Charge-M8 Delta

7kW&22kW AC Charger

Single Socket

Twin Socket

Specification and Installation Manual

WARNING: High Voltage Appliance

Single and Twin Charge-M8 Delta chargers are high-voltage AC charging stations and must only be installed, commissioned, and serviced by qualified electrical personnel in compliance with applicable electrical regulations. Incorrect installation, commissioning, servicing, or operation by unqualified personnel may result in serious injury, equipment damage, or malfunction, and will invalidate the manufacturer's warranty.

Important Notes

Thank you for purchasing a Charge-M8 22kW Delta AC Electric Vehicle Charger.
Please read the installation and operating instructions carefully to ensure correct installation, configuration, and safe operation of the charging equipment.

Charge-M8 Delta AC chargers must be installed and operated in accordance with applicable electrical standards and regulations, including but not limited to IEC 61851 series standards, and all relevant local electrical laws, regulations, and safety requirements, and the manufacturer's guidance as specified in this manual.

Charge-M8 Delta chargers are complex electrical devices and are not intended for end-user or unauthorised service or maintenance. The unit must only be opened, serviced, or repaired by qualified and authorised personnel. Any unauthorised opening, modification, or servicing of the unit will invalidate the manufacturer's warranty.

This manual is provided as a reference guide. Every reasonable effort has been made to ensure the accuracy of the information contained herein at the time of publication. However, the actual product shall prevail in the event of any discrepancy.

Charge-M8 Limited reserves the right to modify product specifications or documentation without prior notice.

Installers must ensure that the operating environment, installation method, power wiring, grounding, and commissioning procedures comply with the requirements described in this manual and relevant local regulations. Only qualified personnel are permitted to install, commission, inspect, or service this charging station.

Once installation is complete, users are advised to retain this manual for future reference and maintenance purposes.

If you have any questions regarding the operation, installation, or maintenance of our products, please contact our customer service team or an authorised service provider.

Statement of Compliance

The Electric Vehicles (Smart Charge Points) Regulations 2021

Charge-m8 Limited hereby declare under our sole responsibility that the following charge point models below comply with the requirements set out under the Regulations. A technical file is available upon request.

Model	Delta AC Charger
SKU:	Single Connector (22 kW) Twin Connector (22 kW)
Rating(Input):	AC 230 Vac (Single-phase) AC 400 Vac (Three-phase)
Rating (Output):	7 kW / 22 kW (Single Connector) 2 × 7 kW / 2 × 22 kW (Dual Connector)
Communication:	OCPP 1.6
Connection Type:	RJ45 Ethernet Wi-Fi 2.4ghz b/g 4G Nano SIM

This statement of compliance covers all Charge-m8 Delta Charger units and further confirms compliance with Schedule 1 of the Regulations (Security).

Signed on behalf of Charge-M8 Limited:

J Smith

Name: Julian Smith

Position: Managing Director

Date: 23rd January 2026

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Copyright

WARRANTY

Thank you for purchasing a Charge-M8® Delta AC Charger.

Warranty Period
Charge-M8 provide a 3-year warranty against manufacturing defects from the date of purchase, conditional upon the installation and annual servicing requirements being compliant with the manufacturer's instructions and all applicable local regulations.

Warranty Conditions
Upon delivery the product packaging should be inspected for transit damage, and opened to check the product and accessories are both complete and in good condition. Claims for transit damage or missing parts will not be considered unless made within 3 working days of delivery, and supporting images/documentation provided.

Warranty Scope
During the warranty period, Charge-M8 may replace or repair components or the whole unit at our discretion, based upon assessment by our appointed engineers. Warranty on replacement parts & components expire in line with the original warranty period.

Technical support can be obtained by contacting the customer team on sales@charge-m8.com or calling +44 333 242 3328

Signed on behalf of Charge-M8 Limited:

J Smith

Name: Julian Smith

Position: Managing Director

Date: 16th January 2026

1. Product Introduction

1.1 Scope of Application

The Charge-M8 Delta AC charger is a dedicated device designed to provide safe, reliable, and efficient charging services for electric vehicles equipped with a Type 2 standard interface.
During the charging process, the charger operates in coordination with the vehicle's on-board charging system to ensure stable, intelligent, and safe charging performance.

