# MINI DC EV Charging Station Instruction Manual

## 20kw/30KW/40KW /60KW/80KW DC


Shenzhen Secon Power Co., Ltd

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# 1. Abbreviations

| Abbreviation | Description |
|---|---|
| **IEC** | International Electrotechnical Commission |
| **EV** | Electric Vehicle |
| **EVSE kW** | Charging station for electric vehicles (Electric Vehicle Supply Equipment) (IEC61851-1) |
| **kWh A** | Kilowatt (unit of power) |
| **V** | Kilowatt hour (unit of energy) |
| **Hz** | Ampere (unit of current) |
| **LCD RFID CMS** | Volt (unit of voltage) |
| | Hertz (unit of frequency) |
| | Liquid crystal display |
| | Radio Frequency Identification |
| | Central Management System, manages charging stations and has the information on the Authorization of users for the use of its stations. |

| | |
|---|---|
| **OCPP** | Open Charge Point Protocol an open standard protocol for communication between charging stations and a CMS that is suitable for all types of charging technology. |
| **IP** | Ingress Protection (protection class) |
| **PE** | Protective earth conductor |
| **RCBO** | Residual current operated circuit-breaker with overcurrent protection |
| **RCMU** | Residual current monitoring unit |
| **MCB** | Miniature circuit breaker |
| **OBC** | On-board charger (of an electric vehicle) |

# 2. Safety instructions

## 2.1 Warnings used

The following warning, mandatory and information symbols are used in this manual, on and in the charging station.

**CAUTION: Warning of electrical hazards.**
This sign is intended to alert the user to the fact that serious personal injury or considerable material damage can occur if the appliance is not operated as required.

**ATTENTION: Warning of a danger zone or dangerous situation.**
This symbol is intended to draw the user‘s attention to the fact that minor injuries or material damage may occur if the appliance is not operated as prescribed.

**CAUTION: Do not touch with your hands in the event of electromagnetic discharge (ESD).**
Draws attention to the possible consequences of touching electrostatically sensitive components. Wear a ESD protective equipment, e.g. a wrist strap, if you are working near microchips on circuit boards, to prevent damage to the sensitive electronics.

**Indicates important texts, notes, or tips.**

## 2.2 Environment

Do not install or use the charger in the vicinity of explosive, corrosive or flammable materials, chemicals, or vapours.

The charger may only be set up on a non-combustible surface, such as concrete, and at a height of at least 120 cm above the floor.

## 2.3 Assembly

The appliance may only be installed, adjusted, and maintained by qualified persons who are familiar with the design and operation of this type of electrical appliance. Failure to observe this precaution may result in serious injury or even death.

The charger must be installed and commissioned by qualified personnel.

Improper installation and testing of the charger may result in damage.
No liability is accepted for any resulting damage.

Make sure that the charging cable is correctly positioned during the charging process and cannot be stepped on, damaged, or strained.

Check the cable diameter according to the local electrical requirements.

The main connection terminal of the charging station must be firmly connected to the cable ends, otherwise material damage may occur.

Bare parts of the ends of electrical cables must be insulated; otherwise, dangerous fires and material damage may occur.

Do not attempt to open, dismantle, repair, manipulate or modify the device.

The RCBO must be tested monthly. This can be done using the TEST button on the RCBO. If the RCBO switches off, the test is successful, and the lever can be moved back into position.

If you have any questions or need repairs, please contact our customer service.

### 2.4 Operation

To avoid injury, minors or persons with reduced capacity are strictly prohibited from approaching the charging station.

Forced charging is strictly prohibited if the electric vehicle or the charging station fails.

Do not use the charger if it is defective or visibly damaged.
Do not use the charger when you are in the vehicle.

Do not use the charger if it is exposed to heavy rain, snow, or bad weather.

In the event of an emergency (e.g., fire, smoke, unusual noises, water ingress, etc.), please press the red „emergency stop“ button on the charging station to ensure personal safety and stay away from the charging station immediately. Then contact the manufacturer.

It is strictly forbidden to use the charging station if the charging cables are defective, cracked, worn, or broken or if the cables are exposed. If you discover such defects, please contact the manufacturer in good time.

The EV may only be charged when the engine is switched off and stationary.

Do not charge in rain or thunderstorms.

### 2.5 Maintenance

It is recommended that a routine safety inspection of the charging station is carried out at least once a week.

Keep the charging port clean and dry and wipe it with a clean, dry cloth if it becomes dirty.

## 3. Compliance with standards

### 3.1 Charging mode

Complies with EN IEC 61851-1

**Charging mode:**
Method for connecting a vehicle to the supply network to supply the vehicle with energy. The charging mode for the charging station corresponds to 4.

Mode 4 is a method for connecting an electric vehicle to a DC EV supply device permanently connected to an AC power supply network, with a control pilot function extending from the AC EV supply device to the electric vehicle.

### 3.2 Charging connection

According to EN IEC 61851-1, the charging station with connected CCS2 cable fulfils the connection according to case C.

**Case C:** Connection of an electric vehicle to a supply network using a cable and a vehicle plug that is permanently attached to the charging station.

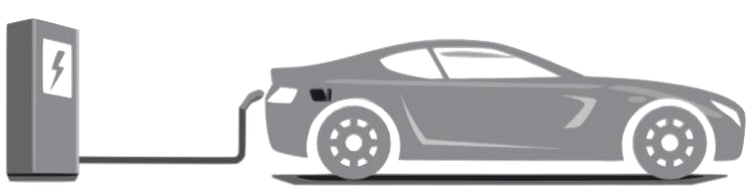


**Illustration of the connection in case C**

### 3.3 Compatibility

The charging station is labelled **L**.

In accordance with the requirements of **EN 17186**, this document specifies harmonized markings for the power supply for electric road vehicles. The requirements in this standard are intended to users‘ information needs regarding compatibility between the charging stations for electric vehicles, the cable assemblies and the vehicles placed on the market.
The identifier must be displayed at the charging stations, on the vehicles, on the cable assemblies and in the consumer manuals as described.

# 4. Information on the product

## 4.1 General

The SeconPower Ultra Speed DC Wall Mount Fast Charging Station is the first choice for powering battery electric vehicles(BEV) and plug-in electric vehicles (PHEV). It is designed for fast charging in commercial and residential locations, such as private and commercial parking lots, fleet charging stations at work, at home, etc.

The charging station has the advantage of easy installation. The wall-mountable design enables flexible and cost-effective installation in different locations. The wall-mounted DC charging station is also suitable for network communication. It can be connected to a central management system (OCPP backend) and provide electric car drivers with real-time information, such as the location of charging stations, charging progress and billing information. The wall-mounted charging station has a touchscreen display with a clear user interface, safety certifications and offers optimal features for outdoor use.

