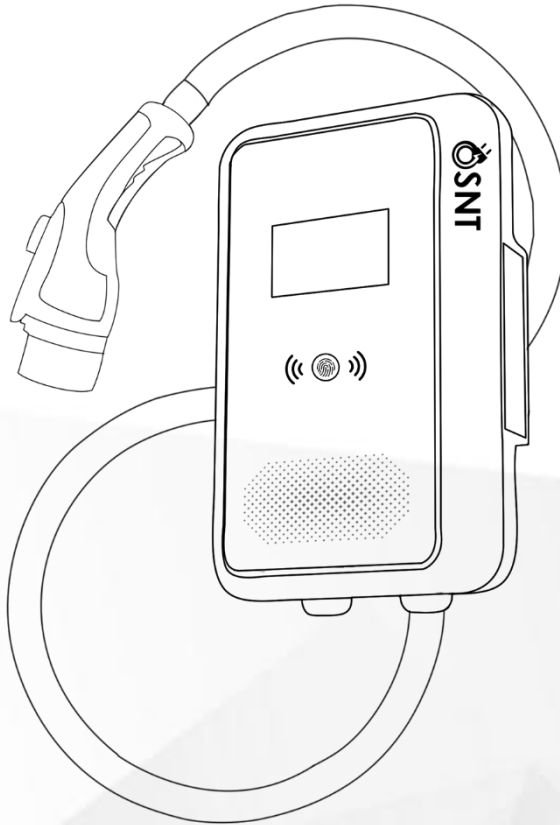




SMART NATURE
Technology Group



User Manual

version 1.0.7

Legal Information

SmartNature - Clean Energy Systems - Nanjing, China

Introduction

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Thank you,

for purchasing our SNT series wall box.

It is the charging station for charging electric vehicles and it has an integrated charging control, suitable for all the E-vehicles of TYPE-2 and GBT. The wall box is equipped with a 5-metres or 7-metres charging cable (TYPE-2 plug, GBT plug), which allows you to charge your vehicle comfortably and safely at any time.

Read carefully before use!

Read this manual carefully before installation.

It contains important regulations and instructions for the use of this product and provides technical support for the operator of the unit.

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Smart Nature Technology Co., Ltd. cannot be held responsible for any inaccuracies or inappropriate information in this instruction manual.

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Smart Nature Technology Co., Ltd. accepts no liability for errors in this operating manual and any consequences resulting therefrom.

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I ABBREVIATIONS

1.1 Abbreviations

NO.	Abbreviations	Description
1	IEC	International Electrotechnical Commission
2	EV	Electrical Vehicle, this can be BEV (battery EV) or PHEV (plug-in hybrid EV)
3	EVSE	Electric Vehicle Supply Equipment (EC61851-1)
4	kW	Kilo Watt (unit of power)
5	A	Ampere (unit of current)
6	V	Volt (unit of voltage)
7	Hz	Hertz (unit of frequency)
8	LCD	Liquid Crystal Display
9	LED	Light-emitting Diode
10	RFID	Radio Frequency identification
11	CMS	Central Management System Manages EVSE and has the information for authorizing users for using its EVSE.
12	OCPP	Open Charge Point Protocol A standard open protocol for communication between EVSE and a Central System and is designed to accommodate any type of charging technique. (www.openchargealliance.org)
13	IP	Ingress Protection
14	PE	Protective Earthing
15	HMI	Human-Machine Interface
16	RCCB	Residual Current Circuit Breaker
17	MCB	Miniature Circuit Breaker
18	MCCB	Moulded Case Circuit Breaker

1.2 Safety Instructions

- Persons installing and using wall box must observe the principles and regulations to ensure personal safety, the safety of the operating personnel and the safety of the appliance.
- Before switching on the wall box, make sure that the wall box is properly earthed to avoid unnecessary accidents.
- A visual inspection for damage should always be carried out before charging.
- In particular, the contact area of the charging plug should be checked for dirt and moisture, the charging cable should be checked for cuts or abrasions to the insulation and the cable outlet of the wall box should be checked for tightness.
- Unauthorized modifications or changes to the wall box will result in the immediate exclusion of the warranty.
- The wall box must not be used in the vicinity of volatile gases or flammable objects.
- Before using the wall box, make sure that the cables to be connected comply with the wall box's specification.
- Only pull the charger cable out of the socket by the plug and not by the cable.

1.3 Attention

- Only use the wall box in protected outdoor areas.
- Protect from moisture, rain and sunlight.

II SAFETY INSTRUCTIONS

2.1 Safety Symbols and Notes

The following warning signs, mandatory signs and information signs are used in the wall box operating instructions:

Caution:



Warning of electrical hazards.

This sign is intended to alert the user that severe personal injury or substantial property damage can be resulted if the wall box is not operated as requested.

Attention:



Warning of a danger spot or dangerous situation. This sign is intended to alert the user that minor personal injury or material damage can result, if the device is not operated as requested.



Indicates assemblies or parts that must be disposed of properly.

Do not dispose of them in the household waste.

2.2 Environment



Wall box should be installed on the incombustible such as metal.

Otherwise, hazardous fire may result.



Wall box should not be installed in the area that contains explosive gas.

Otherwise, hazardous blast may result.



Leave no inflammable or explosive substances near the EV Charging station.

Otherwise, hazardous blast may result.



EV Charging station should be installed in a place with no conductive dust or insulation destructive gas or vapor.



EV Charging station should be installed in a place with no violent vibration and impact.

For good ventilation, mount the charging station vertically.



The installation foundation shall be higher than the ground level, and drainage ditch shall be set around the wall box.

Otherwise, the wall box may be damaged.

2.3 Installation

Safety protection must be done when installing the wall box.



Installation and wiring have to be done by personnel with professional qualification. Otherwise, hazardous electric shock may result.



Make sure input power supply is entirely disconnected before wiring. Otherwise, hazardous electric shock may result.



Earth terminal of the wall box must be grounded securely. Otherwise, hazardous electric shock may result.



The lead nose of the wall box must be securely attached or there will be risk of damaging the equipment.



Leave no metals such as bolts, gaskets into the inside of the wall box. Otherwise, hazardous blast and fire may be resulted.



Main loop terminal of the wall box should be firmly connected with wiring ends. Otherwise, damage to property may result.



Bare parts of wiring ends of electrical cables must be wrapped with insulating tape. Otherwise, hazardous fire and property loss may result.

2.4 Operating



Wall box can only be charged with the engine off and stationary.



At any time, in case of any emergency (such as fire, smoke, abnormal noise, water inflow, etc.), on the premise of ensuring personal safety, please press the red "stop" button of the wall box, and immediately stay away from the wall box.



It is strictly prohibited to use the wall box when the charging adapter or charging cables are defective, cracked, worn, broken or the charging cables is exposed.

2.5 Maintenance



Accessory replacement must be done by qualified personnel, thrums or metals are prohibit to be left in the wall box.

Otherwise, hazardous blast and fire may result.



It is recommended that routine safety visual inspection to wall box should be conducted at least once a week.



Keep the charging plug clean and dry and wipe with a clean, dry cloth if soiled.

2.6 Safety Information

Read the safety information carefully and follow the instructions. Familiarize yourself with the wall box before the installation, operation or service.

