

# EV Charging Station Manual



## Feature

charging plug meet IEC 62196-2 standard.

Control box meet IEC 61851 control principle.

Excellent protection performance, protection grade IP65-Working condition.

Operating temperature: -30°C to 55°C.

## Mechanical Properties

Mechanical life: no-load plug in/pull out>10000times

- Impact of external force: can afford 1m drop and 2T vehicle run over pressure

## Electric Performance

Rated voltage, current and power:250V AC 8A 10A 13A 16A /7KW

- Insulation Resistance:>1000MD (DC500V)
- Terminal Temperature Rise:< 50K

## Control Box Function

- Leakage protection (restart recover).
- Over voltage under-voltage protection (self-checking recover).
- Lightning protection.
- Over current protection.
- Overheat protection.
- Ground protection.

## Charger Cord

Specification:3G2.5mm<sup>2</sup>+2\*0.5mm<sup>2</sup>

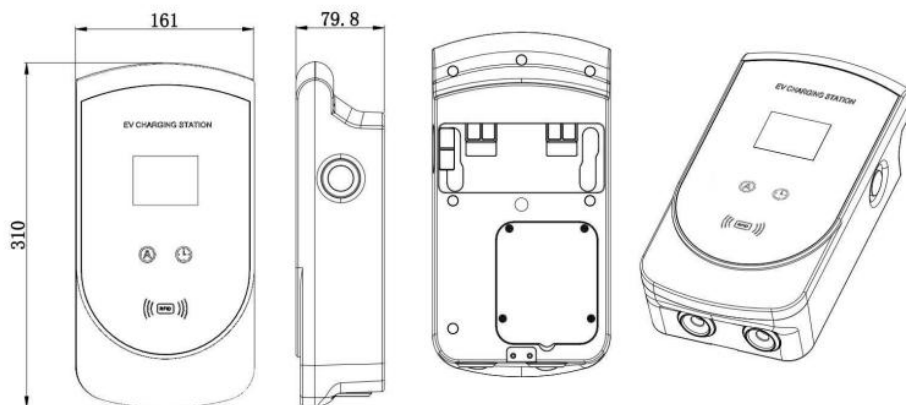
## Cautions

- Do not bring dangerous items such as flammable, explosive or combustible materials, chemicals, flammable steam, etc. near the charging pile;
- Keep the charging gun head clean and dry. If it is dirty, wipe it with a clean dry cloth. It is strictly forbidden to touch the charging gun core with your hands when it is charged;

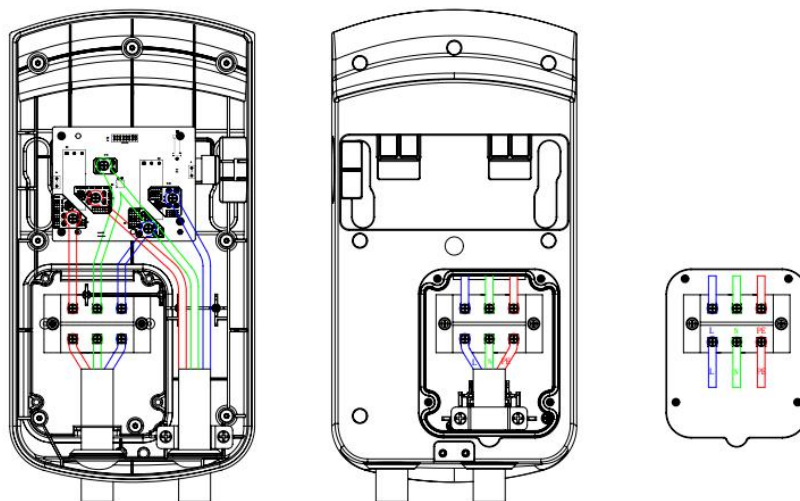
- It is strictly forbidden to use the charging pile when the charging gun or charging cable is defective, cracked, worn, broken, or the charging cable is exposed. If you find any, please contact the staff in time;
- Do not attempt to disassemble, repair, or modify the charging pile. If there is a need for maintenance or modification, please contact the staff. Improper operation may cause damage to the equipment, water leakage, leakage, etc.;
- If there is any abnormality during use, press the emergency stop button immediately to cut off all input and output power supplies;
- In case of rain and thunder, please charge carefully;
- Children are not allowed to approach or use the charging pile during the charging process to avoid injury.
- During the charging process, the vehicle is prohibited from driving and can be charged only when it is stationary. Please turn off the hybrid electric car before charging.
- DO not use the device in extreme temperatures (normal operating range (-30°C to 55°C)).
- The power supply input cable should have at least 3G2.5mm<sup>2</sup>,It is proposed to complete the distribution of electricity by professionals.