## 4.2 Technical data

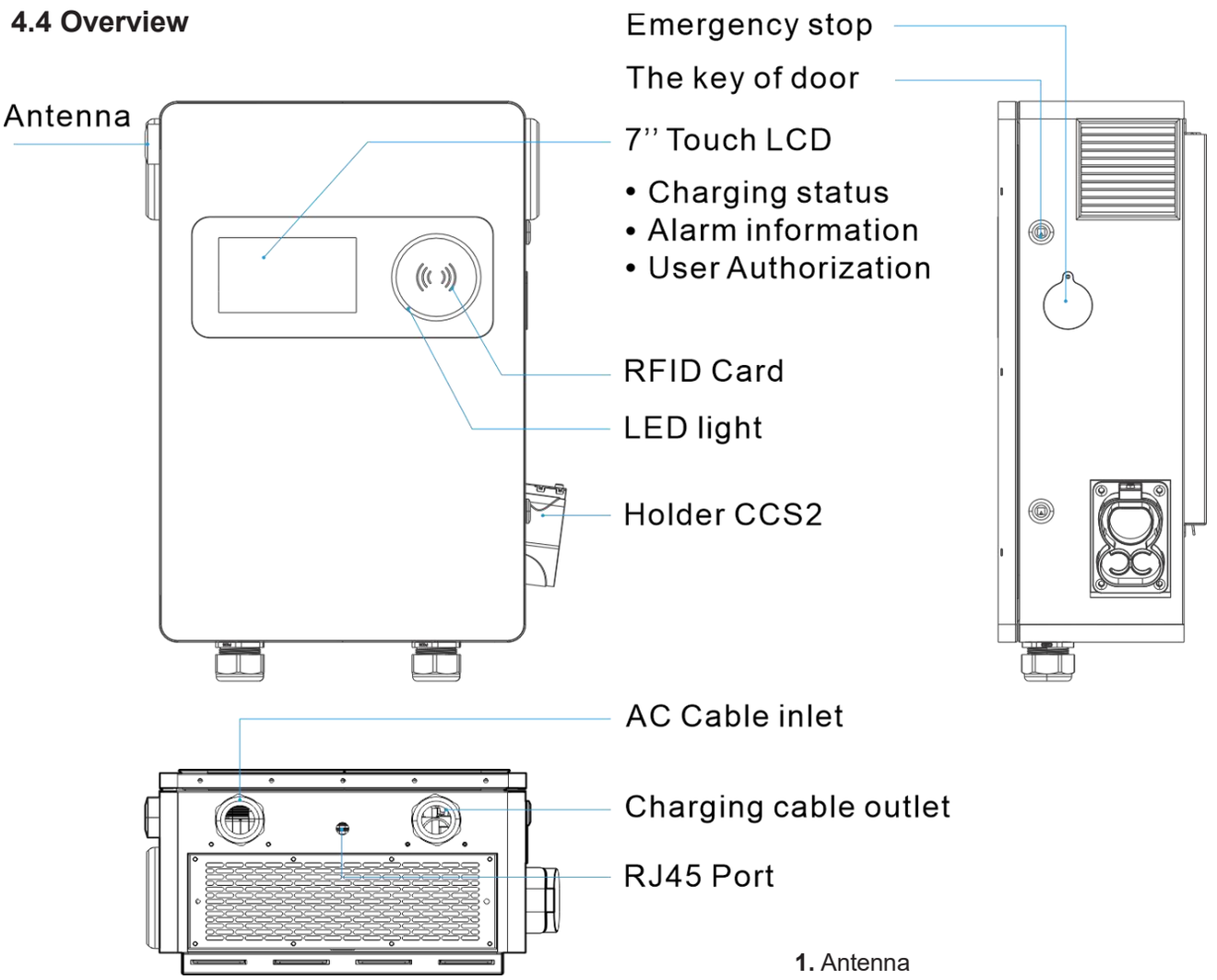
| Model | EVDC-W020-C-A | EVDC-W030-C-A | EVDC-W040-C-A | EVDC-W060-C-A | EVDC-W080-C-A |
|---|---|---|---|---|---|
| **Technical features** | | | | | |
| **Max Power** | Up to 20KW | Up to 30KW | Up to 40KW | Up to 60KW | Up to 80KW |
| **Input voltage** | 400Vac(3P+N+PE)± 10%,50/60Hz, 33.7A | 400Vac(3P+N+PE)± 10%,50/60Hz, 51A | 400Vac(3P+N+P E) ± 10%,50/60Hz, 67.5A | 400Vac(3P+N+PE ) ± 10%,50/60Hz, 101A | 400Vac(3P+N+PE ) ± 10%,50/60Hz, 135A |
| **Power factor** | 0.98 | | | | |
| **Efficiency** | >95% | | | | |
| **Measuring accuracy** | Level 0.5 | | | | |
| **Output voltage range** | CCS1/CCS2/GB-T/NACS: 200~1000VDC | | | | |
| **Output current range** | 0-65A | 0-100A | 0-125A | 0-200A | 0-200A |
| **Communication** | Ethernet/WIFI/4G/OCPP 1.6 Json (OCPP 2.0 optional) | | | | |
| **Wireless** | WiFi (2.4GHz) or cellular (EDGE/3G/LTE) | | | | |
| **User interface** | RFID card(13.56/16MHz) and APP | | | | |
| **Display** | LCD 7 inch Touch Screen | | | | |
| **Versatility** | IEC61851/IEC62196/ISO1511/DIN70121/EN61000-6-4:2007/UL 2202, UL2231 | | | | |
| **Energy Meter** | CE/MID certified(Optional) | | | | |
| **RCBO** | Type A | | | | |
| **Security design** | Over/under voltage protection, overload protection, current leakage protection, grounding protection, lightening surge protection,Emergency stop button,Door sensor | | | | |
| **DC Plugs** | CCS2/ CCS1/ GB-T/ NACS with Cable 5M | | | | |
| **Physical properties** | | | | | |
| **Warranty** | 2 years | | | | |
| **Application place** | Indoor/Outdoor | | | | |
| **Installation method** | Wall mount, pedestal mount (optional) | | | | |
| **Sound noise** | <65DB in all directions | | | | |
| **Operating temperature** | -30℃ to +50℃ | | | | |
| **Humidity** | Max.95%(non-regulating) | | | | |
| **Splash water protection** | IP55 | | | | |
| **Impact resistance** | IK08 | | | | |
| **Dimensions** | 670*460*270mm | 670*460*270mm | 670*460*270mm | 770*560*206mm | 900*650*260mm |
| **Package Dimension** | 670*460*270mm | 800*590*480mm | 800*590*480mm | 1010*720*510mm | 1200*920*450mm |
| **Net Weight** | 28Kg | 41Kg | 46Kg | 75Kg | 115Kg |
| **Gross Weight** | 34Kg | 46Kg | 52Kg | 78Kg | 120Kg |

| Model | EVDC-F040-CC-A | EVDC-F060-CC-A | EVDC-F080-CC-A |
|---|---|---|---|
| **Technical features** | | | |
| **Max Power** | Up to 40KW | Up to 60KW | Up to 80KW |
| **Input voltage** | 400Vac(3P+N+PE) ±10%,50/60Hz, 67.5A | 400Vac(3P+N+PE) ±10%,50/60Hz, 101A | 400Vac(3P+N+PE) ±10%,50/60Hz,135A |
| **Power factor** | 0.98 | | |
| **Efficiency** | >95% | | |
| **Measuring accuracy** | Level 0.5 | | |
| **Output voltage range** | CCS1/CCS2/GB-T/NACS: 200~1000VDC | | |
| **Output current range** | 0-125A*2 | 0-200A*2 | 0-200A*2 |
| **Communication** | Ethernet/WIFI/4G/OCPP 1.6 Json (OCPP 2.0 optional) | | |
| **Wireless** | WiFi (2.4GHz) or cellular (EDGE/3G/LTE) | | |
| **User interface** | RFID card(13.56/16MHz) and APP | | |
| **Display** | LCD 7 inch Touch Screen | | |
| **Versatility** | IEC61851/IEC62196/ISO1511/DIN70121/EN61000-6-4:2007/UL 2202, UL2231 | | |
| **Energy Meter** | CE/MID certified(Optional) | | |
| **RCBO** | Type A | | |
| **Security design** | Over/under voltage protection, overload protection, current leakage protection, grounding protection, lightening surge protection,Emergency stop button,Door sensor | | |
| **DC Plugs** | CCS2/ CCS1/ GB-T/ NACS with Cable 5M | | |
| **Physical properties** | | | |
| **Warranty** | 2 years | | |
| **Application place** | Indoor/Outdoor | | |
| **Installation method** | Wall mount, pedestal mount (optional) | | |
| **Sound noise** | <65DB in all directions | | |
| **Operating temperature** | -30℃ to +50℃ | | |
| **Humidity** | Max.95%(non-regulating) | | |
| **Splash water protection** | IP55 | | |
| **Impact resistance** | IK08 | | |
| **Dimensions** | 770*560*206mm | 770*560*206mm | 900*650*260mm |
| **Package Dimension** | 1010*720*510mm | 1010*720*510mm | 1200*920*450mm |
| **Net Weight** | 75Kg | 75Kg | 115Kg |
| **Gross Weight** | 78Kg | 78Kg | 120Kg |

### 4.3 Package contents

- 1 x EVSE
- 1 x User manual
- 1 x Wall bracket (attached to EVSE)
- 6 x M8x80 bolt anchors (for wall/stand bracket)
- 2 x M5x10 screw (for EVSE/wall bracket)
- 2 x RFID card
- 1 x microSD card
- 1 x USB microSD card reader
- 1 x WiFi module
- 1 x Cellullar module (installed in EVSE)
- 1 x Cable holder
- 3 x Bolt anchor M10x60 (for cable bracket)
- 2 x Housing key

### 4.4 Overview




**1.** Antenna
**2.** Touchscreen display
**3.** RFID card reader
**4.** Status LED
**5.** Holder CCS2 charging plug
**6.** Feed-through output cable
**7.** RJ45 feed-through
**8.** Feed-through input cable
**9.** Ventilation inlet with air filter
**10.** Housing lock
**11.** Ventilation outlet (on both sides)
**12.** Emergency stop button