The charger is suitable for use in the following application scenarios:

- Residential and commercial parking facilities
- Office and workplace charging locations
- Hotels, retail areas, and semi-public parking areas

1.2 Product Features

Feature / Module	Description
Power Conversion Technology	Adopts advanced power conversion technology, offering high efficiency, stable performance, and reliable operation.
Modular Design	Modular architecture supports easy installation, commissioning, and maintenance.
Signal Indicator LED	Displays the current operating status of the charger.
Touch Screen Interface	Human-machine interface that allows direct user interaction and displays real-time charging information.
RFID Card Reader	Identifies users and starts or stops charging.
MID Metering Module	Records the electrical energy delivered during charging.
OCPP Communication and Billing Control Unit	Supports OCPP communication, charger session control, and background interaction, including over-the-air firmware updates and reporting of charging and fault information.
Charging Controller	Regulates power output in accordance with vehicle charging requirements.
Charging Connector(s)	Type 2 standard interface for fast and secure connection to electric vehicles.
Emergency Stop Button	Immediately cuts off input power and stops charging in emergency situations.
Protection Functions	Provides multiple protection functions, including overvoltage, undervoltage, overload, short circuit, overtemperature, grounding, leakage, and emergency stop protection.

1.3 Operation

Delta Single Socket AC Charger

Delta Twin Socket AC Charger

2. Product Performance

Item	Single Connector	Dual Connector
Power rating	7-22 kW	2 × 7-22 kW
Rated current	32 A	2 × 32 A
Rated voltage	230 Vac (7 kW) 400 Vac (22 kW)	230 Vac (7 kW) 400 Vac (22 kW)
Cable specification	3 × 6 mm² (7 kW) 5 × 6 mm² (22 kW)	3 × 16 mm² (7 kW) 5 × 16 mm² (22 kW)
Power supply system	Single-phase three-wire system (L1, N, PE) Three-phase five-wire system (L1, L2, L3, N, PE)	Single-phase three-wire system (L1, N, PE) Three-phase five-wire system (L1, L2, L3, N, PE)
Inlet cable	Equipped with an inlet cable of approximately 1 m	
Network connection	4G RJ45 Ethernet Wi-Fi 2.4ghz	
Communication protocol	OCPP 1.6	
RFID module	ISO 14443, Type A, Mifare Classic	
Charging method	1. RFID 2. Scan QR code 3. Plug-and-charge 4. Online PnC 5. APP	
LED indication	Idle: Steady white Plug-in: Steady purple Charging: Pulsing blue Charging complete: Steady green Fault: Steady red	
Protection features	Over-voltage, under-voltage, overload, short circuit, leakage, overtemperature, grounding	
Electromagnetic compatibility	IEC 61851-21-2:2018	
Safety	IEC 61851-1:2017	
Certification	CE - DEKRA	
Overall dimensions	285 (W) × 150 (D) × 410 (H) mm	350 (W) × 180 (D) × 500 (H) mm
Installation mode	Wall-mounted or floor-mounted with optional pedestal stand	
Altitude	≤ 2000 m	

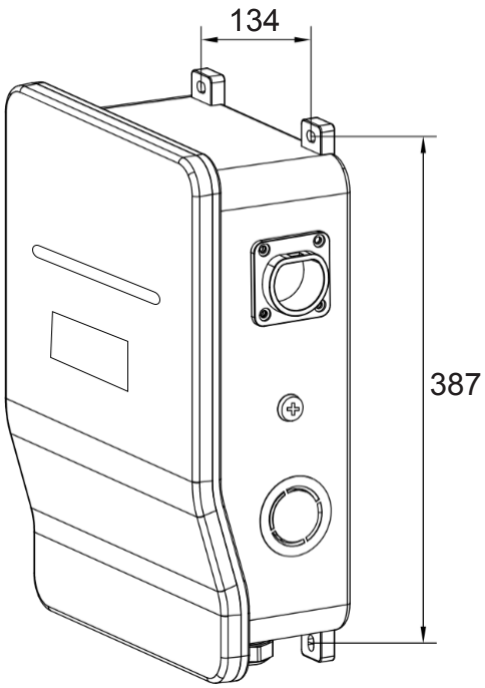
Item	Single Connector	Dual Connector
IP protection level	IP65	
Operating temperature	−25 °C to +55 °C	
Operating environment	No conductive dust, corrosive gas, explosive gas, or strong vibration	
Relative humidity	5% to 95%, non-condensing	
Altitude	≤ 2000 m	

