CITA Smart 22 Eco / Pro

User Manual

www.citaevcharger.co.uk

Easy To Install

Scan QR Code

To Watch Installation Video

Contents

Preface

Thank you for your continued support of our products.

CITA EV Charger is focused on the new energy field of electric vehicle charging and is dedicated to providing customers with high-quality charging devices along with comprehensive solutions. Our EV chargers feature advanced functions, stable performance, a wide range of applications, and strong practicality, earning an excellent reputation in the industry.

Before operating the device, please read this user manual carefully to ensure proper usage. After reading, retain the manual for future reference.

Warning

This device operates at dangerously high voltages, so only qualified personnel should handle it - always follow the safety warnings and instructions provided. Please strictly observe all warnings and operating instructions on the device and in the manual. Unauthorized and non- professional service personnel should not remove the cover of this device.

Safety Instructions

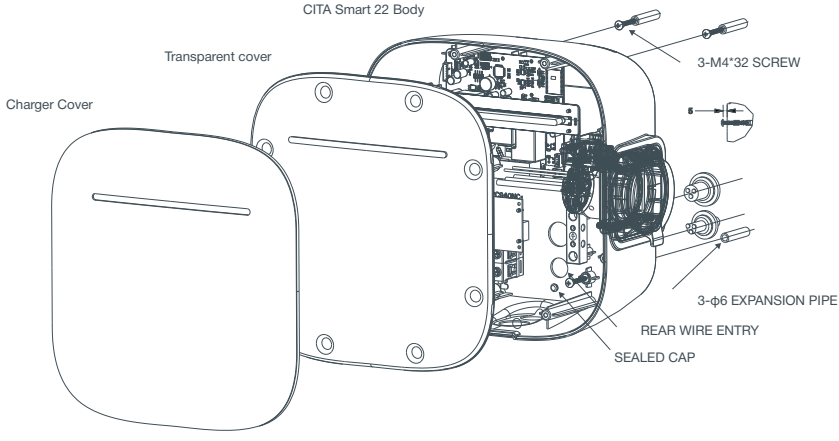
- Keep explosive and flammable materials, chemicals, vapours, and other hazardous objects away from the charger.
- Keep the charging socket clean and dry. If dirty, please wipe with a clean dry cloth. Touching the socket core is strictly forbidden when powered on.
- Do not use the charger in case the device has defects, cracks, abrasion, bare leakage and so on. Please contact the working staff in case of the above conditions.
- Do not attempt to disassemble, repair, or modify the charger. If necessary, please contact the service staff. Improper operation may result in device damage, electric leakage, or other hazards.
- In case any abnormal condition happens, please press the emergency stop button immediately, and cut off all input and output power supply.
- Please charge cautiously in rainy or lightning weather.
- Children should not get close to or use the charger to avoid being hurt.
- During charging, the EV must not be driven. Charging is only allowed when the vehicle is stationary. For hybrid cars, charging is permitted only when the engine is switched off.

Product Overview

CITA Smart 22

- A single-phase charger is used for the purpose of electric vehicle AC charging.
- The charging process can be started or stopped using either an RFID card or the mobile application.
- The front panel includes an LED indicator with different coloured lights to show charging status or to indicate a fault.
- Compatible with all Type 2 charging sockets, the connector locks the charging cable into position when charging begins, ensuring a safe charging session.
- The charger has an environmental protection rating of IP65, providing excellent resistance to water and dust ingress, ensuring safe outdoor operation.
- Floor stand installation is available with the purchase of an additional pillar.
- Designed and tested according to Electric Vehicle Charging System Standard IEC 61851-1, IEC 61851-22, and IEC 62196-2, the charger is compliant with all relevant industry standards.
- With internet connection through onboard Wi-Fi, 4G SIM (Optional Upgrade) or Ethernet connection users can monitor and manage the charger operation from the dedicated CITA EV App (Available in iOS and Android devices) and CITA Smart 22 can operate with all leading OCPP 1.6/2.0 supported CPMS software.