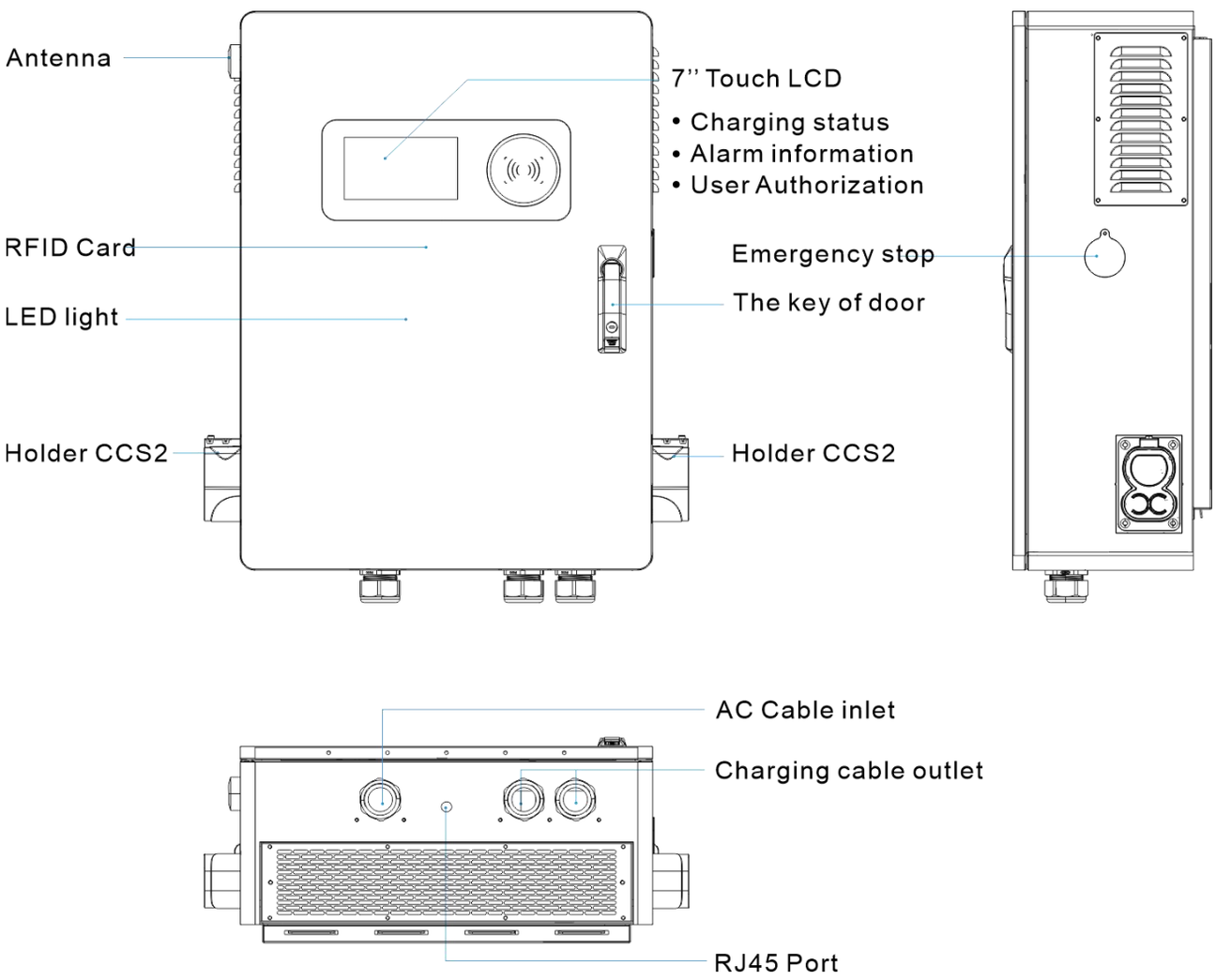
### 4.5 LED display and operating status

| **Status** | **LED display** |
|---|---|
| Standby | Green |
| Malfunction | Red |
| Charging | Blue |

**20/30/40KW with 1 gun**

### 4.6 Package contents

- 1 x EVSE
- 1 x User manual
- 1 x Wall bracket (attached to EVSE)
- 6 x M8x80 bolt anchors (for wall/stand bracket)
- 2 x M5x10 screw (for EVSE/wall bracket)
- 2 x RFID card
- 1 x USB microSD card reader
- 1 x WiFi module
- 1 x Cellular module (installed in EVSE)
- 1 x Cable holder
- 6 x Bolt anchor M10x60 (for cable bracket)
- 2 x Housing key



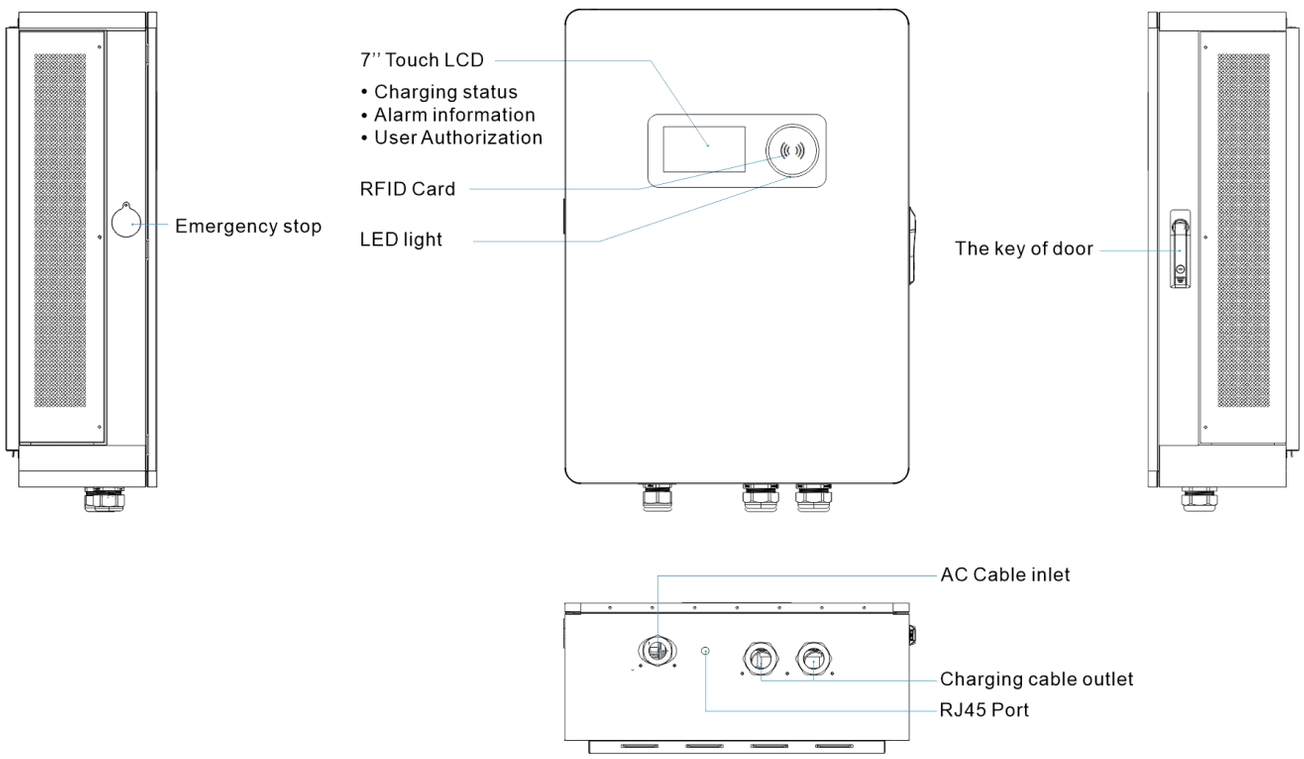

### LED display and operating status

| Status | LED display |
|---|---|
| Standby | Green |
| Malfunction | Red |
| Charging | Blue |

# 40KW/60KW with 2 gun

### 4.6 Package contents

- 1 x EVSE
- 1 x User manual
- 1 x Wall bracket (attached to EVSE)
- 6 x M10x100 bolt anchors (for wall/stand bracket)
- 2 x M5x10 screw (for EVSE/wall bracket)
- 2 x RFID card
- 1 x USB microSD card reader
- 1 x WiFi module
- 1 x Cellullar module (installed in EVSE)
- 1 x Cable holder
- 6 x Bolt anchor M10x60 (for cable bracket)
- 2 x Housing key




### LED display and operating status

| Status | LED display |
|---|---|
| Standby | Green |
| Malfunction | Red |
| Charging | Blue |

# 40kW/60kW/80kW with 2 gun

# 5. Installation instructions

## 5.1 Before installation

- Read all instructions before using and installing this product.
- Do not use this product if the mains or charging cable is damaged.
- Do not use this product if the housing or charging port is broken, open or damaged.
- Do not insert any tools, materials, fingers, or other body parts into the charging port or the EV port.

**WARNING! Always wear ESD protective equipment when working in the vicinity of microchips to prevent damage to the sensitive electronics.**

**RISK OF ELECTRIC SHOCK! Ensure that the supply cable is not connected to the power supply when working on the charging station!**

**WARNING! A damaged charging station must not be installed under any circumstances. In the event of damage, please inform your dealer immediately. Installation and wiring must be carried out by a specialist company.**

- The charging station can be connected to a 3-phase TN(-S)/IT/TT power grid using a Wye configuration.
- TN(-S) system: The neutral conductor (N) and PE of the power distribution are connected directly to earth. PE of the charger is connected directly to PE of the power distribution and a separate conductor for PE and neutral conductor (N).
- IT system: The neutral conductor of the power distribution system is insulated from earth. The PE of the charger is insulated from earth with the PE of the power distribution system.
- TT system: The neutral conductor (N) and PE of the power distribution board are connected directly to earth. The PE of the charger is insulated to earth with the PE of the power distribution board.
- You need sufficient space to install and maintain the appliance. Please keep a distance of at least 60 cm around the appliance. The appliance should be installed in free air space and at least 30 cm away from all ventilation openings of the appliance.