- Never use defective, worn or dirty charging plugs.
- Before starting commissioning, ensure that all screws and clamps are assembled and tight.
- Do not attempt to disassemble, repair or modify the wall box. Improper operation may cause equipment damage, water leakage, electricity leakage and other situations.
- It is strictly forbidden to remove any safety symbols or warning instructions from the wall box.
- Before charging always ensure that there is no damage on the wall box, charging plug or socket. Check that there is no dirt or moisture in the charging plug or socket, or damage on the charging cable.
- Press the stop button immediately to cut off all input and output power in case of any abnormal situation during use.
- Do not flush the wall box with high pressure water.
- If the wall box is installed outside, do not open the wall box housing while rain or snow.
- Protect the charging plug or socket from dirt and water, by ensuring that the plug is placed back into the plug holder when not used.
- To reduce the risk of breakage of the plastic housing, do not counter sunk screws or use powerful force to tighten screws.
- Children are not allowed to get close to or use the wall box during charging to avoid injury.
- Do not step on, pull, fold or knot the cable.
- Only for using in the situation that the power-supply side contains RCD breaker protector.
- Only for EV charging.
- Do not put fingers into the charging connector.

ESD

User manual for trained, qualified and authorized personnel installing the device:

Be careful when operating at the wall box. Electrical components of the wall box can be damaged if touched.

Before operating at modules, conduct a discharging process by touching a metallic earthed object.

If safety instructions were not followed appropriately, serious physical injuries, death or damage to the wall box could be a result. SNT will not accept the liability for claims resulting from this.

Intended Use

This wall box is a charging station for electric and plug-in hybrid vehicles, and can be installed indoor or outdoor. Do not connect any other electronic devices or tools with the charging plug. The wall box is designed to be installed on the wall or pillar, ensure to follow all the relevant national regulations for the installation and connection of the wall box.

The wall box was developed, tested and manufactured according to the national safety standards. Ensure to follow the safety information and instructions in this user manual and as indicated on the device for the intended use.

The device must be earthed, as in case of an error, it will reduce the danger of an electric shock.

The instructions in this user manual must be followed when installing or operating on this device, otherwise sources of danger could be created. In addition to the safety information, it is also important to follow the regulations for each specific device as well as the local regulations for installation.

III PRODUCT RANGE OVERVIEW

3.1 WALL BOX CN (AC GBT)



WALL BOX CN (AC GBT)			
Model	SNTG2ACF7CN	SNTG2ACF11CN	SNTG2ACF22CN
General Parameter			
Maximum Charging Power (kW)	7kW	11kW	22kW
Cable Variant	1 phase	3 phases	
Output Current	8A/10A/13A/16A/22A/32A	8A/10A/13A/16A	8A/10A/13A/16A/22A/32A
Rated Supply Voltage	AC220V 1Phase	AC380V 3Phase	
Standby Power	<2W		
Cable Length	5m		
Dimension (LxBxH)	385*284*80 mm (without cable)		
Weight(N.W.)	4.05 kg	4.00 kg	5.15 kg
System Standards	GB/T20234, GB/T18487		
Charging Interface	GB/T 27930-2015		
Language Supported	Deutsch / English / 简体中文/Français / Русский язык / اردو / other		

3.2 WALL BOX EU (AC TYPE-2)



WALL BOX EU (AC Type-2)		
Model	SNTG2ACF11EU	SNTG2ACF22EU
General Parameter		
Maximum Charging Power (kW)	11kW	22kW
Cable Variant	3 phases	
Output Current	8A/10A/13A/16A	8A/10A/13A/16A/22A/32A
Rated Supply Voltage	400VAC	
Standby Power	<3W	
Cable Length	7 m	
Dimension (LxBxH)	385*284*80 mm (without cable)	
Weight	4.95 kg	6.30 kg
System Standards	IEC 61851-1	
Charging Interface	IEC 62196 Type 2	
Language Supported	Deutsch / English / 简体中文/Français / Русский язык / ไทย / other	

IV WALL BOX

4.1 SNT wall box Introduction

The SNT wall box is a single-phase/three-phase AC charger. It works by swiping card or Wi-Fi, and contains charging protection etc. The equipment adopts the principle of industrial design, to ensure the safety of equipment operation. The protection grade of the whole machine reaches IP55/IP65, with good dust-proof and water-proof functions, and can be operated and maintained safely outdoors.

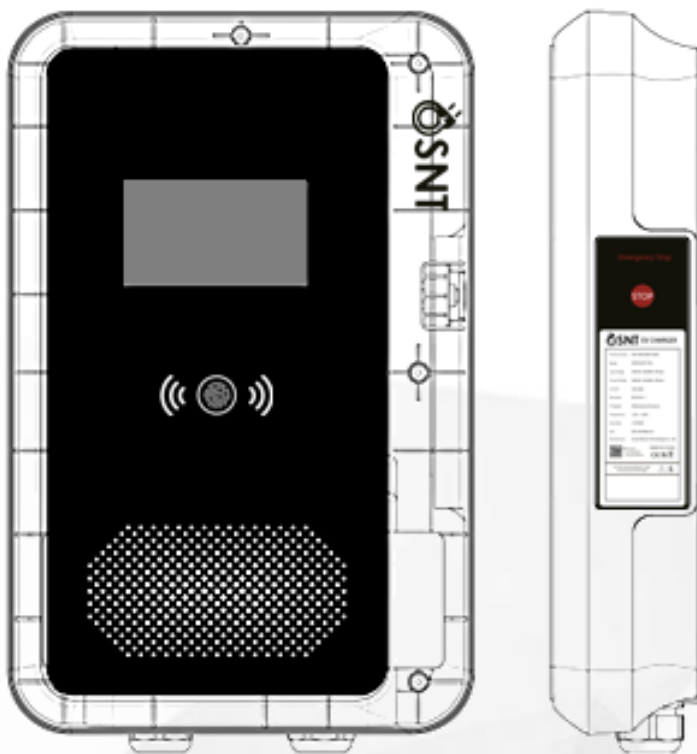


Fig.1 Wall box appearance

Status LED information

LED	Status/ Instructions
Blue (on)	The LED is permanently Blue when the wall box is successfully connected to a power supply and on Standby (not connected to the vehicle).
Green (on)	Wall box has connected the vehicle, and it is ready to charge and will start charging immediately after the user completes the authorization. or The vehicle has been fully charged and the charging cycle is ended.
Green (pulsing)	The Green pulsing LED indicates that the vehicle is being charged successfully.
Red (on)	The LED Status will turn red when the charging cycle has been interrupted due to an error.

End the charging cycle

The charging cycle can be ended by disconnecting the charging plug from the vehicle.

After disconnection, ensure to put the charging cable back into the wall box to avoid any damage.

4.2 Design Standards

The product is designed according to the latest national standard, and meets the industry standard in function and performance. The technical standards used are shown in the table below.