Components & Features



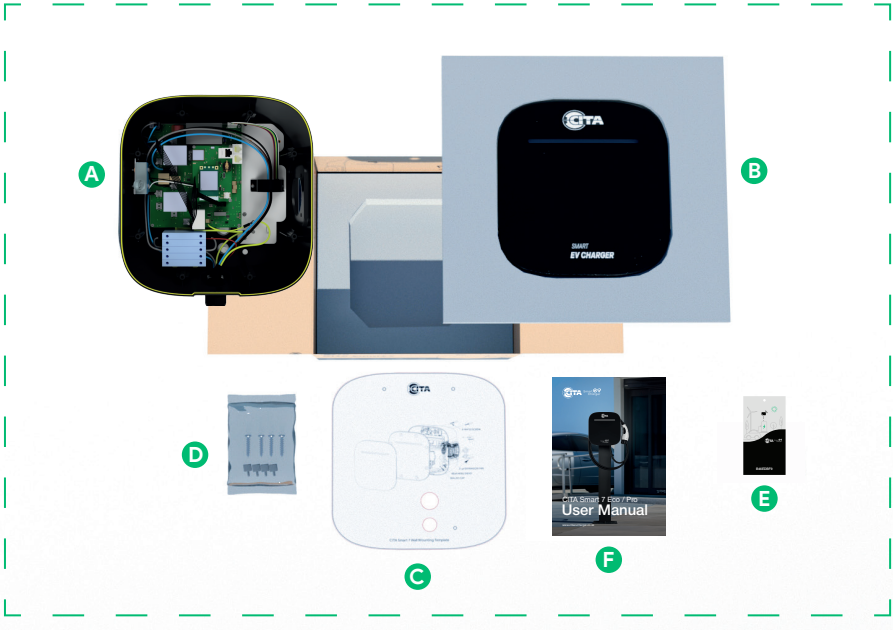
Specification Parameter

Category	Key Features	Specifications
Configuration	User Interface	RFID Card Reader, Smart Mobile Application
	Housing Material	High Impact Plastic
	Installation Mode	Wall-mount (default), Floor-stand (optional)
	Accessory	Floor-stand pillar 100*50*1003mm (L*W*H)
	RFID Card Quantity	5 cards
	Charging Outlet	Type 2 Charging cable, 5 meters
	Product Dimension	435mm x 435mm x 225mm
	Net Weight	4.90Kg
	Gross Weight	6.20Kg

Electrical Parameters	Input Voltage	400V±10%
	Input Frequency	50-60Hz
	Max Power	22kW
	Max Output Current	6 - 32A programmable
	Standby Power	<8W
	Application Place	Indoor / Outdoor
Environmental Index	Working Temp	-30°C ~ +55°C
	Working Humidity	5% ~ 95% without condensation
	Working Altitude	<2000m
	Protection Grade	IP65, IK10
	Safety Standard	IEC61851-1, IEC61851-22, IEC 62196-2
	Special Protection	Anti UV design
Safety Design	Protections from over-voltage, under-voltage, overload, short circuit, current leakage, ground fault, over-temperature, under temperature & surge.	
Communication	Bluetooth setup, Wi-Fi 2.4Ghz communications, Ethernet connection, 4G SIM (Optional Upgrade).	

Package Contents

The CITA Smart 22 box comes with the EV Charger (A), Front Case (B), a Wall Mount template (C), Screw Set (D) to help with the installation, RFID (E) and a detailed user manual (F) to help you with the installation process.