**IMPORTANT NOTE!**

**According to § 19 NAV, the operation of charging facilities for electric vehicles must be reported to the responsible electricity supplier before use (up to 12kVA) and before installation (over 13kVA). This can also be done by the contracted electrician. Please contact your electricity supplier for further information. Please observe the local regulations.**

## 5.2 Earthing and safety requirements

- The product must be connected to an earthed, permanently installed wiring system. The connections must comply with all applicable electrical regulations.
- Ensure that the charger is always de-energized during installation, maintenance, and servicing.
- Use suitable protection when connecting to the main power distribution network.
- Use suitable tools for each task.

**CAUTION!**

**Do not use an extension cable or a second cable or**
**Not allowed to use adapter**
**set to connect the electric vehicle to the EVSE.**

## 5.3 Wall mounting the charging station

**ATTENTION!**

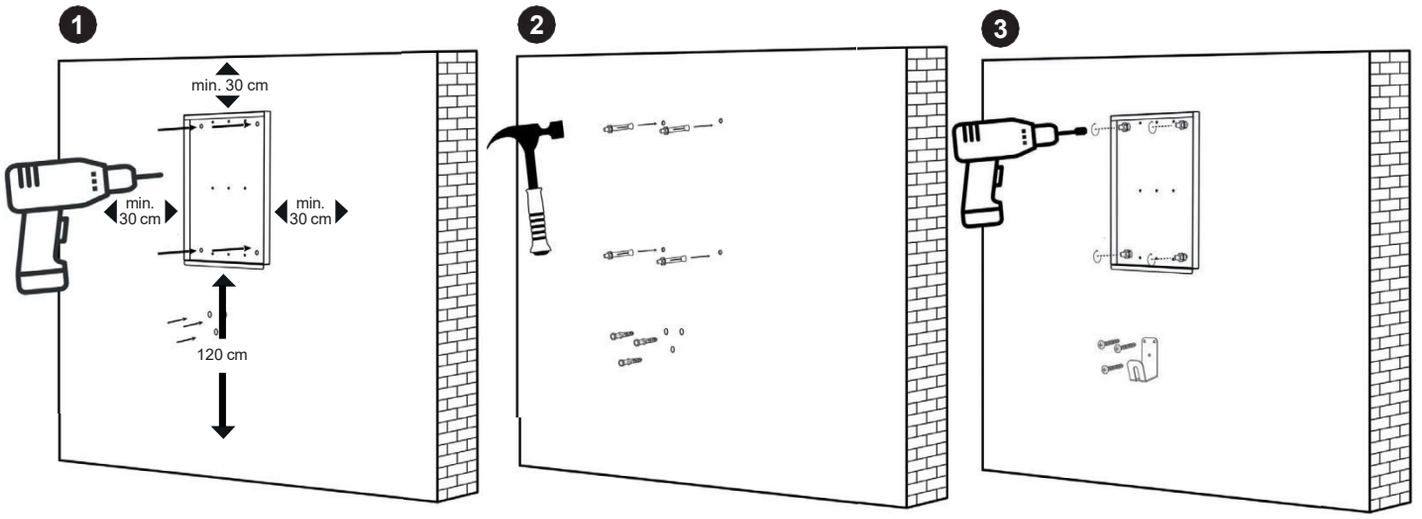
**Due to its heavy weight of 46 kilograms, the charging station must be assembled by at least two people.**

**IMPORTANT NOTE!**

**It is recommended to install the charging station in a location with good ventilation, out of direct sunlight and protected from wind and rain. To ensure good ventilation, you should mount the charging station vertically and leave sufficient space.**

**NOTE**

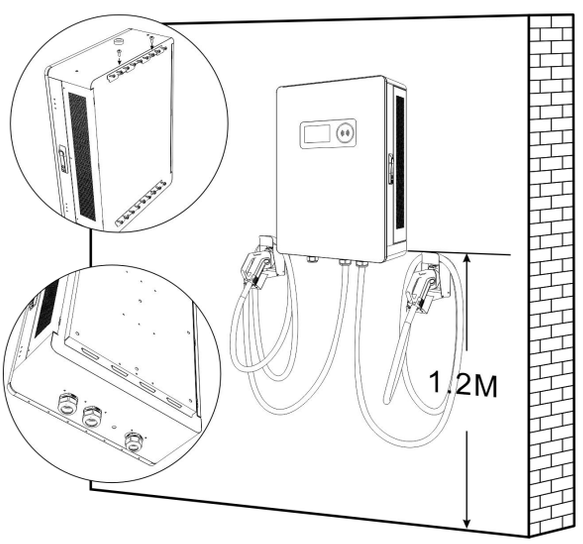
**A high-quality pedestal for using the EV charger as a stand-alone unit at any location is available as an accessory under item number EBU30-40-COMP at www.seconpower.com.**



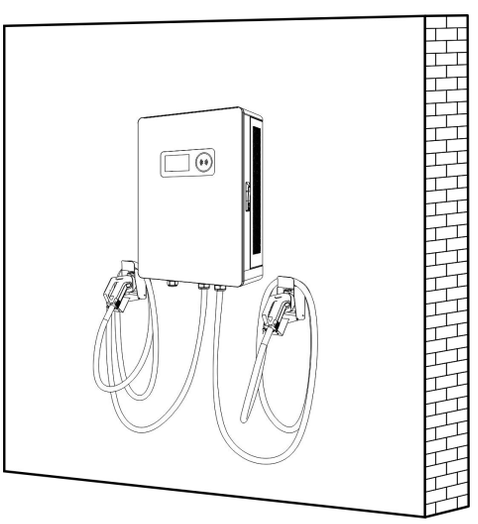

Drill 4 holes 12 mm in diameter and 80 mm deep in accordance with the holes in the wall bracket in a load-bearing wall. Observe the specified distances when positioning the EV charger. Drill 3 holes with a diameter of 10 mm and a depth of 60 mm according to the drill holes of the cable bracket (optional).

Place the bolt anchors in the holes for the wall bracket and the cable holder (optional).

Place the wall bracket on the bolt flanks and screw it on tightly. Screw on the cable holder (optional).




Place the EV charger on the wall bracket and secure it to the bracket from above using the two M6 screws.



After correct installation, the EV charger should be positioned on the wall as shown in the illustration.

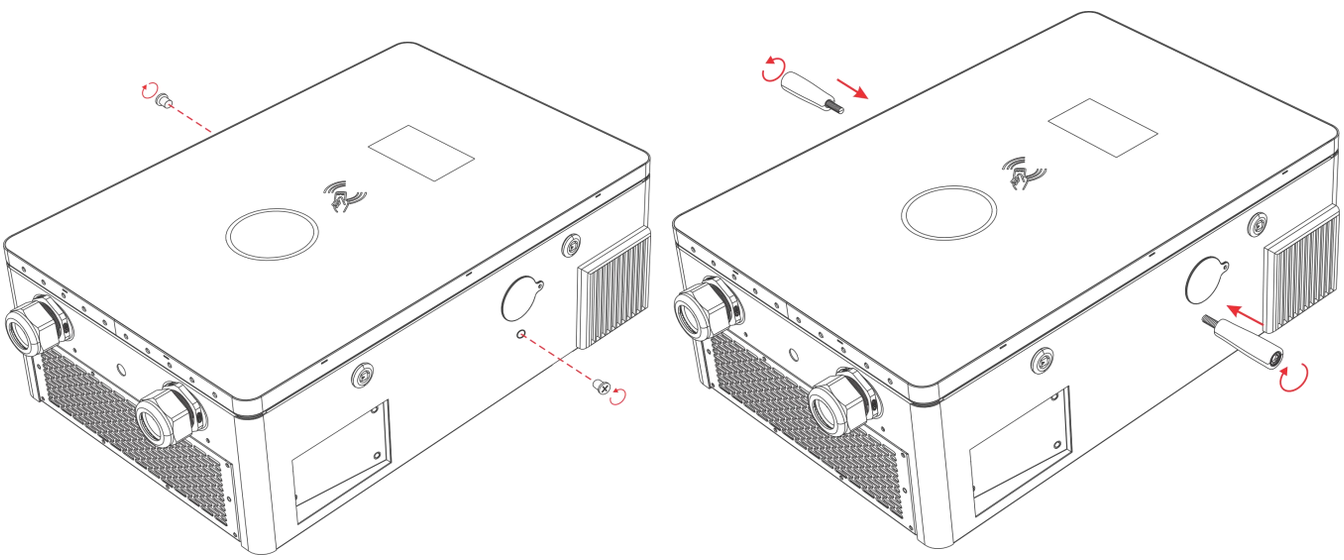
## 5.4 Unlocking/locking the door

The charging station is equipped with a door and two locks for quick and easy access.
carry out installations and maintenance.
The locking mechanism works as follows:

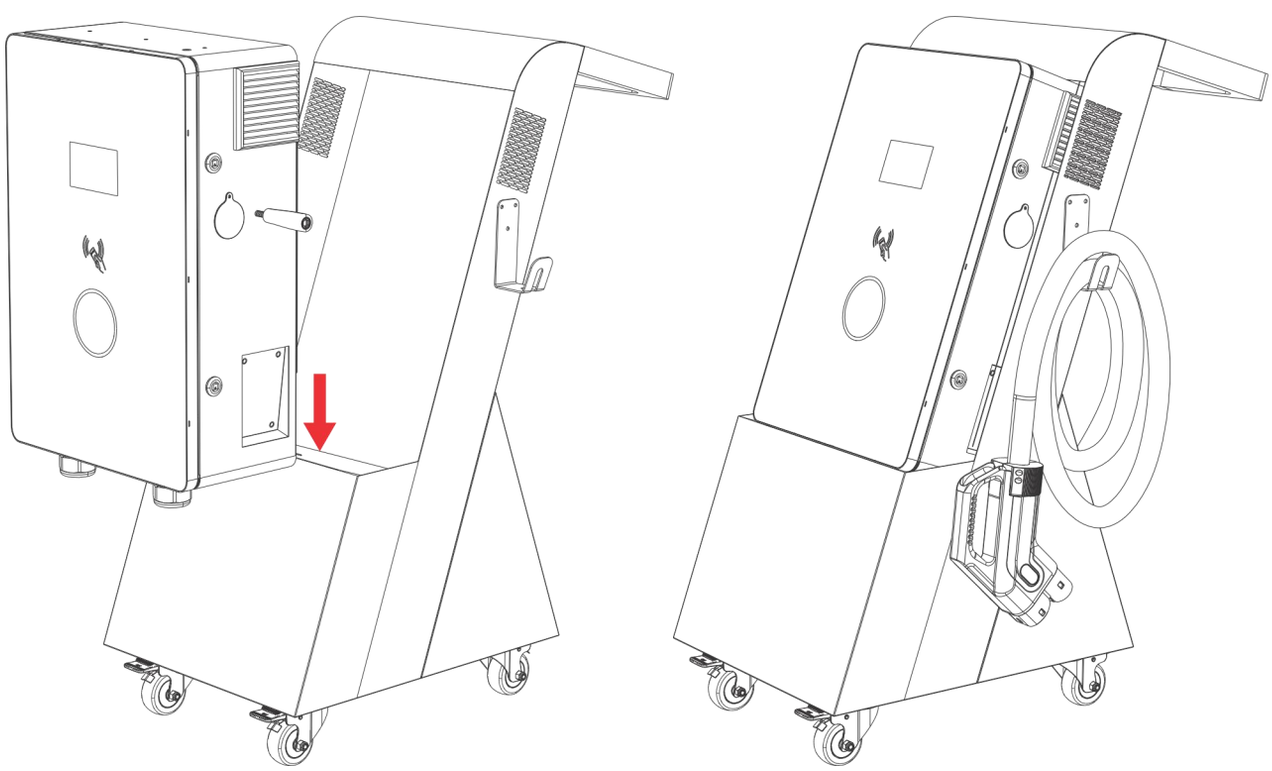
**1.** Push the door shut.
**2.** Insert the key into the lock and push it in.
**3.** Turn the key clockwise to unlock the door.
**4.** Turn the key anticlockwise to lock the door.

### 5.5 Movable Charger installation(Optional)

**Step 1** Remove the keyhole plugs on the left and right sides of the charger, and keep them properly for later use. Fit the handles in the corresponding holes on both sides of the charger, and tighten them.



**Step 2** Lift the charger by the handles, and hook it on to the wall-mounting bracket



## 5.6 Installing the AC input cable

**DANGER OF ELECTRIC SHOCK!**

**Ensure that the supply cable is de-energized when working on the charging station!**

**WARNING!**

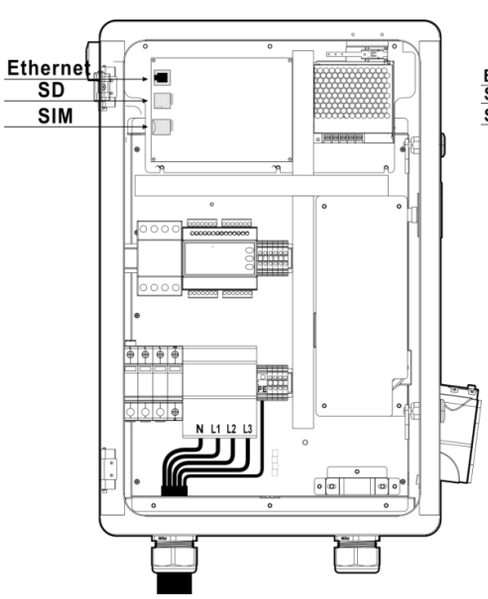
**A damaged charging station must not be installed under any circumstances. In the event of damage, please inform your dealer immediately. Installation and wiring must be carried out by a specialist company.**

**Before commissioning, please ensure that your sub-distribution board is equipped with the appropriate RCD (type A (30mA) 63A) and circuit breaker (C630) for 20KW install outside**
**RCD (type A (30mA) 80A) and circuit breaker (C80) for 30/40KW**
**RCD (type A (30mA) 125A) and circuit breaker (C125) for 60KW**
**RCCB (160A) and circuit breaker (C160) for 80KW**

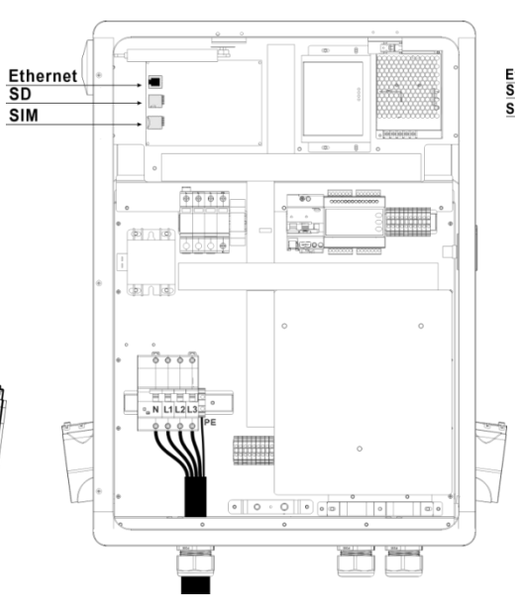
**NOTE!**

**For the charging stations, we recommend using a power supply cable with a copper core and a cable cross-section of at least 5x10mm² for20kW,5x16mm² for 30kW and 5x20mm² for 40kW and 5x25mm² for 60KW and 5x35mm² for 80KW. The outer diameter of the cable may be 24 to 32mm.**

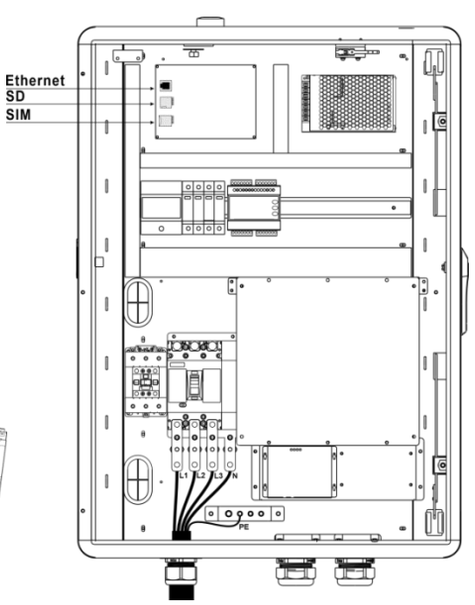
1. Make sure that the supply cable is de-energized.
2. Unlock the two locks on the right-hand side of the charging station with the enclosed keys.
3. Open the door of the charging station.
4. Pass the supply cable through the rubber seal.
5. Remove approx. 12 mm of insulation from the conductors of the supply cable. Multi-core conductors should be fitted with wire end ferrules in advance to ensure a secure connection.
6. Connect the wires of the supply line to the terminal strip for PE (green-yellow) and to the RCBO for L1 [R] (brown), L2 [S] (black), L3 [T] (grey), N (blue) and screw tight (approx. 4 Nm).
7. Switch on the RCBO of the charging station by pushing the lever to the right.
8. Push the door of the charging station closed and lock it with the two locks.
9. Close the covers of the two locks.
10. Close the rubber seal of the supply cable.