Serial	Standard	Item
1	GB/T 18487.1-2015	EVs - Conducted charging systems - Part 1: General requirements
2	GB/T 20234.1-2015	Connectors for conductive charging of EVs - Part 1: General requirements
3	GB/T 20234.2-2015	EVs - Connection devices for conducting charging - Part 2: AC charging interface
4	GB/T 19596-2004	Terms for electric vehicles
5	GB/T 17618	Equipment immunity limits and measurement methods
6	GB 9254-2008	Limits and measurement methods for radio disturbance of information technology equipment
7	GB 4208-2008	Shell Protection Grade (IP code)
8	DL/T 645-2007	Communication protocol for multifunctional electricity meter
9	GB 9286-1998	Paint and varnish film marking test
10	GB 6587.4-1986	Vibration test of electronic measuring instrument
11	GB 6587.5-1986	Impact test of electronic measuring instrument
12	GB/T 13384-2008	General specification for packaging of mechanical and electrical products
13	GB/T 17626.2-2006	EMC testing and measurement techniques Electrostatic discharge immunity test
14	GB/T 17626.3-2006	EMC testing and measurement techniques radio-frequency electromagnetic field immunity test
15	GB/T 17626.4-2008	EMC testing and measurement techniques Electrical fast transient pulse group immunity test
16	GB/T 17626.5-2008	EMC test and measurement technology surge (shock) immunity test
17	GB/T 17626.6-2008	EMC testing and measurement techniques - Conducted disturbance immunity measurement for RF field induction - Surge (shock) immunity testing

Table 1. Technical standards and regulations

4.3 Functional Block Diagram

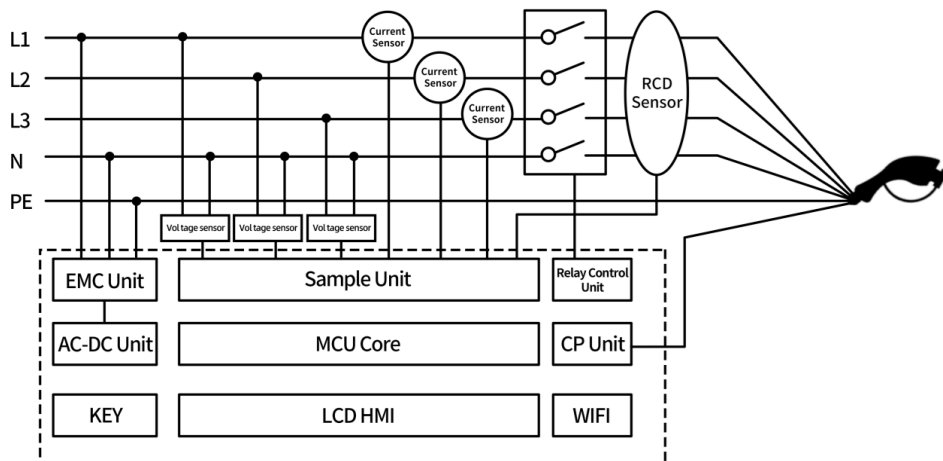


Fig.2 Product principal block diagram

4.4 Operating Environment

- Altitude: ≤ 2000 m
- Operating ambient temperature: $-30^{\circ}\text{C} \sim 50^{\circ}\text{C}$
- RH: 5%~95%
- IP Degree: IP55 and IP65
- Keep away from inflammable and explosive objects around the station

V INSTALLATION AND USAGE

5.1 Before Installation

5.1.1 Delivery Inspection

After the AC charging station arrives, open the package and check the following items:

- Visually inspect the appearance of AC charging station and check whether there is collision damage during transportation. If there is damage, please contact the supplier immediately.
- Check whether the components in the accessories are complete and correct according to the packing list. If any of them is found missing or their models do not match, please make on-site record and contact the local office immediately.

5.1.2 Safety Requirements

Be sure to preview the User Manual and ensure local building and electrical codes are reviewed before installing the SNT wall box.

The SNT Wall box should be installed by a qualified technician according to the instruction manual and local safety regulations.

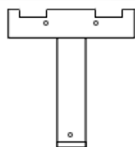
Use appropriate protection when connecting to the main power distribution cable. And disconnect switch for each ungrounded conductor of input shall be provided by others.

- **7 KW**: single-phase two-wire 200-230V AC input type C or D breaker with type A 4-pole 30mA RCD in the upstream panel should be installed, and the rating current of the breaker should be 50A.
- **11 KW**: three-phase four-wire 380-415V AC input, type C or D breaker with type A 4-pole 30mA RCD in the upstream panel should be installed, and the rating current of the breaker should be 20A.
- **22 KW**: three-phase four-wire 380-415V AC input, type C or D breaker with type A 3-pole 30mA RCD in the upstream panel should be installed, and the rating current of the breaker should be 50A.

5.1.3 Accessory Kit

Accessory list

NO.	Tool Name	Effect
1	Mounting bracket	Installation base of SNT wall box
2	Plug holder	Hold the charging connector when not in use
3	RFID card	Activate / inactivate SNT wall box
4	Allen wrench	Fasten the hexagon socket head cap screw
5	hexagon socket head cap screw	fix the Plug holder on the wall base
6	Longer screw	Fix the mountin bracket on the wall base
7	Sleeve anchor	Fix the longer screws into the wall base
8	E6010 Tube pre-insulating terminal	Cable connection



Mounting bracket*1



Plug holder*1



RFID card*2



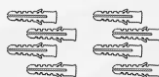
Allen wrench L*1



hexagon socket head
cap screw*2



Longer screw*8



Sleeve anchor*8



E6010 Tube
pre-insulating terminal*6

5.1.4 Recommended Tools

The following tools are recommended for the SNT wall box installation:

- (1x) Voltmeter or digital multimeter
- (1x) Spirit level
- (1x) Hammer
- (1x) Concrete drilling machine
- (1x) Wire stripper
- (1x) Tamper-Resistant T15 and T20 screw driver
- (1x) No.8 Flathead screwdriver and socket wrench
- (1x) No.6 Flathead screwdriver
- (1x) No.2 Philips screwdriver
- (1x) No.3 Philips screwdriver
- (1x) M25 conduit hub, conduit and wrench for main power wires

WARNING!



Danger of electrical shock or injury. Turn off power at the panel board or load center before working inside the equipment or removing any component. Do not remove circuit protective devices or any other component until the power is turned off.

CAUTION!



To avoid damage to the charger or personal injury, please make sure that the installation location is able to support the weight of the SNT wall box.

5.2 Cable Preparation

Recommended specifications of power cables, breakers and RCCBs for charging stations are as follows:

Power line cables

Name	Cable specifications (within 30 meters in total length)	Length
power line (7 kW)	3*6mm ² and above single-phase power cables	The specific construction length shall prevail
power line (11 kW)	5*4 mm ² and above three-phase power cables	The specific construction length shall prevail
power line (22 kW)	5*6 mm ² and above three-phase power cables	The specific construction length shall prevail

RCCB

NO.	wall box specification	Model
1	Single-phase/7KW	2P RCCB 50A
2	Three-phase/11KW	3P+N RCCB 20A
3	Three-phase/22KW	3P+N RCCB 50A

5.3 Installing the SNT wall box

1. Preparation

- a. Open the top of the box, as shown in Fig.1



Fig.1

- b. Take out mounting bracket and cut off the cable ties to move the charging plug
- c. Take out the wall box, as shown in Fig.2

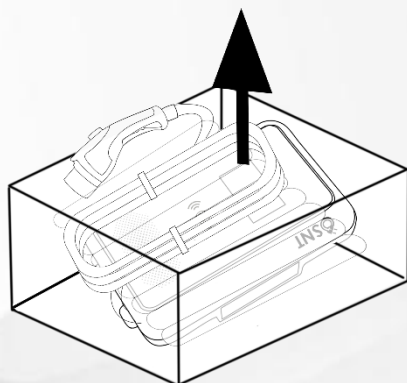


Fig.2



Note:

Carefully place the wall box and the charging plug on the ground or a flat surface.