Package Verification

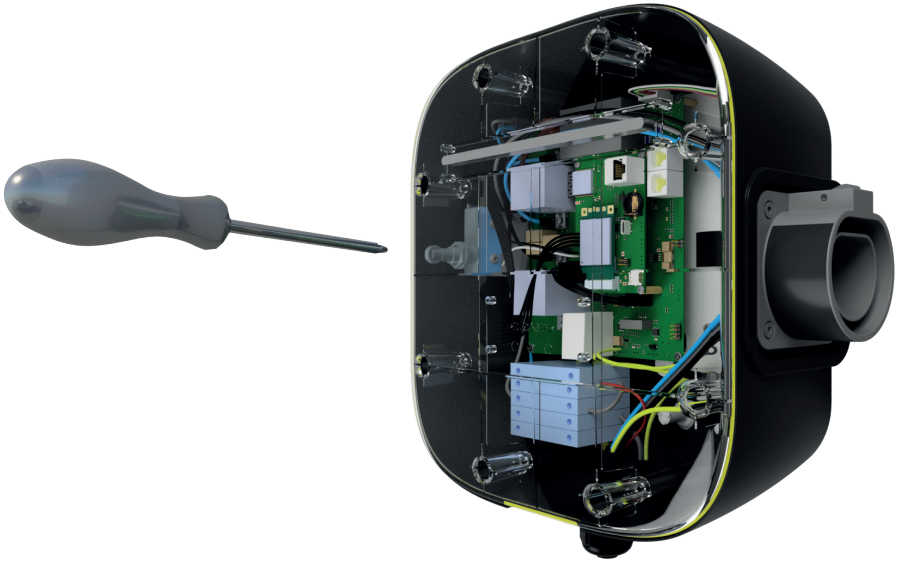
- If the package appears broken or damaged upon visual inspection, please notify the seller immediately.
- Check that all the contents listed above are included. If anything is missing, please contact the seller immediately.

1. Installing CITA Smart 22

Warning: Risk of Electric Shock

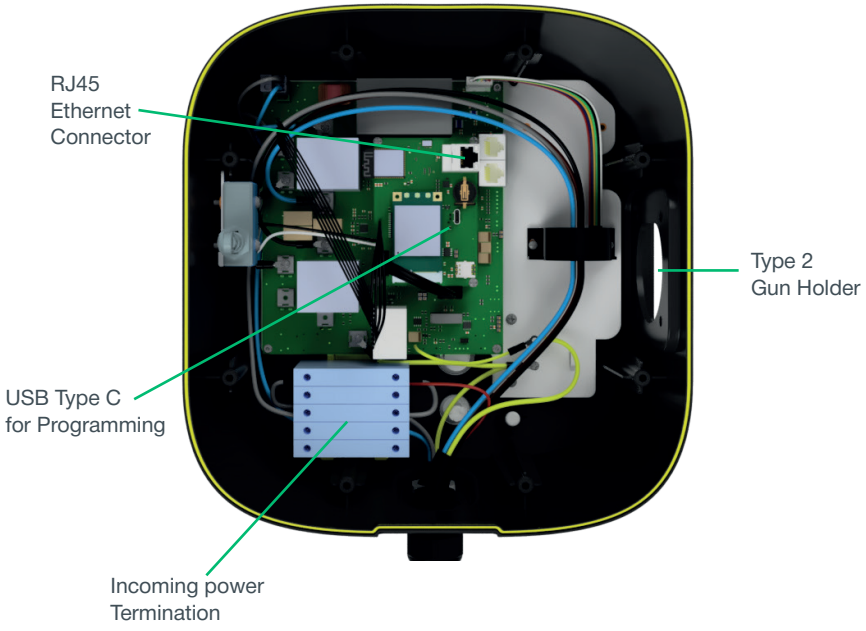
INSTALLATION OF ANY ELECTRICAL DEVICE MUST BE CARRIED OUT BY A QUALIFIED AND COMPETENT PERSON.

A qualified person is defined as someone who possesses the necessary skills and knowledge in the construction, installation, and operation of electrical devices, and who has received proper safety training to recognize and avoid electrical hazards.



1.1 Things to keep in mind during Installation of CITA Smart 22

- Before installing the CITA Smart 22, ensure that the power line you are using is switched off at the service panel. If the amperage rating of the charging cable differs from the amperage rating of the MCB, the installer or user must adjust the station settings in the mobile app or web platform, as provided by the operator or service provider for this product.
- The installation must include a Type A 30mA Residual Current Device (RCD). The RCD shall comply with one of the following standards. 60947-2 and IEC 62423.
- The MCB must match the capacity of the charging cable (22 kW). Please ensure that the selected MCB has an I^2t value not exceeding 75,000 A^2s.
- If the amperage rating of the charging cable differs from the amperage rating of the MCB, the installer or user must adjust the station settings in the mobile app or web platform for station management, as provided by the operator or service provider of this product. Service provider for this product.