**20/30/40KW with 1 gun**




**40/60kW with 2 gun**



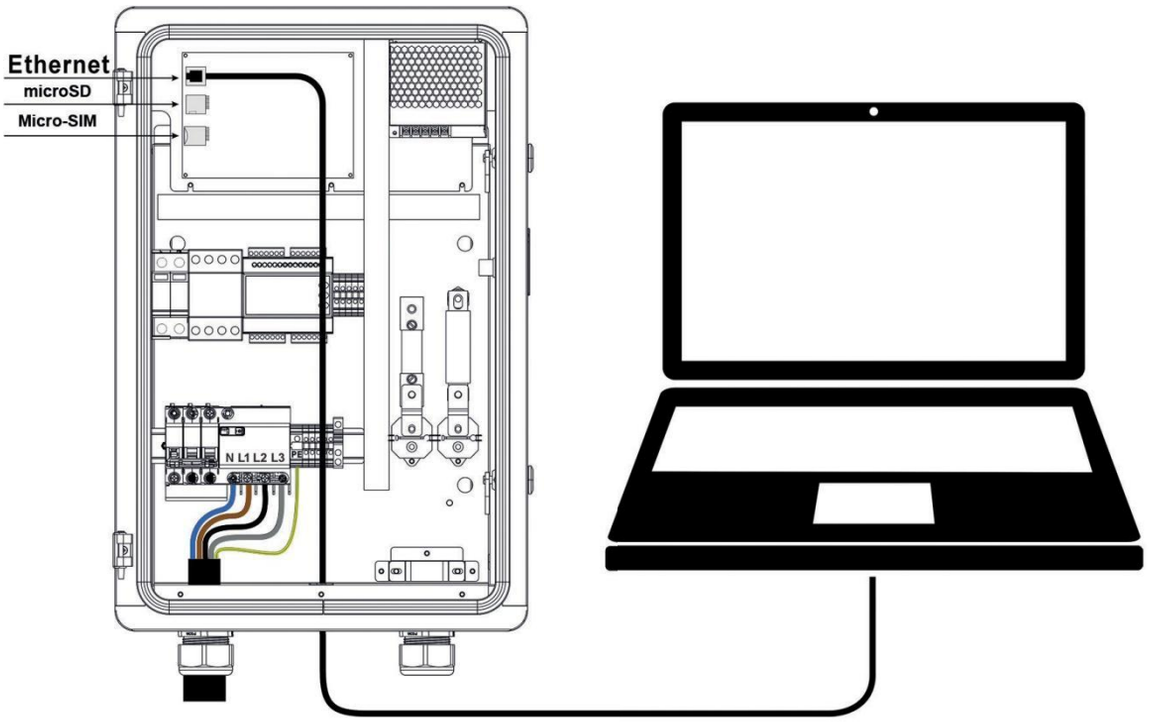

**80kW with 2 gun**

# 6. Network interfaces

The charging station can be operated with an Ethernet cable, via WiFi or cellular. When using WiFi or cellular, the module must be replaced accordingly. The cellular module is installed by default.

**CAUTION!**

**Always wear ESD protective equipment when working in the vicinity of microchips to prevent damage to the sensitive electronics.**




## 6.1 Connecting the Ethernet cable

**1.** Open the door of the charging station.
**2.** Disconnect the charging station from the mains by pressing down the lever of the RCBO switch.
**3.** Open the rubber seal and feed an Ethernet cable through the cable guide on the housing.
**4.** Assemble the Ethernet cable with an RJ-45 plug.
**5.** Connect the plug to the RJ-45 socket at the top left.
**6.** Close the rubber seal.
**7.** Switch on the RCBO switch of the charging station by pushing the lever upwards.
**8.** Close the door of the charging station.

## 6.2 Installing the WiFi module

**1.** Open the door of the charging station.
**2.** Disconnect the charging station from the mains by pressing down the lever of the RCBO switch.
**3.** (Optional) If present, remove the cellular module by removing the antenna cable with the **„4G“** label. Remove the two screws and remove carefully the module from the Mini PCIe slot.
**4.** (Optional) Attach the unused antenna cable with the **„4G“** label to the second antenna cable using a cable tie.
**5.** Insert the **WiFi** module into the Mini PCIe slot and tighten the two screws.
**6.** Carefully connect the antenna cable with the „**WIFI**“ label to the module.
**7.** Switch on the RCBO switch of the charging station by pushing the lever upwards.
**8.** Close the door of the charging station.

## 6.3 Installing the cellular module

**1.** Open the door of the charging station.
**2.** Disconnect the charging station from the mains by pressing down the lever of the RCBO switch.
**3.** (Optional) If present, remove the WiFi module by removing the antenna cable with the **„WIFI“** label. carefully from the module, remove the two screws and remove the module from the Mini PCIe slot.
**4.** (Optional) Attach the unused antenna cable with the **„WIFI“** label to the second antenna cable using a cable tie.
**5.** Insert the cellular module into the Mini PCIe slot and tighten the two screws.
**6.** Carefully connect the antenna cable with the **„4G“** label to the lower connection of the module with the Inscription **„MAIN“**.
**7.** Switch on the RCBO switch of the charging station by pushing the lever upwards.
**8.** Close the door of the charging station.

## 6.4 Inserting the SIM card

**1.** Open the door of the charging station.
**2.** Disconnect the charging station from the mains by pressing down the lever of the RCBO switch.
**3.** Insert the micro-SIM card with the contacts facing downwards and the notch pointing to the right into the slot under the cellular module until it clicks into place.
**4.** Switch on the RCBO switch of the charging station by pushing the lever upwards.
**5.** Close the door of the charging station.

**NOTE!**

**Make sure that you deactivate the SIM card PIN before inserting it.**

## 6.5 Inserting the microSD memory card

The microSD memory card is used to save log files on the memory card and to update the firmware of the charging station. The memory card must be formatted in the FAT32 file system. Compatible memory capacities are 128MB to 16GB. Larger capacities are not supported.

Proceed as follows to insert the microSD memory card into the charging cradle:

**1.** Disconnect the charging station from the power supply by pressing down the lever of the RCBO switch.
**2.** Open the door of the charging station.
**3.** Insert the microSD card into the microSD holder under the RJ45 socket with the contacts pointing downwards and to the right until it clicks into place.
**4.** Switch on the charging station by pushing the lever of the RCBO switch on the charging station upwards.
**5.** Close the door of the charging station.

# 7. Charging process

## 7.1 Status RGB LED

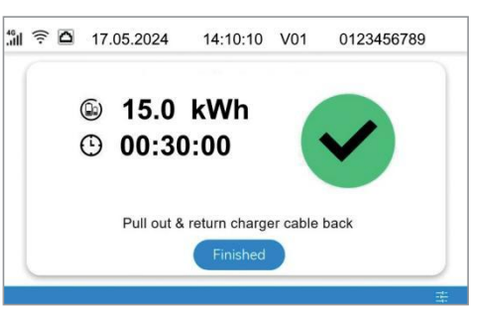
| Status of the charger | LED display |
|---|---|
| Device ready | Green flashes |
| Plugged in | Yellow |
| Hold out/insert card | Yellow |
| Charging | Light green flashes slowly |
| Fault | Red flashes |

## 7.2 Touchscreen

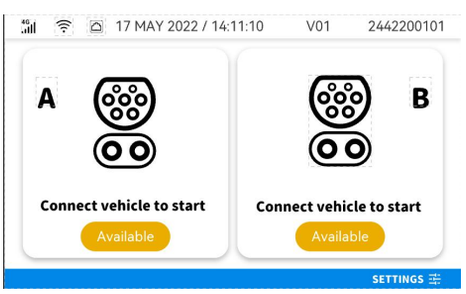
The charging station is equipped with a 5-inch touchscreen. Among other things, the following information is displayed.

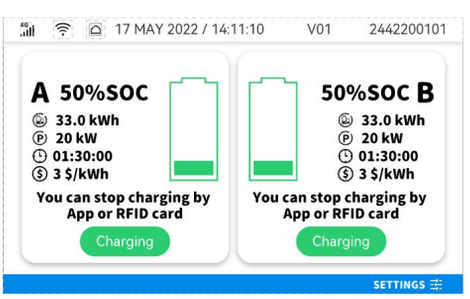

Display in standby

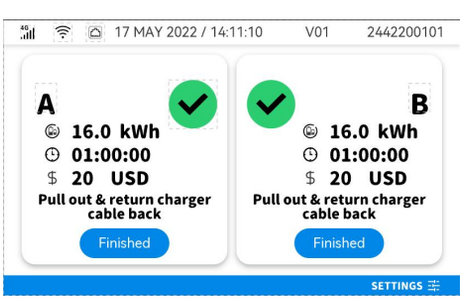

Display during a charging process




Display of completed charge



### 7.3 Charging the vehicle

**NOTE!**

**The vehicle to be charged must be parked, the ignition switched off and the parking brake applied.**

1. Connect the CCS2 charging cable to the charging port of your vehicle.
2. Swipe a previously programmed RFID card in front of the RFID card reader.
3. The display shows that it has recognized the RFID card. The CCS2 charging cable is locked by the vehicle. The charging process is started. During charging, the display shows information about the charging process.
4. To end the charging process, swipe the RFID card in front of the RFID card reader again. When charging is complete, pull the CCS2 plug out of the vehicle‘s charging port and insert the charging plug into the charging station socket. If you cannot pull the plug out of the vehicle, press the vehicle‘s unlock button.