2. Wall Mounting

- a. Use mounting bracket and leveler tool to mark out the mounting position, as shown in Fig.3

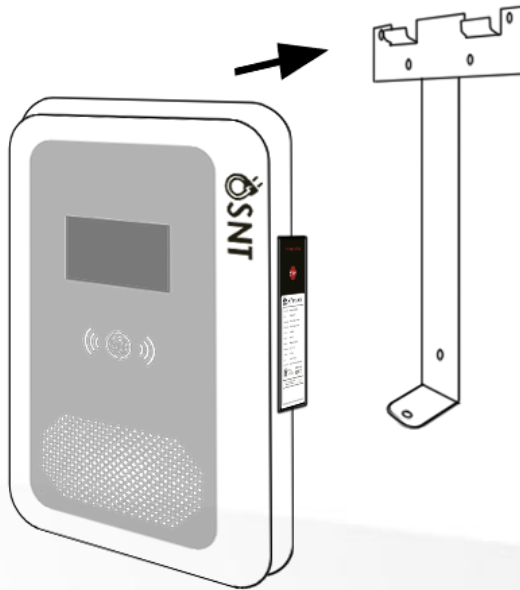


Fig.3

- b. Mount bracket onto the wall, and SNT wall box onto the bracket

Note:

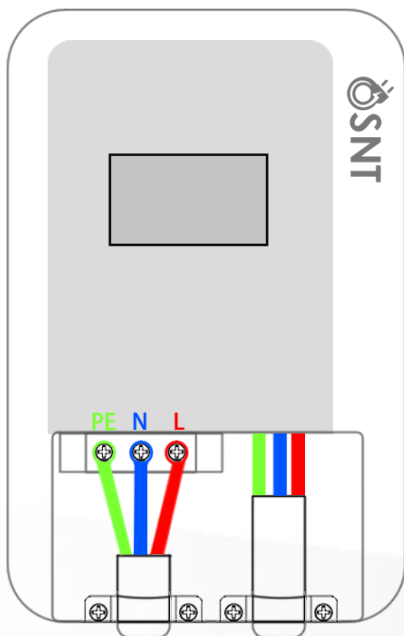
The unit must be mounted on a solid wall (concrete or metal preferred).

Use the sleeve anchor in the accessory kit or choose proper mounting screws for different types of walls. A drilling machine might be needed for certain conditions.

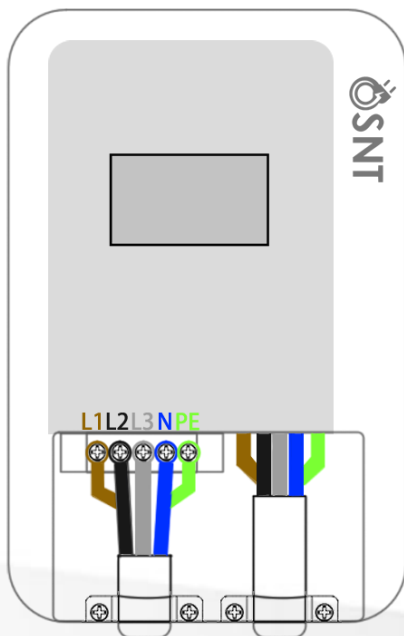
Follow applicable accessibility requirements for the mounting position. The unit must be mounted at a sufficient height from grade such that the height of the storage is located between 110 cm (43.30 feet) and 128 cm (50.39 feet).



- c. Remove lid of terminal block and connect the wiring to the correct terminals. See the following information for specific model connections. Wiring depends on the model type, as shown in Fig.4



Single-phase 220V/32A wiring diagram



Three-phase 380V/16A wiring diagram

Fig.4

- d. Place unit onto bracket. Align the back chassis of unit with the corresponding slot on the bracket. Slowly slide down the unit until it sits firmly on the bracket. Fasten one screw from the bottom, as shown in Fig.5

Under the equipment, install the plug holder which the installation height is 800mm from the ground, as shown in Fig.6

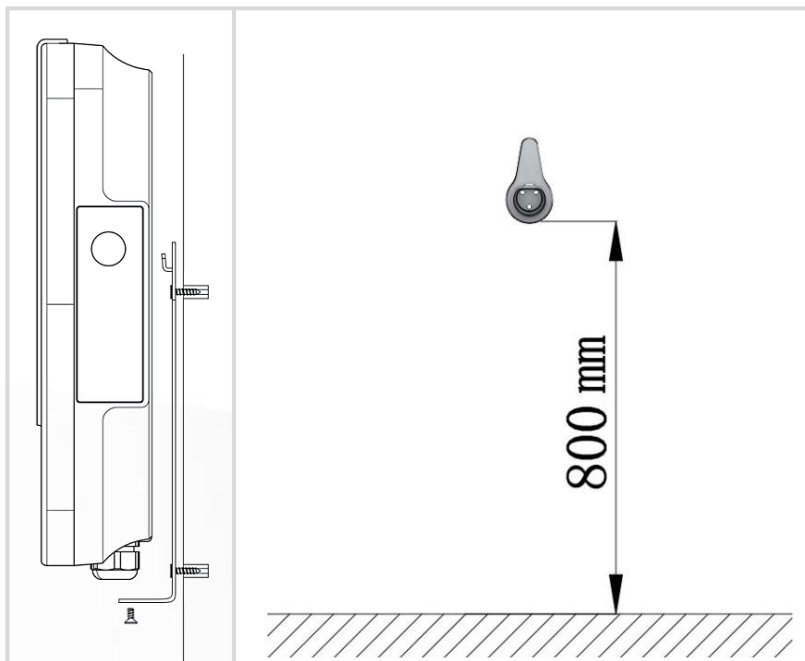


Fig.5

Fig.6

Note:



The bottom fixing screws are in the accessory kit.

- e. After installation, the effect is as follow: Fig.7

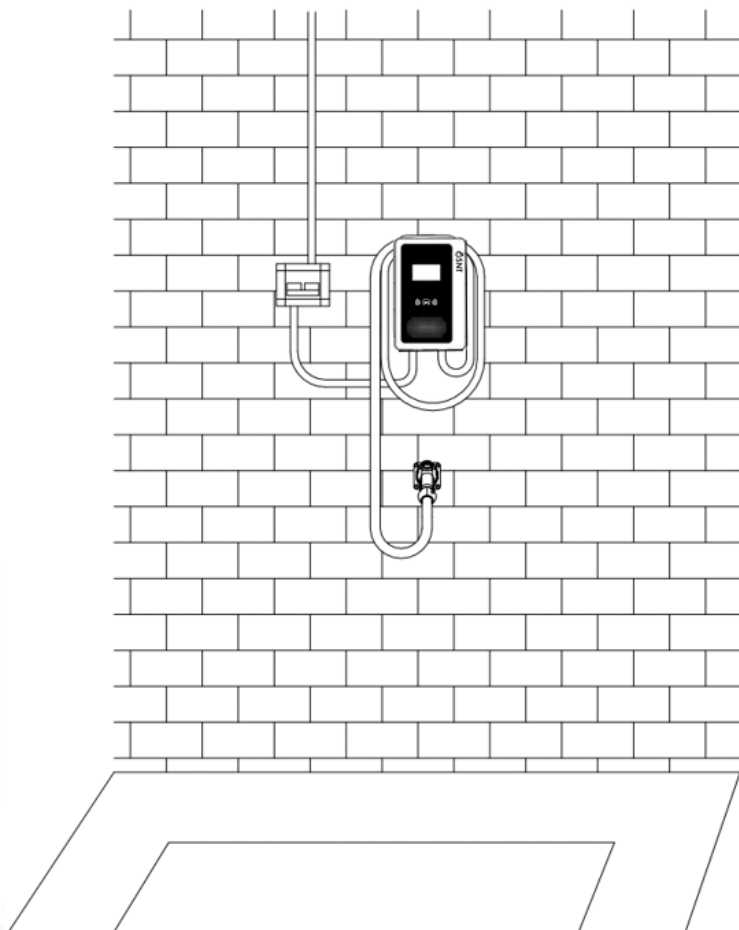


Fig.7

3. Pillar Mounting

- a. Use bolts to fix the pillar to a solid surface such as a cement platform.
- b. Use mounting bracket and pillar to mark out the mounting position, as shown in Fig.8

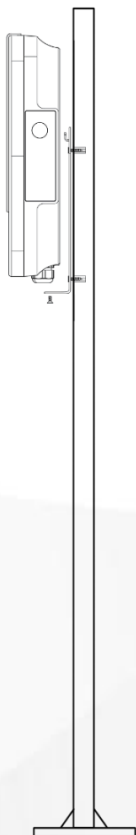


Fig.8

Note:



The pillar must be mounted on a solid ground (concrete preferred).