This is a global product, and local wiring regulations and safety precautions within the country of installation must be followed at all times.

The CITA Smart 22 requires Wi-Fi connectivity to enable all smart features of the charger. Before installation, ensure that a suitable Wi-Fi signal is available at the chosen installation point.

1.2 Tools Needed For The Installation

Included in the box

CITA Smart 22

Wall Mounting Template

4 x Screws
32 mm x 6mm

4 x Plastic Fisher

2 x Screw Cap

1 Phase Cord
1 Blue 1 Red
1 Yellow 1 Black

Required Tools

Multimeter

Cross Screwdriver
PH2x150mm / PH3x250mm

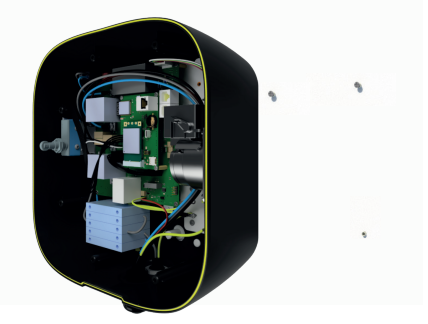
Electric Drill

Diagonal Pliers

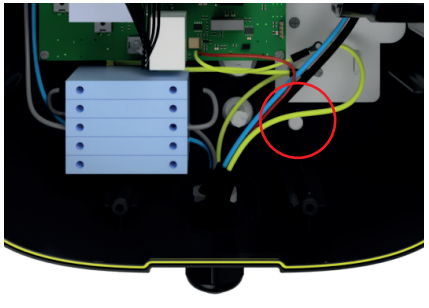
1.3 Preparing for Installation

1.3.1 Wall mounting method

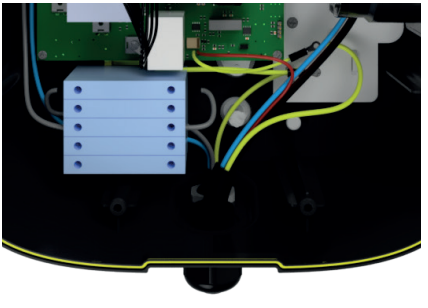
Use the supplied template to drill three fixing holes in the wall for the supplied screws.



Fix both top screws to allow you to hang the charger.



Once the charger is hanging from the top screws fix the charger firmly against the wall by screwing from internally the bottom screw.



The power supply cable can be installed from the rear or the bottom of the charger. The charger should be mounted at a minimum height of 1.3 m from ground level.

Note:

Cabling should be prepared to be inserted from the back or from the bottom of the EV Charger.
Recommended to install the input power cable inside conduit.
The charger should be mounted at least 1.3m from ground level.

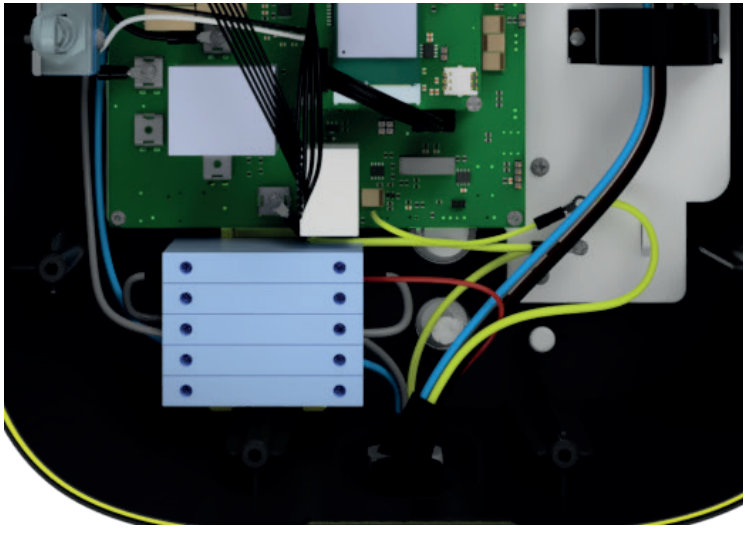
Electrical Parameters	Input Voltage	400V±10%
	Input Frequency	50-60Hz
	Max Power	22kW
	Output Voltage	400V±10%
	Max Output Current	32A
	Standby Power	<8W