3. Installation and Commissioning

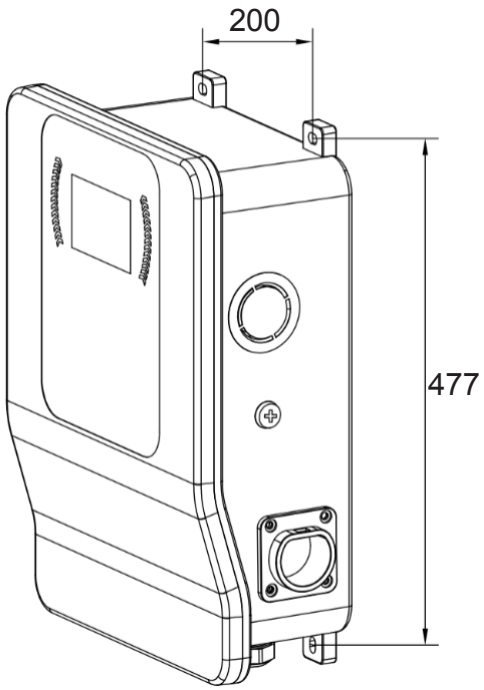
3.1 Unpacking and Inspection

- Packing list is attached to the charger transit carton;
- When unpacking, please refer to the packing list to confirm that all parts are included;
- If there are any damaged or missing parts during transportation, please contact our customer service as soon as possible;

3.2 Installation (Unit: mm)



Delta Single Socket



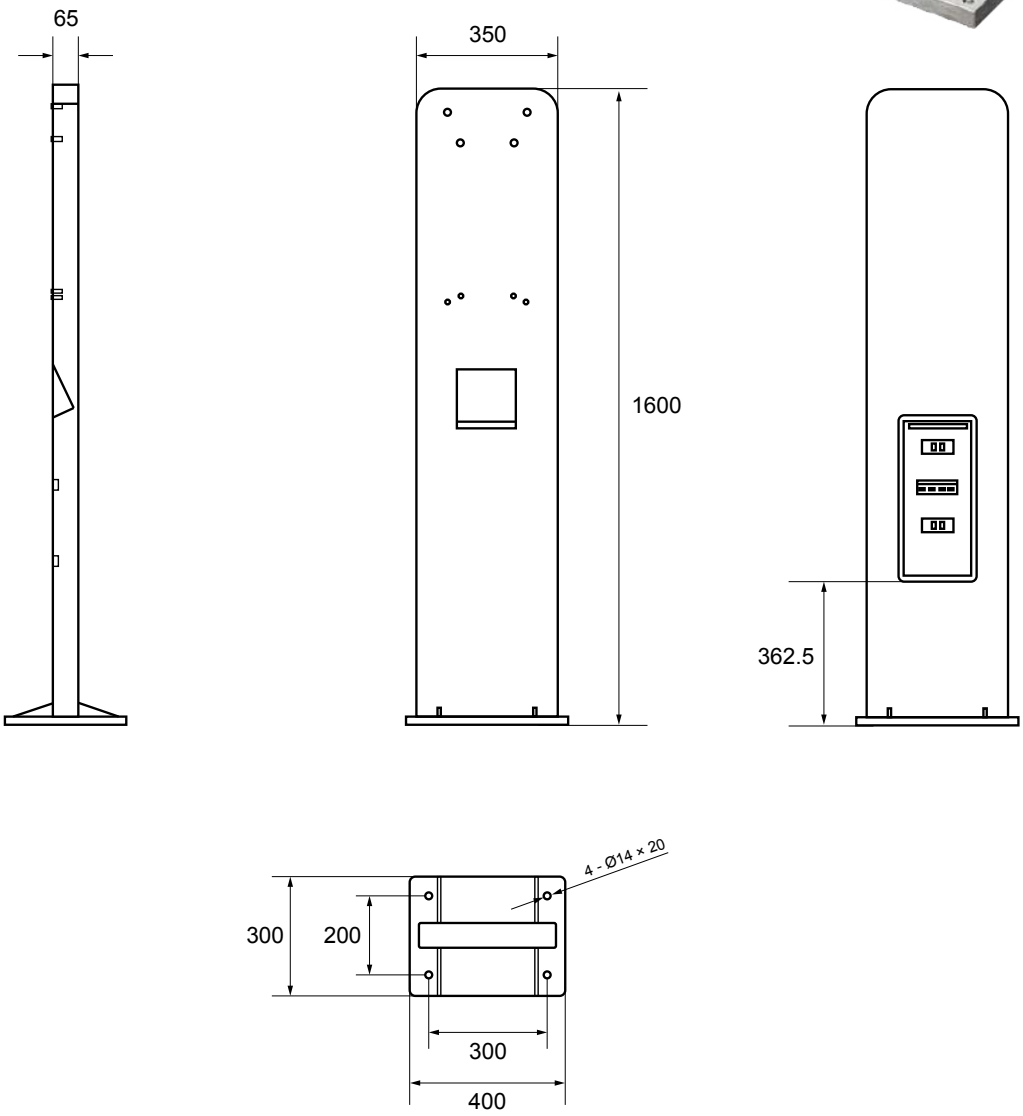
Delta Twin Socket

Description:

The AC charging station has four fixing positions, the size is ø10×15mm, M8×80 expansion bolts are included.

