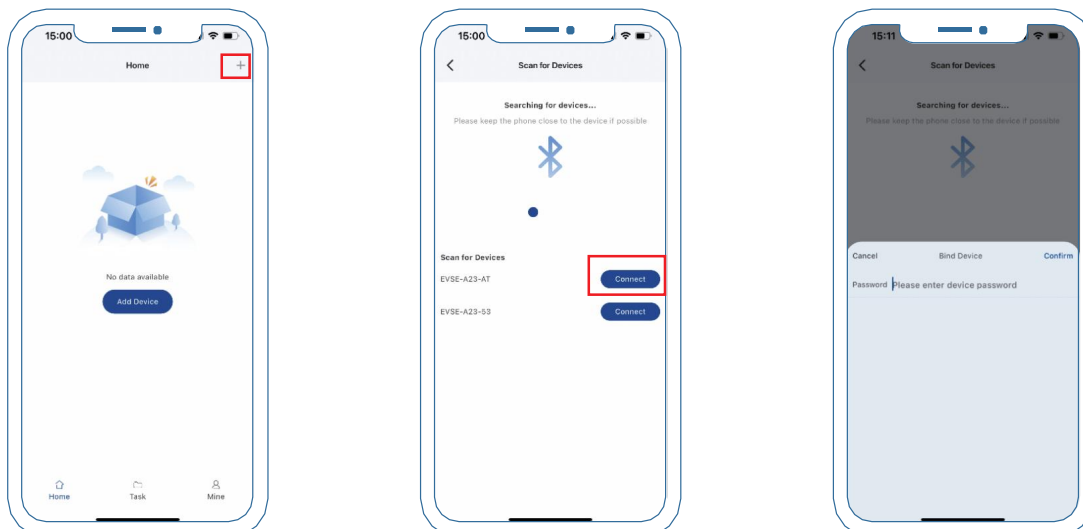
# APP CONNECTION

## Search for abChargego (IOS)

1. When using it for the first time, click on the App Store to search for abChargego and obtain the corresponding information.



2. For the first time connecting, click on the + sign in the upper right corner to add the corresponding Bluetooth device. Enter the default password Gopro to save the corresponding charging station information.



## APP CONNECTION

3. Click on the top left corner to return, and then click to return to the homepage to view the connected charging station devices. Click on the corresponding list item to enter the charging interface.



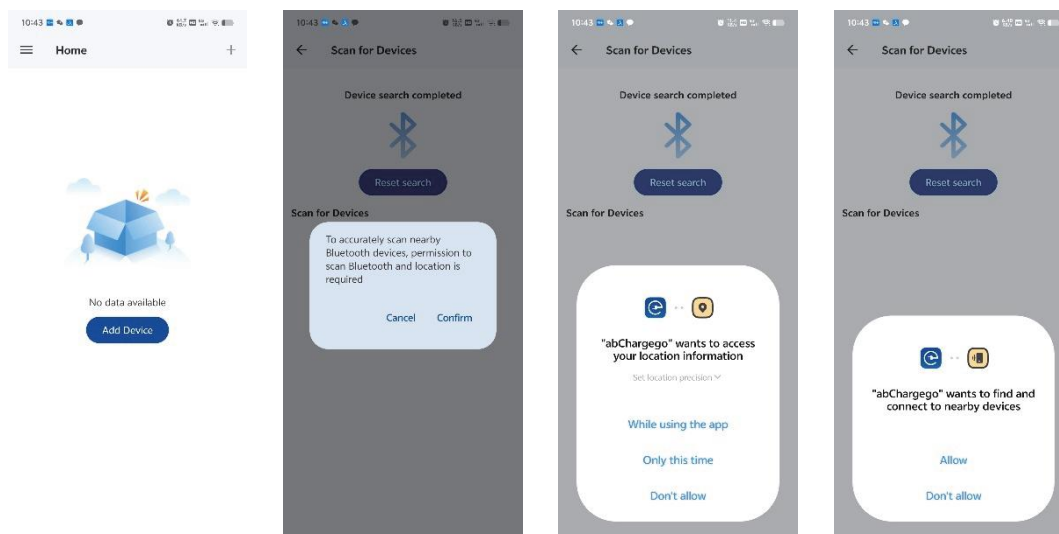
4. After inserting the charging gun into the electric vehicle and transitioning from idle state to wait state, click the power button to start charging, and then click again to complete the charging.