1.3.2 Pole Mount Installation (Optional)

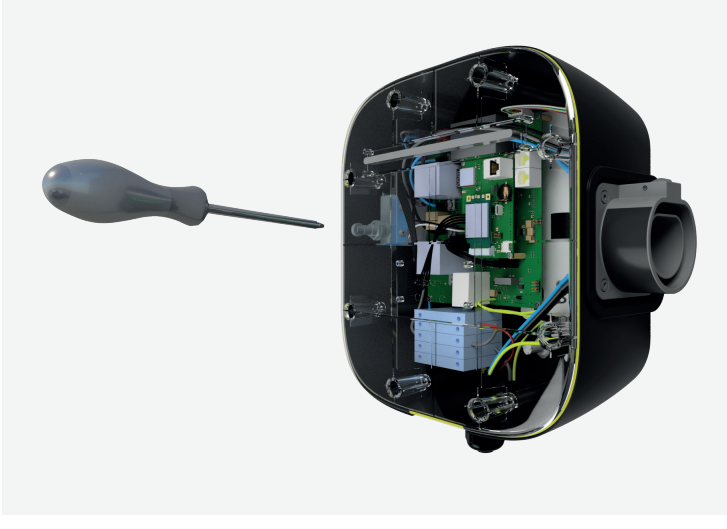
1 x Poll
4x Screws
4x floor mount fishers
1x Installation template

2. Commissioning

Connect the wires to their designated terminals and ensure the cables are securely fastened before closing the transparent cover.



Ensure no wiring is protruding from beneath the transparent cover. Tighten the screws to secure the cover, but do not overtighten.



2.1 Check before Power-on

Please check the following before any operation

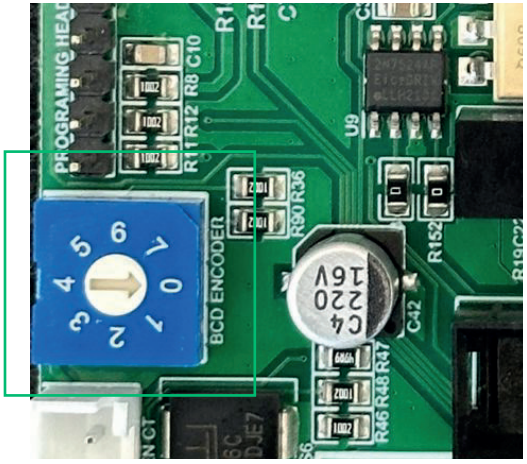
- The charger is securely fitted to the wall/bracket.
- Chargers weatherproofing is not compromised.
- All electrical connections are securely tightened.
- All electrical connections are in the correct terminals.
- The charger lid and seal are secure and in the correct position.
- Secure the charger with the main cover.

2.2 LED Notification Status

State	LED Status
Internet Not Connected	 Blink Yellow Slow
OCPP Not Connected	 Blink Yellow Fast
Available	Solid Blue
Preparing	 Green Blink Slow
Charging	Solid Green
Finishing	 Green Blink Fast
Reserved	Solid White
Suspended EVs	 Blink Green Very Fast
Suspended EV	Green Loading Pattern
Fault	Solid Red

2.3 Configuring the Maximum Charging Current

If you want to adjust the power output by default during the installation use the blue color rotary switch to the desired output current as per the table mentioned below. the default value is 7 for the maximum rating of 32A current.