**NOTE!**

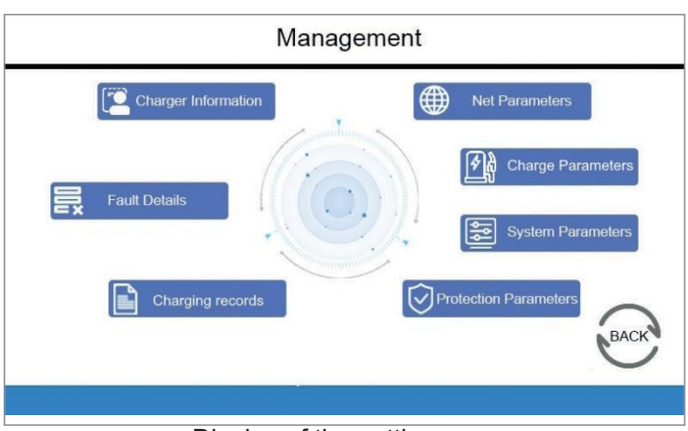
**Press the emergency stop button to end the charging process immediately in an emergency. Do not use the emergency stop button to regularly end a charging process, as this can damage the vehicle‘s sensitive charging electronics.**

## 8. Settings menu

The touchscreen can be used to read status messages and configure the charging station. To open the menu, tap the settings icon at the bottom right of the touchscreen.

**NOTE!**

**The charging station emits an acoustic signal each time the touchscreen is pressed.**




Display of the settings menu

| Menu item | Meaning |
|---|---|
| Charger Information | Display of charging station information on |
| Fault Details | Display of the error memory |
| Charging Records | Display of loading transactions |
| Net Parameters | Network configuration |
| Charge Parameters | Charging configuration |
| System Parameters | System configuration |
| Protection Parameters | Display of protection parameters |

## 8.1 Input password

The **Net, Charge, System** and **Protection Parameters** menu items are password-protected.

**1.** Open one of the menus listed above. The keyboard opens.
**2.** Tap the keyboard once and then enter the password.
**3.** Confirm the entry by pressing the Enter button.

Password prompt

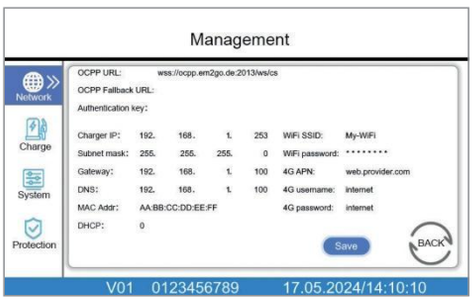
**NOTE!**

**The default password is 1234, which we recommend you change for security reasons.**

## 8.2 Network configuration

In the Net Parameters menu, the network interfaces of the charging station are configured using the following parameters.

| Parameter | Meaning |
|---|---|
| OCPP URL | Endpoint URL of the backend |
| OCPP Fallback URL | URL of the backend, if 1st URL is not accessible |
| Authentication key | Authentication key for the backend |
| Charger IP | IP address of the Ethernet interface |
| Subnet mask | Subnet mask of the Ethernet interface |
| Gateway | Gateway der Ethernet-Schnittstelle |
| DNS | DNS address of the Ethernet interface |
| MAC Addr | MAC address of the Ethernet interface |
| DHCP | 0: DHCP Off, 1: DHCP (Ethernet only) |
| WiFi SSID | Name des WLAN-Netzwerks |
| WiFi password | Network key of the WiFi network |
| 4G APN | Name of the cellular access point |
| 4G username | Username of the cellular access point |
| 4G password | Password of the cellular access point |



Menu Net Parameters

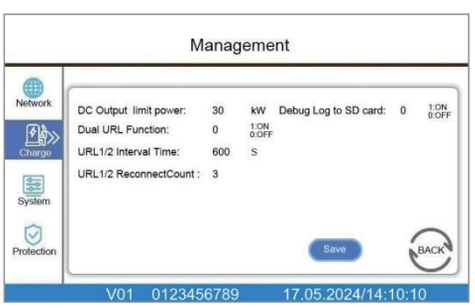
**NOTE!**

**Save after each change by tapping the Save button.**

## 8.3 Charging configuration

The following parameters are configured in the **Charge Parameters** menu.

| Parameter | Meaning |
|---|---|
| DC Output limit power | Maximum allowed DC output power in kW |
| Dual URL Function | OCPP fallback function 0: Off, 1: On |
| URL 1/2 Interval Time | Time limit until fallback URL is used |
| URL 1/2 Reconnect Count | Number of connection attempts until fallback URL is used |



Menu Charge Parameters

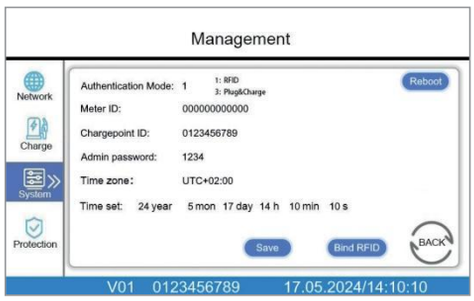
**NOTE!**

**Save after each change by tapping the Save button.**

## 8.4 System configuration

The charging station is configured using the following parameters in the **System Parameters** menu.

| Parameter | Meaning |
|---|---|
| Authentication mode | Authentication mode |
| Meter ID | Energy meter ID |
| Chargepoint ID | Charging point ID |
| Admin password | Administrator password |
| Time zone | Time zone |
| Time set | Date and UTC time |
| Reboot | Restarting the charging station |
| Bind RFID | Program RFID cards |




Menü System Parameters

**NOTE!**

**Save after each change by tapping the Save button.**

## 8.5 Program RFID cards

The **Bind RFID** button in the **System Parameters** menu can be used to program RFID cards for offline use.

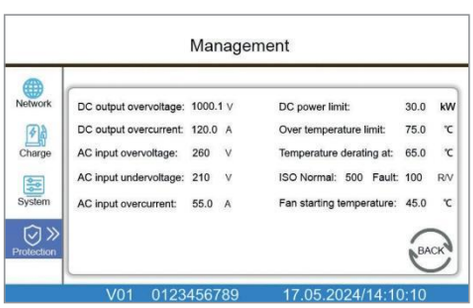
1. Open the **Bind RFID** menu and swipe an RFID card in front of the card reader.
2. The UID of the card and its status are displayed.
3. Register the card by tapping on the **Bind** button or remove it by tapping on **Delete**.


Menu Bind RFID

## 8.6 Protection parameters

The threshold values for various measured values of the charging station are displayed in the **Protection Parameters** menu. If a value is above the threshold value, an error is displayed. The specified values cannot be changed; they must be consulted for analysis in the event of an error.

| Parameter | Meaning |
|---|---|
| DC output Overvoltage | DC overvoltage |
| DC output overcurrent | DC overcurrent |
| AC input overvoltage | AC overvoltage |
| AC input undervoltage | AC undervoltage |
| AC input overcurrent | AC overcurrent |
| DC power limit | DC power limit |
| Over temperature limit | Overtemperature |
| Temperature derating at | Power throttling |
| ISO Normal/Fault | Insulation values in normal/fault condition |




Menu Protection Parameters

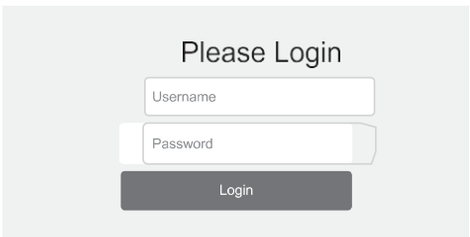
# 9. Web interface

The charging station has an integrated web interface that can be used to set the various parameters. The web interface can be accessed via the Ethernet connection. The IP address of the charging station can be viewed and set via the touchscreen in the Network Parameters menu.

1. Connect an Ethernet cable to the charging station and a computer or the network via a router or switch.
2. For direct connection to the charging station, the computer and the charging station must have a fixed IPv4 address in a shared address space (DHCP switched off). Example:
   - Computer IP address: 192.168.1.100, subnet mask: 255.255.255.0
   - Charging station IP address: 192.168.1.253, subnet mask: 255.255.255.0

If you are using Windows as your operating system, you can set the computer‘s IP address as follows:

1. Open **„Network Connections“** in the Control Panel via the Start menu or by executing the command **„ncpa.cpl“**.
2. Locate the network connection to which the network cable is connected and open the properties of this connection.
3. Open the properties of **„Internet Protocol, Version 4 (TCP/IPv4)“**.
4. Select the **„Use the following IP address“** option and enter the value **„192.168.1.100“** in the **„IP address“** field and the value **„255.255.255.0“** in the **„Subnet mask“** field and accept the setting by clicking on **„OK“** in both dialog windows.
5. Open a web browser and enter the IP address of the charging station under **port 8080** in the address bar. The correct address for the **IP 192.168.1.253** is **http://192.168.1.253:8080**. The login screen is displayed.
6. Enter the username and password and click on **„Login“**. By default, the username is **„admin“**, and the password is **„12345678“**.