## product structure

### Overall outline drawing

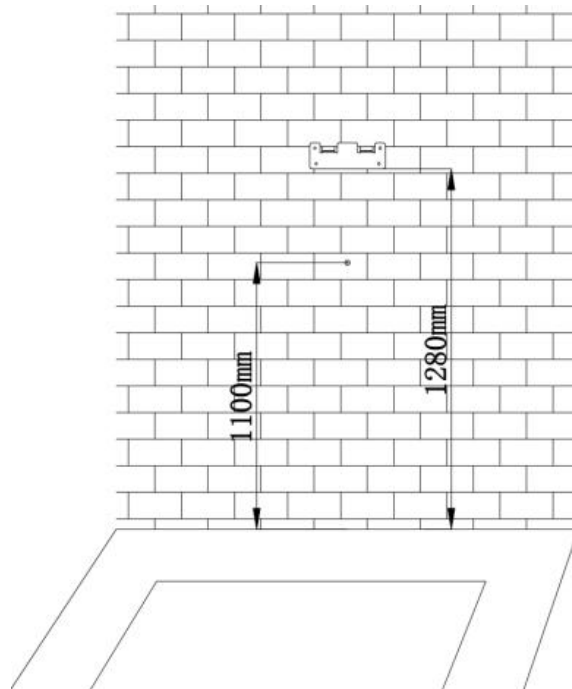


### Internal structure map

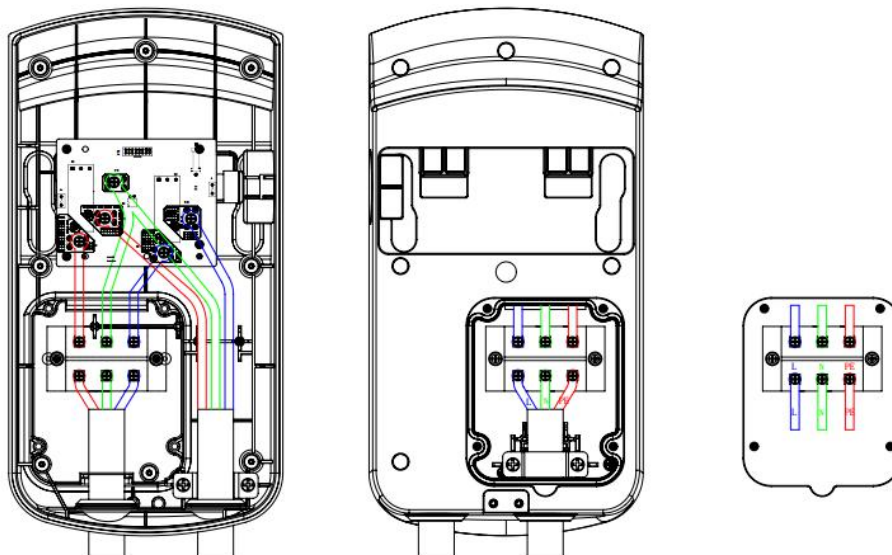


## Installation process

### 1) Wiring and installing the wall bracket

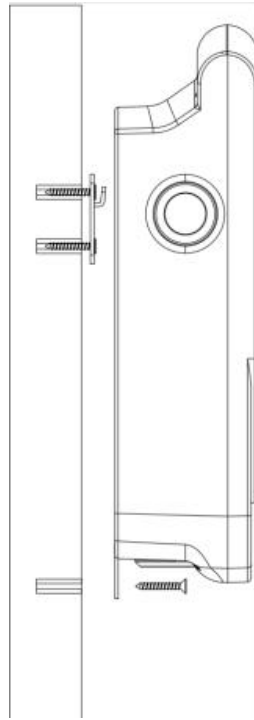


### 2) Installation of charging pile inlet



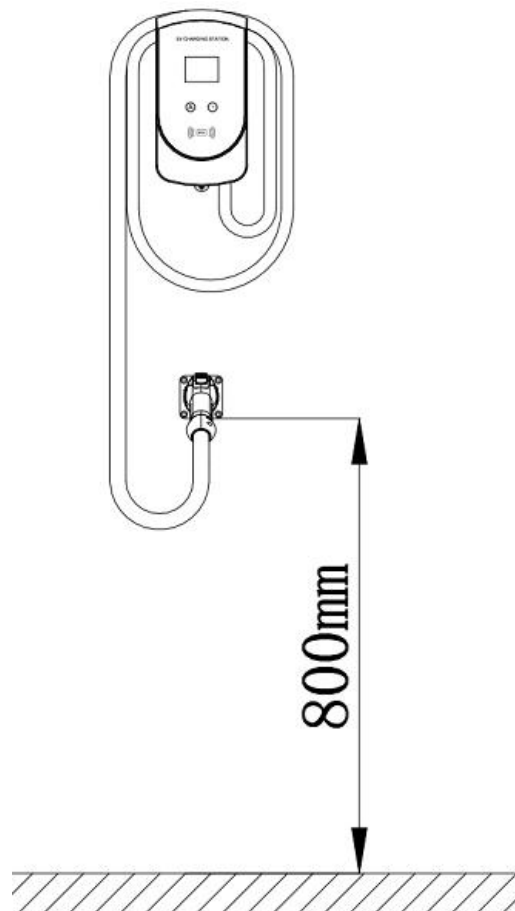
### 3) Wall-mounted installation and fixing

Hang the mounting holes on the back of