Use the sleeve anchor in the accessory kit or choose proper mounting screws for different types of walls. A drilling machine might be needed for certain conditions.

- c. After installation, the effect is as follow: Fig.9

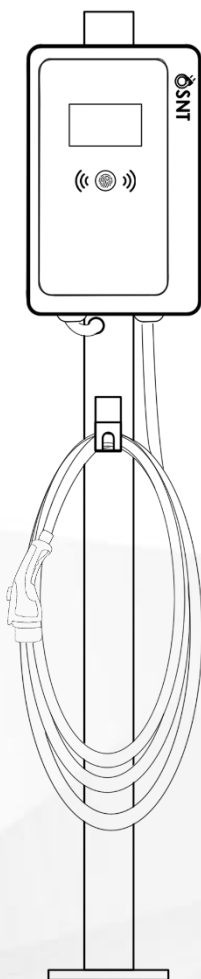


Fig.9

Accessory list of Pillar

NO.	Tool Name	Effect
1	M8 Assembly bolt	Fix the pillar to the ground
2	Shape-C plug holder	Hold the charging connector when not in use
3	Rubber gaskets	Cable protection at the edge of the hole
4	screw	Fix the mounting bracket on the pillar base



M8 Assembly bolt *4



Shape-C plug holder *1



Rubber gaskets *2



screw *10

Note:



The fixing screws are separately packed with pillar.

Single-phase

Wiring the 200V- 230Vac

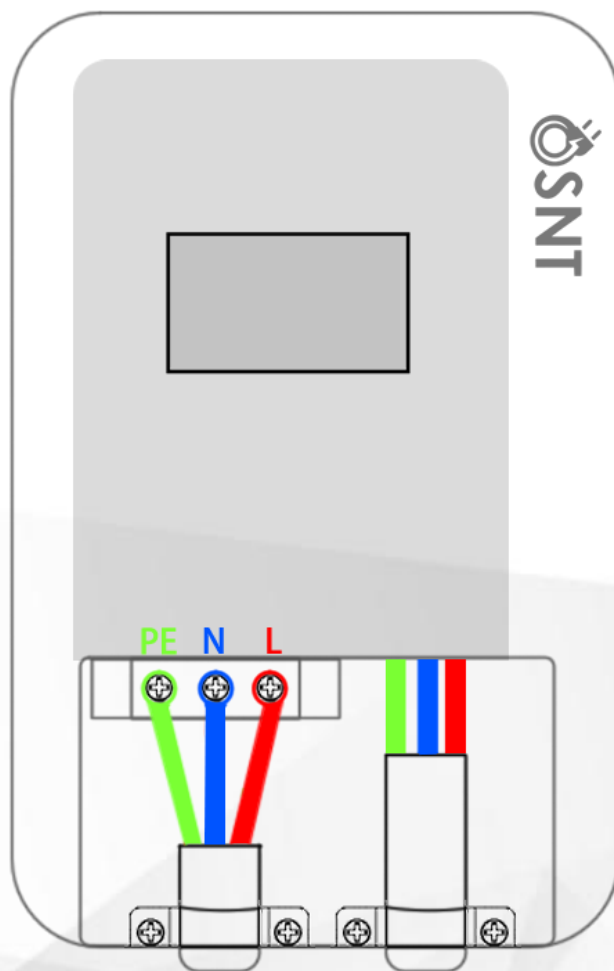


Fig.10

Use conduit hub and conduit size M25 according to EN 61386-24.

Connect the E6010 Tube pre-insulating terminal by which the power wires ended to the ports marked "L", "N" and "PE" using 3 x M6.0 screws.

Three-phase

Wiring the 380V- 415Vac

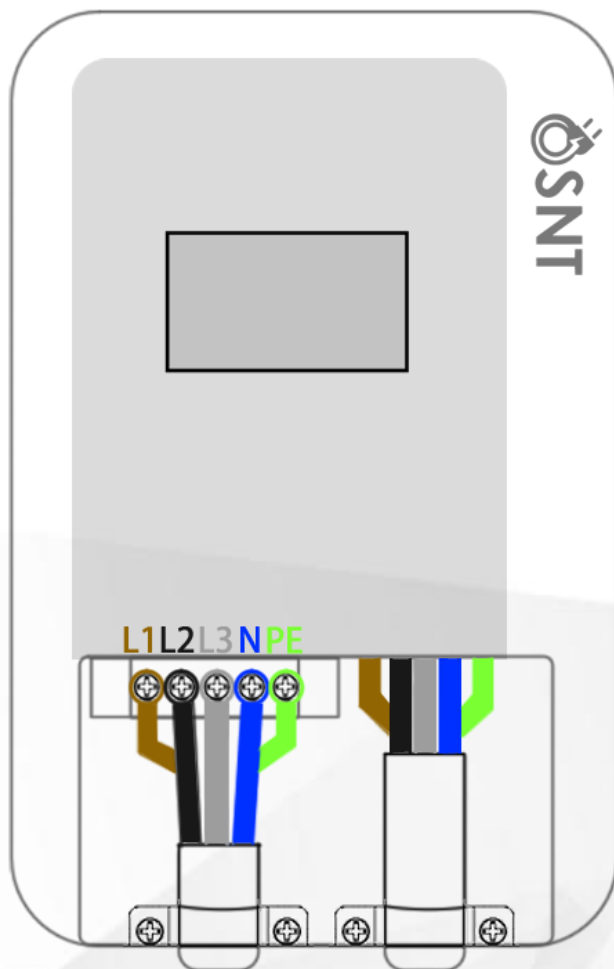


Fig.11

Use conduit hub and conduit size M25 according to EN 61386-24.

Connect the E6010 Tube pre-insulating terminal by which the power wires ended to the ports marked with "L1", "L2", "L3", "N" and "PE" using 5 x M6.0 screws.