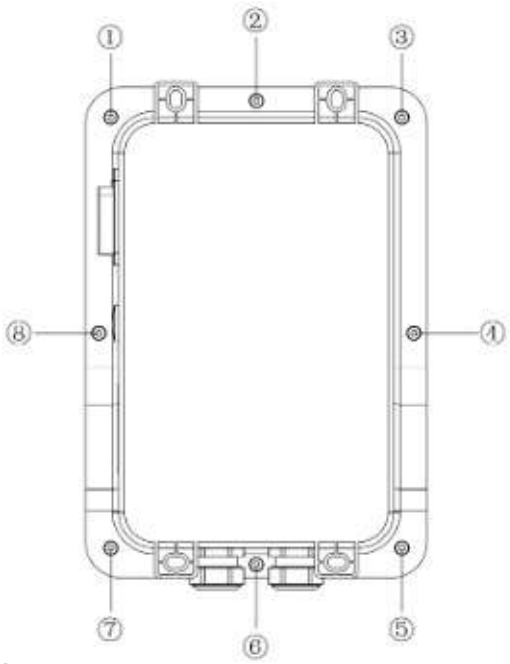
Pedestal:

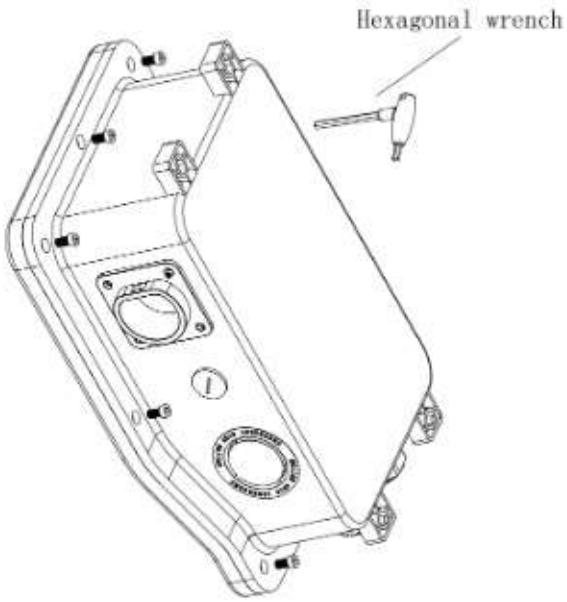
A bespoke pedestal for both single and twin Delta chargers is available.



Delta Twin & Single Charger Stand Schematic Diagram

3.3 Installation of 4G SIM Card





Description.

- As shown in the image, the front covers of the AC charging stations are secured with eight M5 × 20 mm screws.
- Remove the front cover to access the 4G module. Without removing the module, insert the 4G Nano SIM card into the designated slot if using 4G as your chosen network connection method.
- Tool required: M5 hex key

3.4 Power Connection

Connect the incoming power cable to the corresponding power supply terminal or circuit breaker.

Notice:

- Before installation ensure the power supply is isolated. Connect the AC input cable to a suitable adaptable box, or alternatively the 1m fly cable provided can be removed and the supply cable connected directly to the charger.

  Single-phase: L, N, PE

  Three-phase: L1, L2, L3, N, PE
- The cross-sectional area of the AC power supply cable shall be selected according to the charger model and rated power:

  1. Single Connector (7 kW / 22 kW):

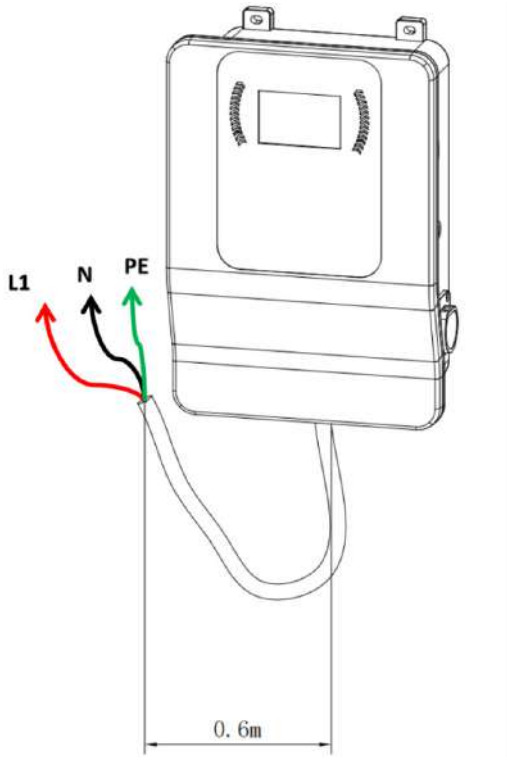
  Single-phase: 3 × 6 mm²

  Three-phase: 5 × 6 mm²

  2. Twin Connector (2 × 7 kW / 2 × 22 kW):

  Single-phase: 3 × 16 mm²

  Three-phase: 5 × 16 mm²
- An upstream RCD device of the appropriate type and rating must be installed as part of the installation design, in accordance with local electrical regulations.



Delta Single & Twin Power Connection

3.5 Power up

Energise the charger.

Note: The supply circuit must be protected by a suitably rated residual current protective device in accordance with local electrical regulations.

3.6 Installation inspection checklist

- Confirm that the operating environment of the charger meets the technical requirements;
- Check that the charger is securely fixed and does not feel loose or unstable when moderate force is applied from different directions;
- Check that the IP rating and electrical safety protection of the installation meet the charger technical requirements, in particular that all cable entry points are correctly sealed and protected;
- After the charger firmware has completed initial boot-up, verify correct operation of the LCD touch screen, card reader and energy meter before configuring site, network or OCPP settings;
- Verify that the emergency stop button operates correctly and immediately stops charging when pressed;
- The charger may only be serviced by qualified and authorised personnel. In case of an emergency, press the emergency stop button immediately;
- Only qualified personnel may service the charger;

4.1 Delta Single & Twin Socket Operation

Power On

When the Charger is turned on, it will display the following picture on the display:

Single Charger Home Screen

Twin Charger Home Screen

Main interface when there is a fault reminder

Connect the Charging Plug

Connect the charging connector, the interface will show the plug logo: 

After swiping the card or scan QR code to start charging, it will jump to the charging screen;

Or scan the QR code directly on the main interface or your chosen OCPP APP to start a charging session.

Once authentication is passed, insert the cable connector and charging will commence when the car is ready, the charging information summary will be displayed.

Main menu:

There are 4 sub-menus: System Status, Language & Time Records, and Config.

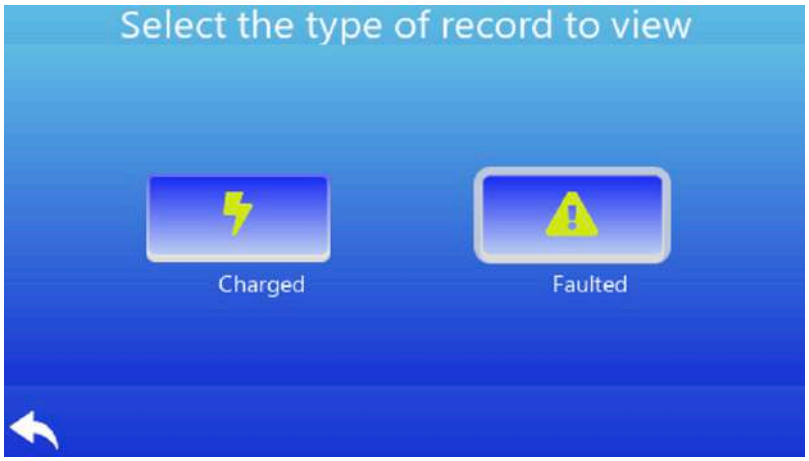
System status:

System status displays real-time information, namely CP and PWM, MID meter readings, and fault warning descriptions.

The MID meter information and the fault description information columns can be swiped up and down to read more information.

This interface can be entered by pressing and holding the text on the interface to see more fault details.