➡	0	1	2	3	4	5	6	7	8	9
i (A)	-	6	10	13	16	20	25	32	-	-

If you do not wish to adjust it permanently you can get the same function on the charger configuration dashboard. follow the guide in page no 21. to adjust this digitally without opening the charger cover.

Notes

This setting is not safe to do without the help of an installer. Please do this setting during installation of the charger if you have limitation on incoming power. Otherwise leave it to the default value to not disturb the power setting.

3. EV Charger Configuration Interface

AP Mode adds a function that allows you to configure Wi-Fi on the charger without using Bluetooth.

1. Network Configuration

Network Connection

You can perform the configuration on a Smart Phone or Laptop's web browser.

Step 1

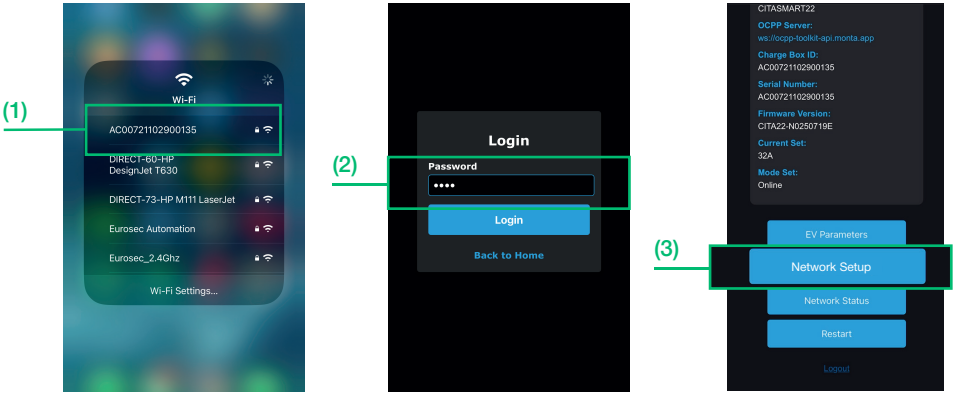
Wi-Fi Connection

(1) Switching your phone to Airplane mode is advised to avoid interference during the setup process. However, it is not mandatory.

(2) Make sure the Wi-Fi is enabled on your phone.

(3) Select the charge point Wi-Fi name, which begins with"AC007....."; it is the same as the charger's serial number.

(4) Enter the Wi-Fi Default password to connect: **admin123**



Notes

If the interface does not launch automatically, please open any web browser on your smartphone or laptop (e.g., Chrome, Safari, Edge, etc.).

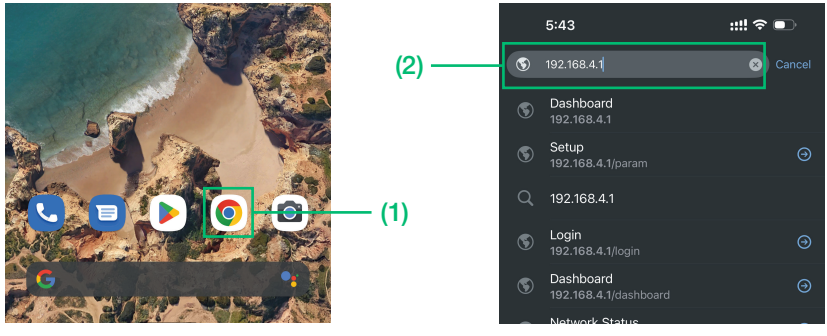
Step 2

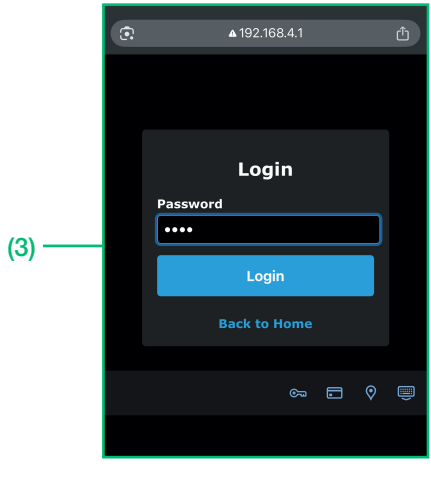
Note: The default web-browser will launch automatically on your Smart-phone. if it is not launching or you are using a Laptop. Please Open Any Web Browser and Follow the below Instructions.