5.4 Start Charging Operation

5.4.1 RFID Operation

- 1) Connect the plug to the EV, as shown in Fig.12

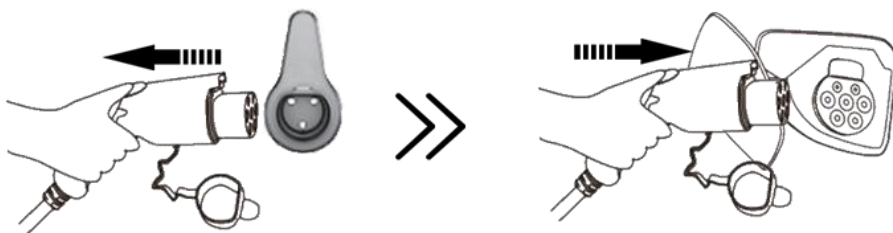


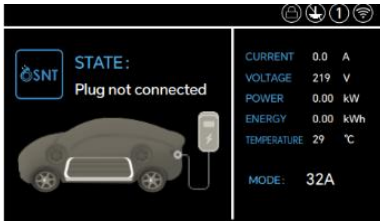
Fig.12

- 2) Swipe the authorized RFID card to start charging, as shown in Fig.13

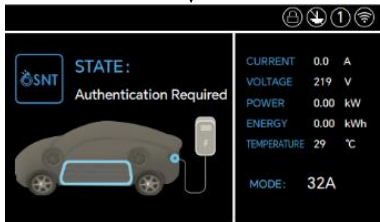


Fig.13

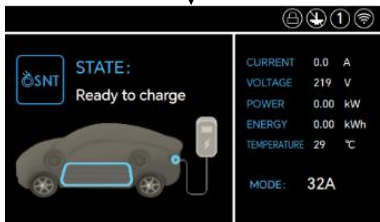
- 3) Once charging commences, status information is displayed on the screen. The following illustrations demonstrate the start of the charging procedure, as shown in Fig.14



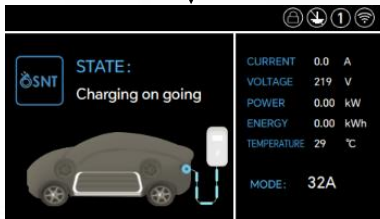
Plug not connected



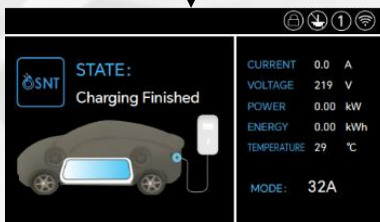
Authentication Required



Ready to charge



Charging on going



Charging Finished

Fig.14

- 4) Swipe the authorized RFID card to stop, as shown in Fig.15

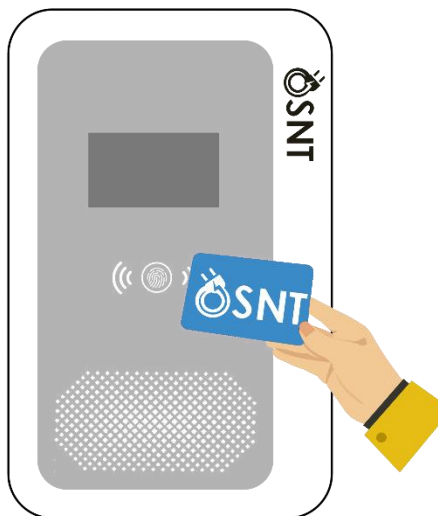


Fig.15

- 5) Return the plug to the holder, as shown in Fig.16

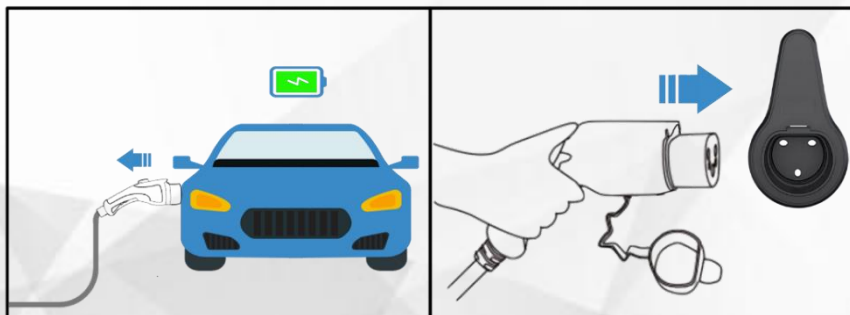


Fig.16

5.4.2 APP Operation

1. Download the SNT energy APP:

Scan the QR code below, as shown in Fig.17, select the appropriate software version according to the type of mobile phone system, download and install the SNT energy APP. For IOS system, please search for "SNT Energy" in the Apple Store to download and install;



Fig.17

2. APP usage tutorial

Open the APP and follow the steps below:

WIFI connection as shown in Fig.18 and Fig.19 → select the hotspot name beginning with SNT and connect, the initial password is: 12345678



Fig.18

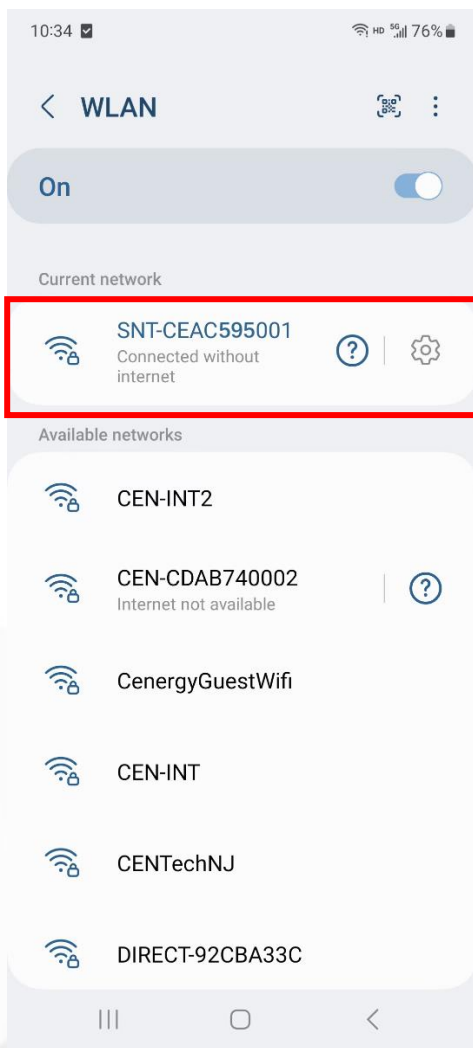


Fig.19

If there are multiple similar hotspot names, please choose the hotspot name that is consistent with the serial number of the nameplate on the side.

After connecting, return to the APP, the device has been automatically added to the "Home" page, as shown in Fig.20 and Fig.21.