Record Logs:

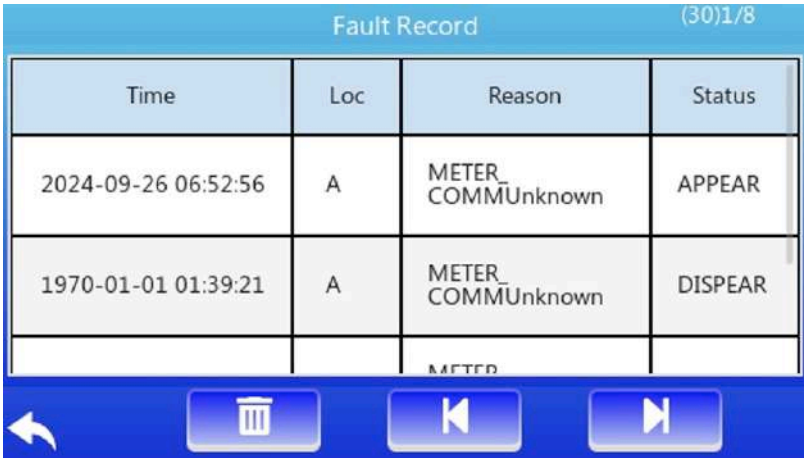


Records: Charge record and Fault Record.

Charging record:

- The charging record interface displays key information including the transaction serial number, RFID card serial number or OCPP APP tag ID, charging power, charging start and end time, charging duration, and the reason for charging termination.
- Charging start mode: OCPP remote start or RFID card activation.
- Reasons for charging termination: Normal stop, stop upon unplugging, stop when preset conditions are met, or abnormal stop.

Error log:



Touch the [< Time of occurrence] and [Fault Reason >] buttons to scroll up and down. The red “APPEAR” icon indicates that the error has occurred, and the green “DISPEAR” icon indicates that the error has been resolved.

Date set:

For OCPP Network connections only the time zone needs to be set and the “Network Time” box checked as above. In off-line mode, the installer should set both the time and the time zone, and un-check the “Network Time” box..

Launguage set

Currently supports Chinese Simplified, Chinese Traditional, English, German, French, Spanish, Portuguese, Greek, Arabic.

Parameter configuration:

Users can configure detailed parameters in this interface; batch configuration can be imported through the U disk configuration. To use the U disk configuration, please refer to the European Standard 22 kW charging point U disk import configuration manual.

Tip: slide up and down the right list area to achieve page turning function, click on the minimum right arrow to enter the configuration item.

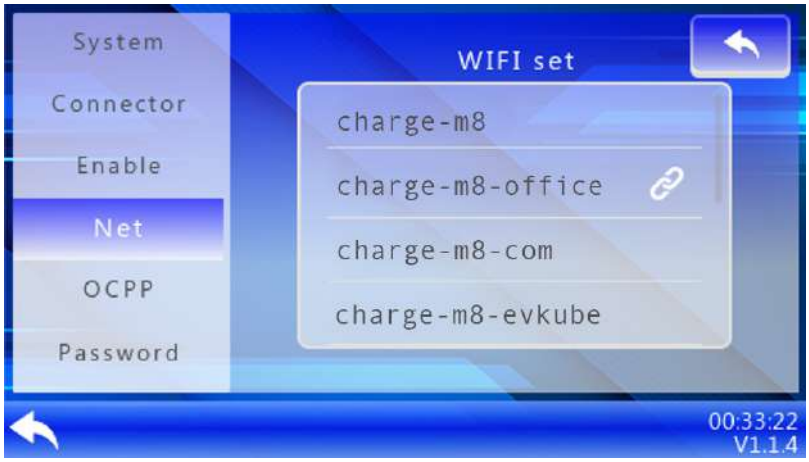
Working mode:

No Tap: Offline without swiping mode

TIP: When you turn on the “Charging Password Protect”, you will have double protection.

Srake number:

Set up Wi-Fi



When Wi-Fi is selected as the networking method, you can configure WLAN here.

First select an SSID, and then touch the signal icon area to set it. You need to enter a password when you enter it for the first time, mainly to prevent other unauthorised users from changing it at will.

Tip: Only 2.4 G Hz Wi-Fi, Wi-Fi names must be pure English, and the maximum character length is not more than 24.

Choice of networking:

Supports three networking modes: 4G, Ethernet, and Wi-Fi can be selected.