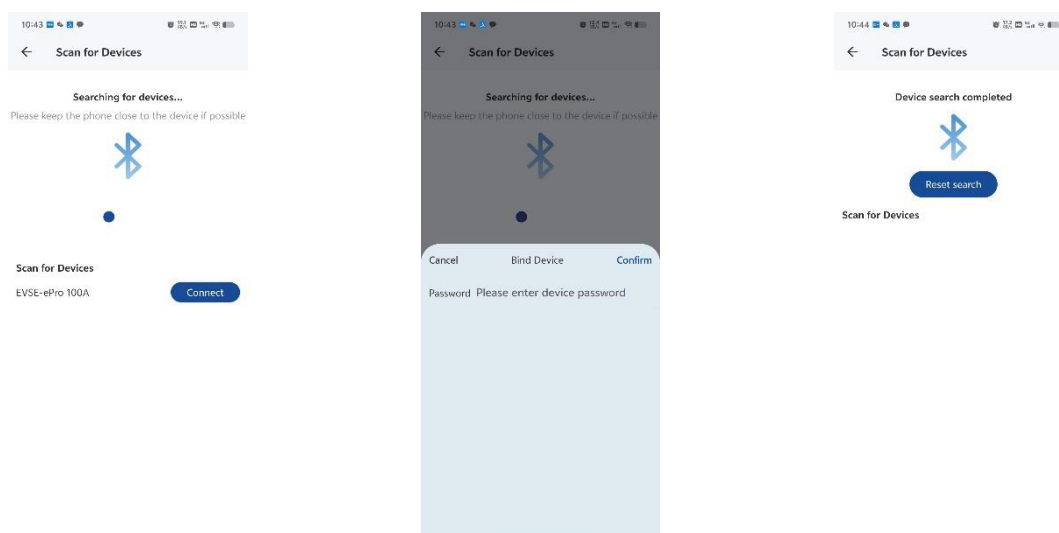
# APP CONNECTION

## Download the installation package and use it on an Android phone Search for abChargego (Android)

1. For the first time connecting, when the device is powered on, click on the sign “+” which in the upper right corner to start matching with the device. To use it, you need to obtain the corresponding mobile device permissions.



2. After completing the search, click on Connect. The initial device password defaults to Gopro. After a successful pairing is displayed, click on the upper left corner to return to the homepage and query the currently connected device.





## APP CONNECTION

3. My device will display previously paired charging station devices. Click to display the device name of the connected device, in this case EVSE-A23-12, to query charging station related information. When reconnecting previously paired devices, click on the connection button on the right side of the corresponding device to reconnect.



4. When the charging gun is not connected to the electric vehicle, it displays as idle. At this time, clicking the power button will bring up relevant prompts. When the charging gun is connected, it will display as ready. Click to start charging and display as charging. Click again to stop charging.



## WARRANTY AND MAINTENANCE

- The warranty period for this charger is two years.
- During the warranty period for any malfunction under normal use according to the User Manual and Service Instructions (to be determined by certified maintenance technicians of sellers), the product shall be repaired free of charge. Except for the following situations, the charger shall be subject to the above warranty terms:
  - The warranty certificate cannot be provided or the contents of the warranty certificate are modified or inconsistent with the label indication of the repaired product.
  - Those who are unable to provide valid proof of purchase.
  - Those who exceed the manufacturer's specified warranty period.
  - Those who damage the product due to not following the product service instruction for use, maintenance and storage.
  - Damage or malfunction caused by external object entering.  
Unauthorized repair, disassembly or modification.
  - Damage caused by force majeure (such as lightning, excessive voltage, earthquake, fire, flood, etc.).
  - Malfunction and damage caused by other unavoidable external factors.
  - Malfunction and damage caused by improper use of equipment, such as water or other solutions entering into the equipment.
  - Malfunction and damage caused by the grid power supply and voltage which is not specified for use with the charger equipment.
- The above guarantees shall be made solely, and no other express or implied warranties shall be made (including the implied warranties of merchant ability, particular and applicable reason- ableness and adaptability, etc.) whether in the contract, civil negligence, or other aspects, the
- Company shall not be responsible for any special, incidental or consequential damages.

## WARRANTY AND MAINTENANCE

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