Login to the web interface

**NOTE:**

**The default password is „12345678“.**
**We recommend that you change this for security reasons.**

## 10. Firmware update

The charging station can be updated via the web interface, OCPP and USB. Updates can be downloaded at **www.seconpower.com**. The duration of the update depends on which module is being updated:
• Firmware (file **„App.bin“**) updates take up to 2 minutes
• Display firmware takes up to 5 minutes

**NOTE:**

**Always update all parts contained in the update ZIP file. Otherwise, the EV charger may behave unexpectedly.**

### 10.1 Updating the firmware via microSD card

1. Insert the microSD card into the card reader and plug it into the computer.
2. Format the SD card in the FAT32 file system.
3. Extract the **„App.bin“** and **„UploadConfig.txt“** files from the downloaded ZIP file to the microSD card.
4. Safely remove the removable disk via the operating system to prevent data loss.
5. Open the covers of the two locks on the right-hand side of the charging station and unlock the locks with the keys.
6. Open the door of the charging station.
7. Disconnect the charging station from the power supply by pressing down the lever of the RCBO switch.
8. Insert the microSD card with the contacts facing downwards and to the right into the microSD holder under the WiFi/cellular module until it clicks into place.
9. Switch on the charging station by pushing the lever of the RCBO switch of the charging station upwards.
10. The charging station now starts the update process. The red LED on the charging station flashes during the update.
11. The update is complete as soon as the charging station has started up.
12. Remove the microSD card from the charging cradle and remove the files on the memory card that you have previously copied.
13. The version number is shown on the display of the charging station.

### 10.2 Updating the firmware via OCPP

The EV charger firmware can be updated via an OCPP backend. You need an accessible FTP or HTTP server that provides the files for the EV charger and an OCPP backend that is connected to the EV charger.

1. Unzip the firmware file **„App.bin“** from the downloaded ZIP file to your FTP or HTTP server.
2. Use your OCPP backend and call the command **„UpdateFirmware“**, where the location refers to the full address of the firmware file on your server. For example: ftp://user:pass@192.168.1.2/App.bin
3. Send the command to the EV charger using your OCPP backend.
4. The EV charger reports the status of the installation to your OCPP backend.
5. As soon as the EV charger reports „Installed“ or as soon as the firmware version has been changed after a BootNotification message, the firmware has been successfully installed.

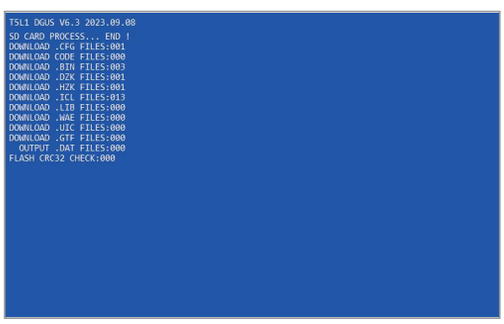
**NOTE:**

**Do not rename the firmware file, otherwise the update will fail.**

### 10.3 Updating the display firmware via microSD card

The display firmware of the charging station can be updated using a MicroSD card.

**1.** Insert the microSD card into the card reader and plug it into the computer.
**2.** Format the SD card in the FAT32 file system.
**3.** Unzip the **„DWIN_SET“** folder with all the files it contains
**4.** Safely remove the removable disk via the operating system to prevent data loss.
**5.** Open the covers of the two locks on the right-hand side of the charging station and unlock the locks with the keys.
**6.** Open the door of the charging station.
**7.** Disconnect the charging station from the power supply by pressing down the lever of the RCBO switch.
**8.** Place the microSD card in the microSD holder on the left side of the display with the contacts facing down and to the right.
**9.** Switch on the charging station by pushing the lever of the RCBO switch of the charging station upwards.
**10.** The display loads the files from the microSD card.
**11.** The process is complete as soon as **„SD CARD PROCESS... END!“** appears on the display.
**12.** Disconnect the charging station from the power supply by pressing the lever of the RCBO switch downwards and remove the microSD card.
**13.** Switch on the charging station by pushing the lever of the RCBO switch of the charging station upwards.
**14.** The display has been successfully updated.




## 11. Emergency stop button

Only press the emergency stop button during the charging process in an emergency. The charging process will end immediately.

**NOTE:**

**Do not press the emergency stop button to end a normal charging process.**

## 12 Troubleshooting, maintenance, and warranty

• Please follow the instructions in the table if errors occur during the charging process.
• Or please contact the supplier of the DC quick charger for further instructions.
• If an emergency occurs, press the emergency stop button to end the charging process immediately.

### 12.1 Error codes

| Code | Description |
|---|---|
| 0001 | The emergency stop button has been pressed |
| 0002 | CCS fuse faulty |
| 0003 | AC input contactor 1 welded |
| 0004 | CCS output contactor welded |
| 0005 | Temperature sensor of the CCS connector faulty |
| 0006 | Relay module faulty |
| 0007 | CCS Power module faulty |
| 0008 | Maximum output current exceeded |
| 0009 | Maximum output voltage exceeded |
| 0011 | Cellular radio module faulty |
| 0012 | Ethernet module faulty |
| 0013 | WiFi module faulty |
| 0014 | Overtemperature of the CCS plug |
| 0015 | Flash protection triggered |
| 0016 | CCS protective conductor error |
| 0017 | RFID module faulty |

0018 Communication error of the CCS Power Module
0019 Door open
0020 System fan must be replaced
0021 AC protective conductor faulty
0022 Communication error of the vehicle
0023 DC counter faulty
0024 CCS insulation error
0025 Touchscreen communication error
0026 Input overvoltage
0027 Input undervoltage
0028 Runtime error in the CCS insulation measurement
0029 Battery inserted incorrectly
0031 System overtemperature
0032 Communication error of the external counter
0099 Unknown error

### 12.2 Maintenance

To ensure long-term stable operation of the device, you should maintain the device regularly according to the operating environment.

**a)** Have the appliance serviced by a specialist.
**b)** Check that the device is correctly earthed and securely mounted.
**c)** Check whether there are potential safety risks in the vicinity of the charging station, such as high temperatures, corrosion, or flammable and explosive objects in the vicinity of the charging station.
**d)** Check whether the connection point of the supply terminal has a good contact and whether there are any anomalies. Make sure that the other connections are connected correctly.

### 12.3 Cleaning

Check the surface of the charging station regularly for damage. Only clean the housing with a clean and damp soft cotton or microfiber cloth. Avoid cleaning with liquids other than water or mild soaps. Make sure that no water gets near the connections.

**NOTE:**

**The front panel contains high-gloss surfaces that are sensitive to scratches. Be careful when cleaning these parts as scratches may occur.**

### 12.4 Warranty

The warranty period for this charging station is two years.
The warranty expires if:
• No proof of purchase can be presented.
• The warranty period specified by the manufacturer has been exceeded.
• The instructions for use, maintenance and storage are not followed.
• Damage or malfunctions are caused by the ingress of foreign bodies.
• In the event of repair, disassembly, or modification by unauthorized persons.
• Damage caused by force majeure (such as lightning, overvoltage, earthquake, fire, flooding, etc.).
• Damage and malfunctions are caused by other avoidable external factors.
• Damage and malfunctions are caused by improper use of the equipment, such as the ingress of water or other liquids.
• Damage and malfunctions are caused by the mains power supply and a voltage that is not specified for use with the charger.

No liability is accepted for any damage caused by incorrect operation.
If you need technical support, please contact our support team via our website **www.ying-power.com**.

## 13. Simplified EU declaration of conformity

CE We hereby declare that this appliance bears the CE mark in accordance with the regulations and standards. It complies with the essential requirements of the RED Directive 2014/53/EU.
The full text of the EU Declaration of Conformity is available at the following internet address: www.d-parts.de/Konfo.

## 14. Note on environmental protection

The following applies from the date of transposition of European Directive 2011/65/EU into national law: Electrical and electronic equipment may not be disposed of with household waste. Consumers are legally obliged to return electrical and electronic devices at the end of their service life to the public collection points set up for this purpose or to the point of sale. Details on this are regulated by the respective state law. The symbol on the product, the instructions for use or the packaging indicates these regulations. By recycling, material recycling or other forms of recycling old appliances, you are making an important contribution to protecting our environment. In Germany, the above disposal regulations apply to batteries and rechargeable batteries in accordance with the Battery Ordinance (EU) 2015/86

Room 201,BlockA,Building 1,HanhaiDaSci-TechInnovationPark,Genyu Road,GuangmingDistrict,ShenzhenCity,Guangdong,China.

www.seconpower.com Manufacturer:Shenzhen Secon Power Co., Ltd