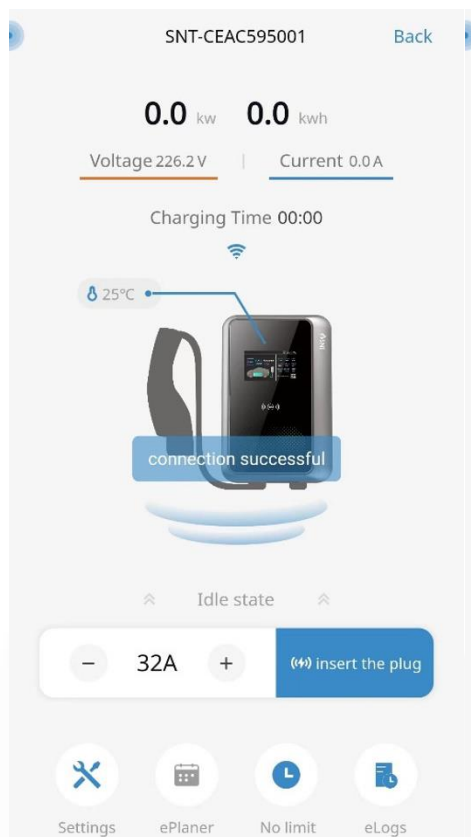


Fig.20

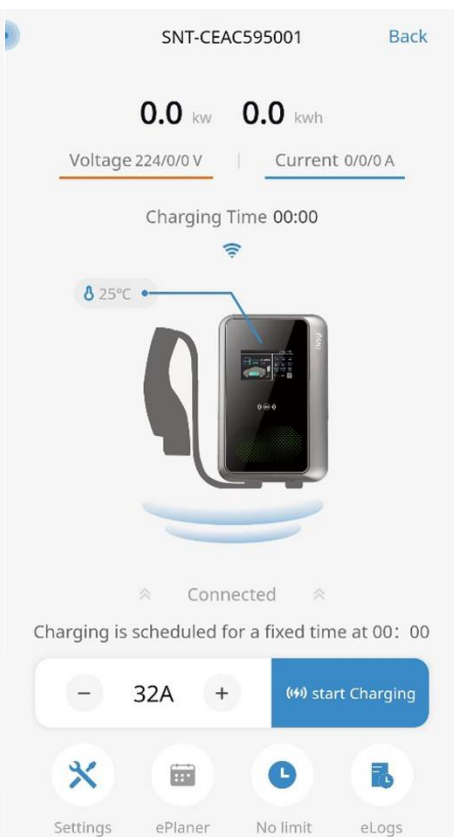


Fig.21

- Start charging: After inserting the plug, you can click the "start charging" button to initiate the charging process, as shown in Fig.20.
- Stop charging: you can click the "stop charging" button to interrupt the charging process, as shown in Fig.21.
- eTimer: Set the duration of charging.
- ePlanner: Start charging from a specified time.

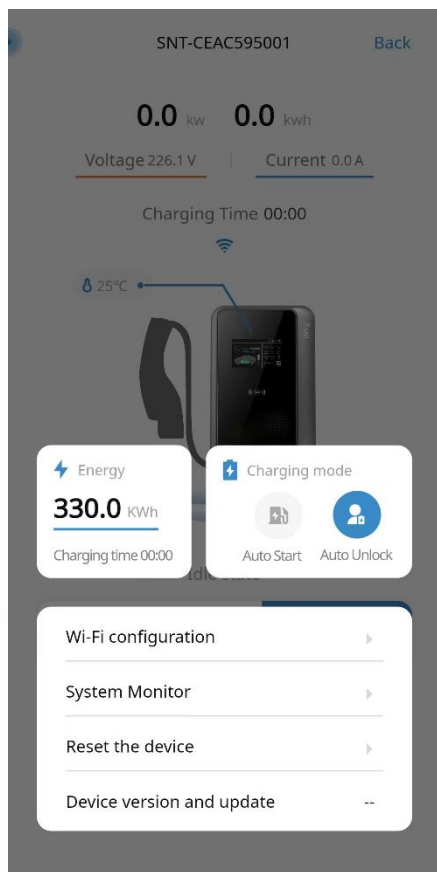


Fig.22

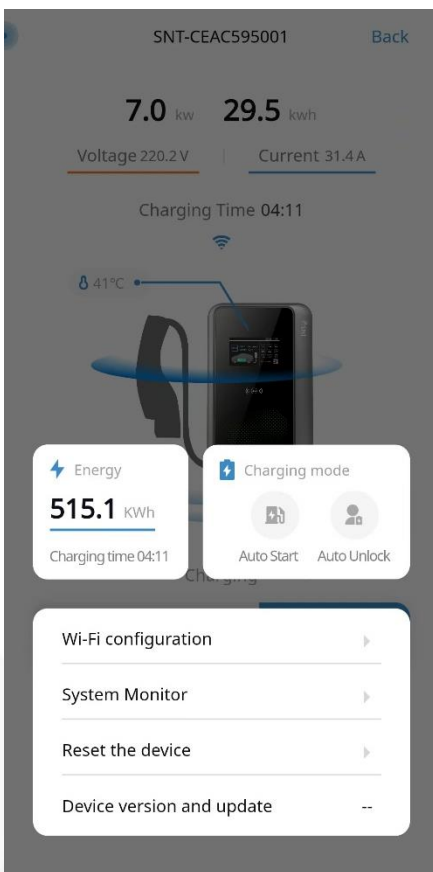


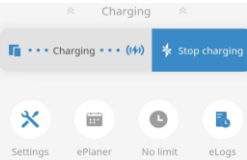
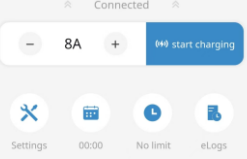
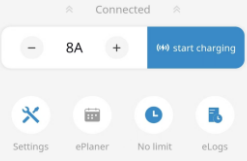
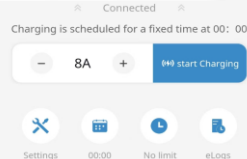
Fig.23

SNT Energy APP menu introduction (click “Settings” in Fig.20 to enter) :

- Energy: Summarized statistics for total charging data.
- Wi-Fi configuration: Change the device password and Connect to the local Wi-Fi.
- System monitor: Users can check the safety performance of the device at any time.
- Reset the device: Restart the device.
- Device version and update: Recorded the device software information and available update.
- Charging Mode: “Auto Start” or “Auto Unlock”.

Auto Start: after the wall box be turned on, once the mobile phone is close to and connected to the hotspot of the charging station, the device will automatically start charging, eliminating the need to swipe the RFID card or operate in the mobile phone. This feature prevents the device from being embezzled;

Auto Unlock: After turning it on, charging starts automatically. (Note: Anyone can use the device without authorization after it is turned on; Auto Start automatically expires after "Auto Unlock" is turned on);

#	Charging Mode	Diagram	Detailed Introduction of Corresponding Functions
1	  Auto Start Auto Unlock		Charging starts automatically.
2	  Auto Start Auto Unlock		Please click "start charging" button to start charging. "00:00" button can start charging from a specified time. "No limit" button can set the duration of charging.
3	  Auto Start Auto Unlock		Please click "start charging" button to start charging. "No limit" button can set the duration of charging.
4	  Auto Start Auto Unlock		The scheduled charging is default to be started at 00:00. "00:00" button can start charging from a specified time. "No limit" button can set the duration of charging.

The prerequisite is that the user has completed inserting the plug.

Add Device to Local Wi-Fi

Once the user successfully connects the charger to the local Wi-Fi via the SNT Energy APP, the APP does not have to be connected to the device's hotspot during use and the user's mobile phone can always access it via the Internet.

Operating steps:

After the APP is successfully connected to the device's Wi-Fi, enter the device management page.