the device into the fixing screws on the wall from the front, and fix them;

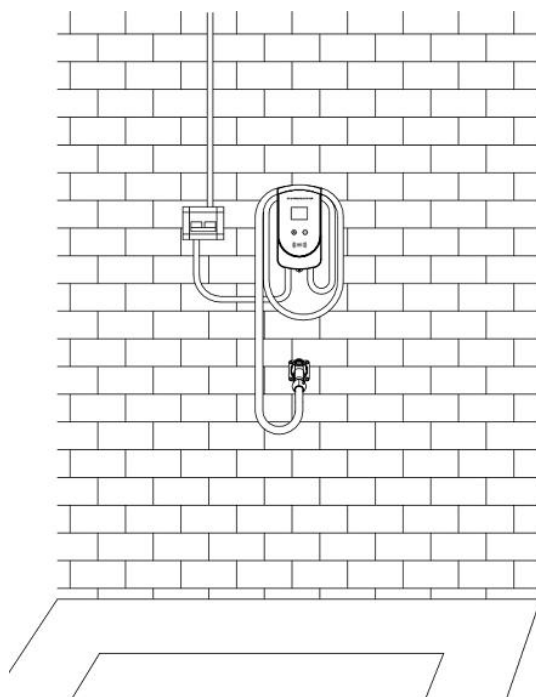


#### 4) Installation of gun base

Just below the equipment, install the gun base, the installation height, 800mm from the ground



5) The installation is over, the effect is as follows:



## Power-on inspection and debugging

### 1) Check before operation

Before running, please check carefully and ensure the following items:

- The installation position of the AC pile is convenient for operation and maintenance
- The AC pile and accessories are correctly connected and installed firmly
- Reasonable selection of leakage protection switch for AC inlet
- No external objects or parts are left on the top of the AC pile

### 2) Power on the device

1. Make sure that the above inspection items before operation meet the requirements
2. Close the power inlet leakage protection circuit breaker
3. Power on the AC pile: There is about 5 seconds of power-on self-check time, and the green indicator light flashes.
4. After the power-on self-check is completed, observe the status of the LED indicator.
  - **Normal standby: the green light is always on**
  - **Equipment failure: red light is always on**

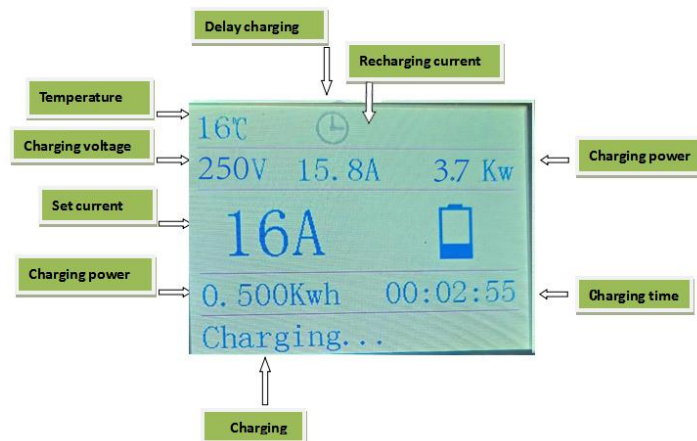


#### Description of enabling and disabling the card swiping

**function:** The key at the leftmost end of the equipment panel controls the opening and closing of the card swiping function. When you need to enable or close the card swiping function, please long press the key for 5 seconds. When prompted to authorize the card swiping to open or close, complete the card swiping operation as required to open or close the card swiping function.

**Description of equipment cumulative power and clear cumulative power functions:**The cumulative charging amount on the equipment display screen is displayed in two cases: during charging, the cumulative charging amount of this time is displayed; When the gun is not inserted, the historical cumulative charge is displayed. Press and hold the button at the right end of the panel for 5 seconds when the gun is not inserted to clear the historical cumulative charge.

## Led Screen Description:



## Charging status description

Serial number	charging	Green	Blue	Red	Definition description
1	Ready	On	Off	Off	Power-on self-test or reset
2	Connect	Flash	Off	Off	The voltage of detection point 1 is $9 \pm 0.8V$ ,
3	Charging	Off	Breathe	Off	Detection point 1 voltage is $6 \pm 0.8V$ , the relay is closed
4	Finish	Off	On	Off	
5	Err:CP	Off	Off	Fault (0.5s) 1 time	The voltage of detection point 1 is $9.8V < U < 11.2V$ ; $6.8V < U < 8.2V$ ; $12.8V < U$ or $U < 5.2V$ ; the relay is off
6	Under Voltage	Off	Off	Fault (0.5s) 2 time	Voltage $< 176V$
7	Over Voltage	Off	Off	Fault (0.5s) 3 time	Voltage $> 264V$
8	Elec Leakage	Off	Off	Fault (0.5s) 4 time	The relay is disconnected, and it needs to be re-powered after the fault is removed before the relay is allowed to close
9	Over Current	Off	Off	Fault (0.5s) 5 time	When the line current is $I_e + 2 < I \leq I_e + 4$ , 5S, the relay is disconnected, and it will automatically restart after 10S. Repeat three times for permanent disconnection. When $I > I_e + 4$ , the relay is disconnected, and the charging ends
10	Over Temp	Off	Off	Fault (0.5s) 6 time	Temperature $> 85$ degrees, disconnect the relay, wait for the temperature $< 65$ degrees, then turn on charging
11	Err:Reset	Off	Off	Fault (0.5s) 7 time	When the emergency stop button is pressed, the relay is disconnected. After the fault is removed, the relay is allowed to close