Step 1: Login

(1) Open a web browser
(2) Enter the IP Address in the address bar as: 192.168.4.1
(3) Enter 4-digit network password (PIN Number)

The network pin can be found on the cover of the charge point. Please keep the PIN sticker on a safe place to access it later.





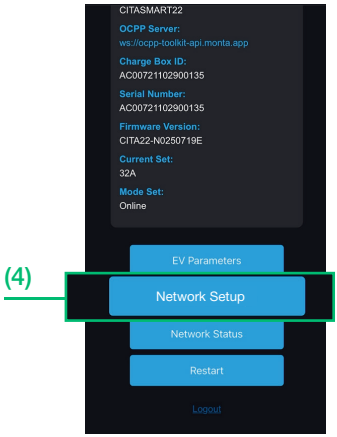
Note: Please make sure the WiFi SSID which you connected is correct if you can not enter the login interface via the default IP address.

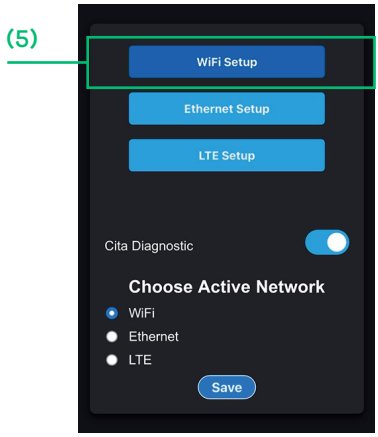
Step 2: Wi-Fi Setup

(4) Select “Network Setup”

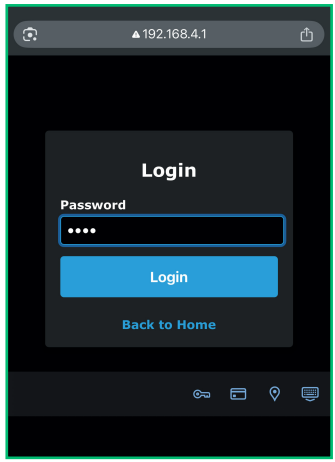
(5) Select "WiFi Setup" menu to Select the local available network

You can select the Wi-Fi SSID name that you want to connect.
Select “Other” and enter Wi-Fi SSID and Password manually if the Wi-Fi network is not showing in the list.
(Make sure to enter the Wi-Fi SSID carefully while entering it manually)





Note: After WiFi setup, you need to repeat step (3) to login again.