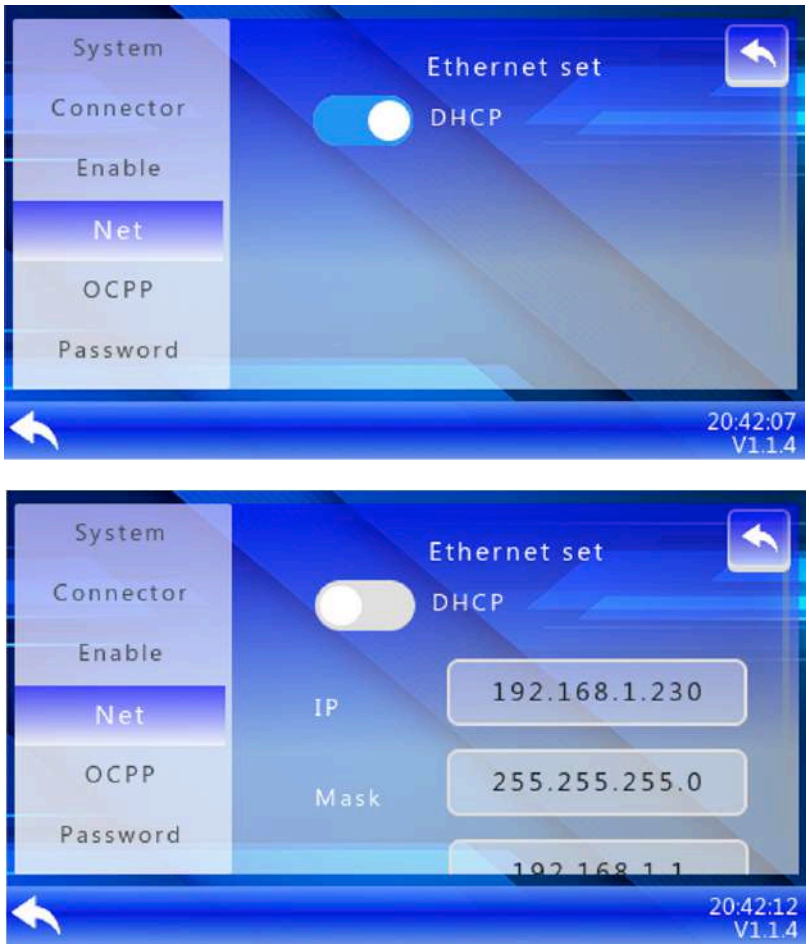
OCPP path:

If the path only has a charger ID, keep it as an empty text. If there is a path, please configure it according to the format above.

APN settings for GPRS:

According to the local SIM card operator, the APN settings must be configured correctly. Otherwise, the device may not be able to connect to the Internet in 4G mode.
Enter the information in the following format: **APN, Username, Password.**

Ethernet settings:



It can be configured as DHCP or static. A static configuration provides faster and more stable network connectivity.

DNS settings:

DNS is mainly used in conjunction with Ethernet mode. When domain name resolution is required, DNS must be configured. If no DNS is configured, the system will use the internal default DNS.

Overload setting:

- The maximum overload is 20%. The charging output will be automatically shut down after 5 seconds of continuous overload, overvoltage, or undervoltage.
- Vref is the reference input voltage, with a range of 100–250 Vac.
  OV: Overvoltage
  UV: Undervoltage
  OC: Overcurrent and input reference voltage
- The reference voltage is 230 Vac. The reference current is the lower value between the current set on the charger and the current calculated by the Smart Charge Profile.

Maximum output current setting:

The setting range is 6–32 A. The maximum current of the charger is configured in this setting. The actual maximum output current is jointly determined by this setting and the calculation result of the Smart Charge Profile.

Tip: The current displayed at the bottom of the charging interface is the calculated maximum output current (rounded for display).

Phase number setting:

Phase Mode Setting

Single: Single-phase mode

Three: Three-phase mode

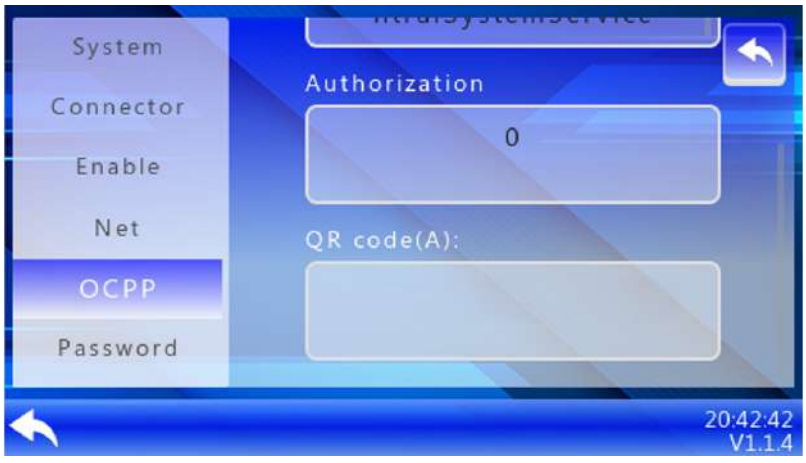
3 to 1: Single-phase mode using a three-phase meter

The charger supports both single-phase and three-phase operation.