Click 'Settings' → 'Wi-Fi configuration' → 'Add the device to a local Wi-Fi' → enter relevant information, as shown in Fig.24 and Fig.25

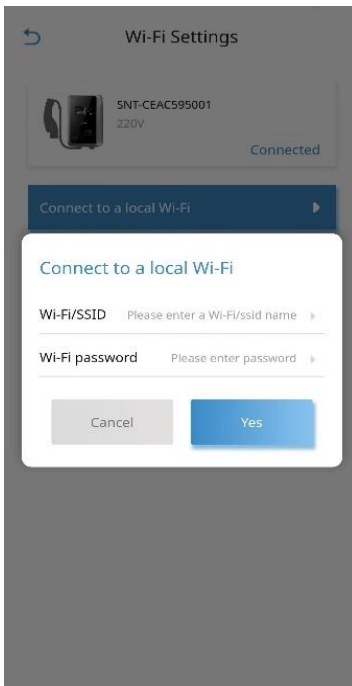


Fig.24

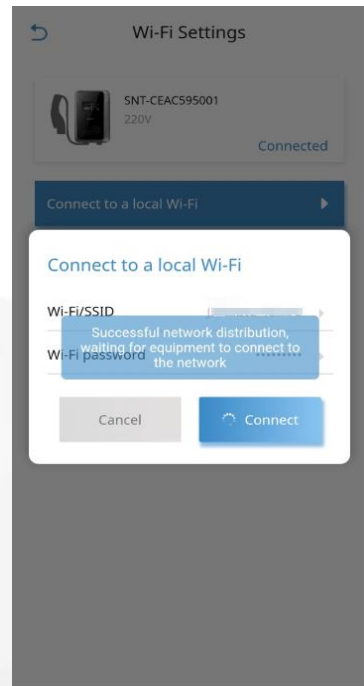


Fig.25

Please note that the precondition as follows:

- Frequency Band: 2.4G
- Encryption Standard: WPA/WPA2
- Protocol: IEEE802.11 b/g/n

5.4.3 Web Interface Operation

1. Connect the hotspot of device

WIFI connection → select the hotspot name beginning with SNT and connect, the initial password is: 12345678

2. Enter the URL **192.168.4.1** in your mobile browser, as shown in Fig.26 and Fig.27

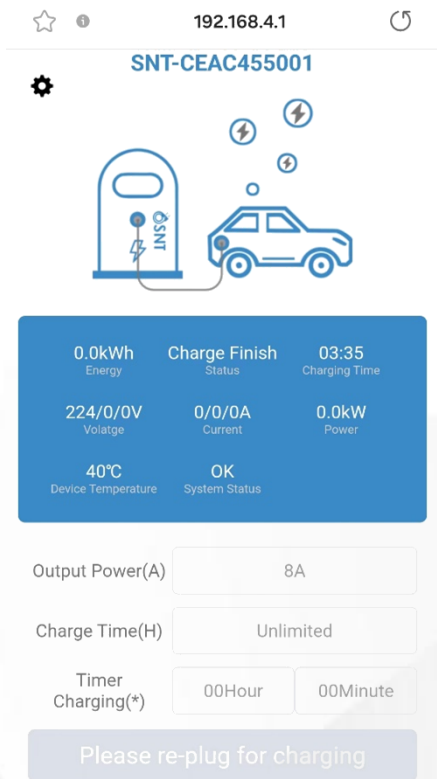


Fig.26

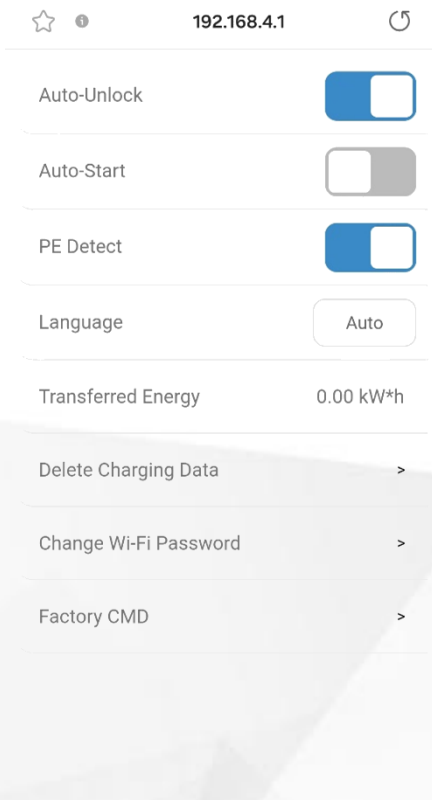


Fig.27

VI TROUBLESHOOT COMMON FAULTS

6.1 Common Faults

Error Code	Reasons	Recommendation
CP	CP connection of charging connector is abnormal	Please check whether the charging plug is connected correctly and reliably. If the fault persists, please contact with SNT Customer Service.
PE	The input/output is improperly grounded	Immediately turn off the leakage/overcurrent protection switch of the distribution box. Then check whether the input/output lines of chargers are grounded properly and whether the input L/N is connected in normal sequence. After the fault is rectified, power on the device again. If the fault persists, please contact with SNT Customer Service.
OV	The AC input voltage is too high.	Please ask the electrician to test the input voltage of the air switch. If the actual voltage exceeds 275Vac for a short time, wait for the network to restore itself to the normal voltage range, power off and restart. If the actual voltage exceeds 275Vac for a long time, contact the power supply department. If the actual voltage is less than 265Vac and the power failure is not recovered, please contact with us.
UV	The AC input voltage is too low.	Please ask the electrician to test the input voltage of the air switch. If the voltage is temporarily below 85Vac, wait for the voltage to return to normal range. If the actual voltage is lower than 85Vac for a long time, contact the power supply department. If the actual voltage is greater than 85Vac, please contact with us.
OC	The AC input current is too large	Immediately turn off the leakage/overcurrent protection switch of the distribution box. Then check whether there is low impedance connection between two output lines of chargers. If the power on fails to recover after troubleshooting the above issues, please contact with SNT Customer Service.
OT	The internal temperature is greater than 85 degrees	Please check the installation environment of chargers. Check whether there are heating devices or devices nearby. Ensure that the ambient temperature is below 55°. If the fault cannot be rectified, please contact with SNT Customer Service.
LEAK	Leakage current is greater than 30mA	Immediately turn off the leakage/overcurrent protection switch of the distribution box. Check charger output line for damage or low impedance connection to the ground. After troubleshooting the above issues, reset the switch of leakage current protector and power on again. If the fault still exists, please contact with SNT Customer Service.

6.2 Troubleshoot

PROBLEM	POSSIBLE CAUSE
Status LED not lit	No voltage supply connected Fault on the wall box, please contact SNT customer service.
Charging cycle has not started	The charging plug has not been connected correctly, please remove the charging cable plug and try connecting again. The vehicle is already fully charged or has a fault – check the vehicle.
Charging cable plug cannot be disconnected	Charging cycle has not been ended by the vehicle, ensure to end the charging cycle first as described in the manual provided by the vehicle manufacturer.
Vehicle did not fully charge/ in time	Vehicles charging setting has been incorrect, either the charging mode or planned departure time. Power has been reduced due to high temperature in the car or the wall box.
Status LED permanently lights in RED	The wall box is unable to shut down the voltage on the charging cable, please reset the wall box. If the problem persists, please disconnect the wall box from the main power supply and contact SNT Customer Service.

6.3 Reset an Error

In case of any interruptions during the connection process or charging cycle, the wall box will automatically attempt to restart.

If the charging cycle cannot be restarted, the charging cycle must be ended, and the wall box should be reset.

If the error occurs again, for no obvious reason, please contact with us.

For more or update information, please visit the SNT page: www.smartnature.group

If the error/error code is not listed, please contact the SNT after -sales service department.

6.4 Warranty

SNT Service can provide more details about the warranty of this device.

However, the warranty will not cover any damage caused by the following cases.

- Damage at the wall box caused by inappropriate installation, when it was carried out by a not authorized electrician or the following Installation Instructions were not followed.
- Damage or Defects of the device if the instructions were not followed according to SNT installation and operating instructions.
- Costs or damage caused by someone installing or operating at the device, who is not a trained, qualified and authorized electrician.

6.5 Waste Disposal

Ensure to properly decommissioning the device, then have the device by a service and follow all the valid national disposal regulations.

The devise must be disposed separately from general house waste.



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