Three-phase hardware can be switched to single-phase mode by selecting 3 to 1.

Single-phase hardware cannot be switched to three-phase mode.

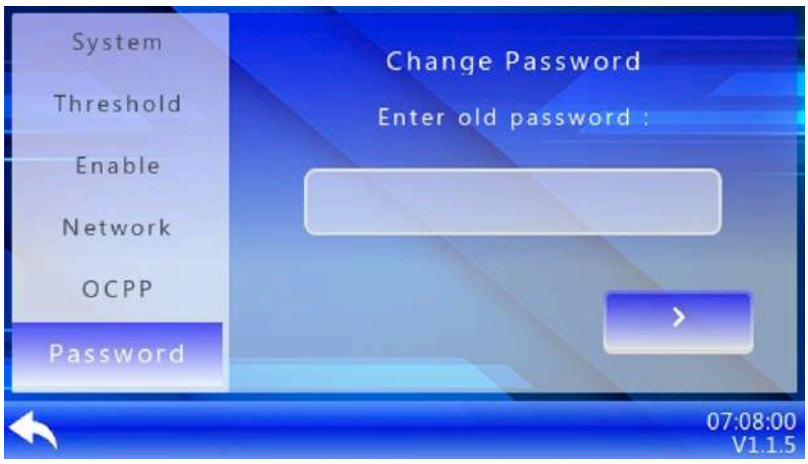
QR code editing:



To facilitate charging via the mobile APP and to eliminate errors and inconvenience caused by manual input, the charging station supports QR code display.

The QR code value can also be configured remotely via a custom command. For specific interfaces, please contact a technician.

User password modification:



You need to enter the user password before entering the parameter configuration item; the default password is **123456**

Please remember the new password. If you forget it, please contact us.

Tip: Most of the settings interface needs to be swiped up and down to display the full screen

5. Product Maintenance

5.1 Routine Maintenance

To ensure the charger's seamless, long-term operation, regular inspections of the equipment are essential, with the following routine maintenance measures highly recommended:

No.	Inspection Item	Inspection Cycle	Inspection Guidance
1	Charger and cable condition	3 months	Regularly check whether the charging connector is damaged, and inspect the cable for damaged insulation, exposed conductors, or other defects. If any issues are found, replace the component in a timely manner to ensure charging safety.
2	Display screen	3 months	Regularly check the display screen for cracks and ensure that the touch function is responsive. If any issues are found, repair or replace the display as required.
3	Grounding connection	3 months	Regularly check whether the grounding connection is loose or unreliable to ensure proper grounding and operational safety.
4	Emergency stop function	3 months	During normal operation, press the emergency stop button to verify that charging stops immediately. Check whether the display indicates any emergency stop fault. If any issues are found, repair the system in a timely manner.

5.2 Troubleshooting

No.	Fault Name	Investigation Method
1	Emergency stop button failure	Check whether the emergency stop button operates normally. If the button is abnormal, rotate it clockwise to reset.
2	AC circuit breaker failure	Check whether the AC input circuit breaker has tripped. If tripped, push the circuit breaker handle fully down and then switch it back on to restore operation.
3	PE line fault	1. Check whether the grounding wire connection is secure. If there is poor contact, reconnect the grounding wire. 2. Check whether the live and neutral wires are connected incorrectly.
4	Network offline failure	1. Restart the device by powering it off and then on again. 2. Check the network settings to ensure they are correct, including IP address, subnet mask, and default gateway. 3. Check whether the 4G module is functioning normally. 4. Check whether the SIM card is inserted correctly, unlocked, activated, and has sufficient data allowance. 5. Check whether the local signal strength is adequate.
5	Overvoltage failure	1. Check whether the input voltage is within the normal range (187 V–253 V). 2. Check whether the overvoltage threshold setting is correct (253 V).
6	Undervoltage failure	1. Check whether the input voltage is within the normal range (187 V–253 V). 2. Check whether the undervoltage threshold setting is correct (187 V). 3. Check whether the electricity meter protocol is functioning normally.
7	Overflow failure	1. Check whether the input current is normal. 2. Check whether the overcurrent threshold setting is correct.
8	Screen black	1. Check whether the mainboard power supply is normal. 2. Check whether the screen cable is damaged and properly connected.
9	Touch screen unresponsive	1. Check whether the screen cable is damaged and properly connected. 2. Check whether the mainboard is operating normally (observe whether the indicator lights are flashing normally).