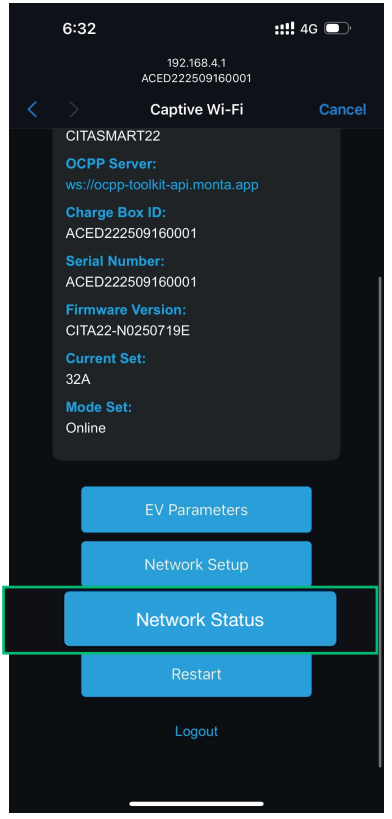


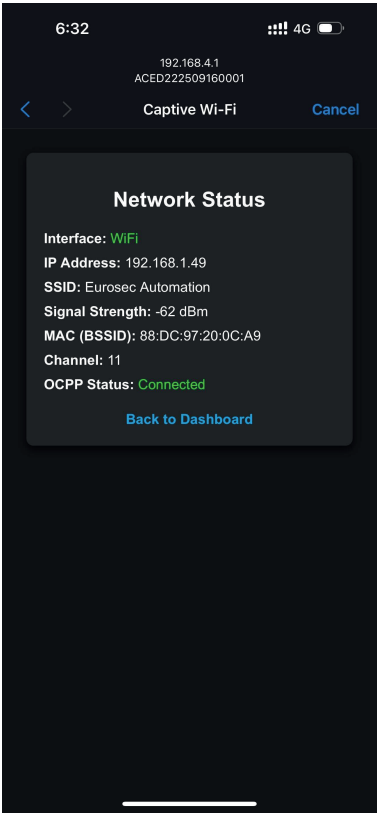
(6) Verifying Network Connectivity

After re-login, Please select the "Network Status" Menu to open the Network Status page to make sure the Wi-Fi is connected and if connecting to OCPP server you can check the connection status from here.

If the Wi-Fi strength is poor, please try to change the Wi-Fi network or arrange a range extender to enhance the network strength.

If the server communication is “Disconnected” or the network status shows Offline, please try to reset network setting, and then repeat Step 1 and Step 2.





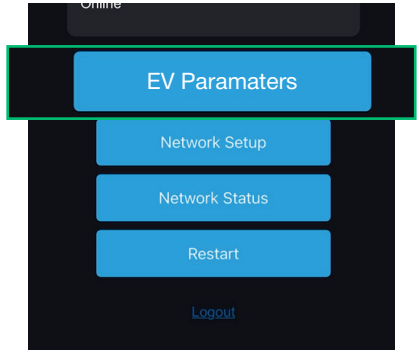
Step 3

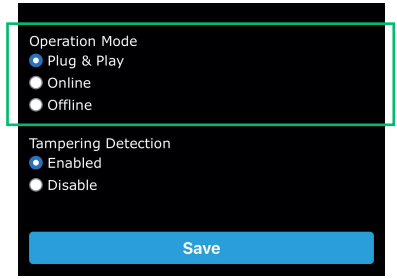
Operating in Plug & Play Mode

(1) Select "EV Paramaters " on the dashboard configuration page to configure the Operation Mode.

(2) Scroll down to see the Operation Mode Options.

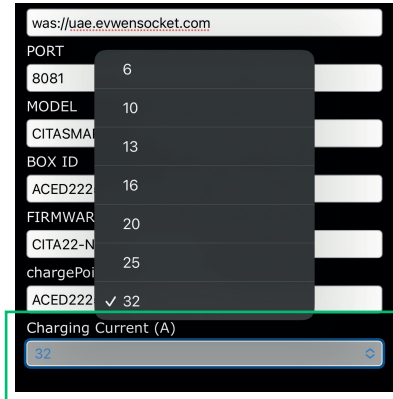
(3) Select Plug & Play Radio button and select Save button to confirm the settings.





Setting Maximum Charging Current.

Follow the steps above and just give the option to select the drop-down button to set maximum power and **save it.**



4. RFID Operation

Notes

Add the RFID card information in the OCPP mobile app you are using to operate the charger. The steps may vary depending on the OCPP app you are connecting the charger to.

A) After the charger is connected to the EV, a yellow light will switch on indicating that it is ready for charging.

B) Scan the RFID card once on the identification area of the front panel after which the charging starts. When the charging starts, the gun will be locked into the charger socket. The charger LED will change to a slow green pulse to indicate charging.

C) Charging will automatically stop when the EV is fully charged, and the charger LED indicator will be solid green.

D) Please end the charging session by scanning the RFID card for a second time. If you do not scan the RFID card again, the charger will not unlock the gun on the charger side, and the user cannot unplug the charging gun.

E) When an EV is being charged, the user can stop charging by scanning the RFID card for a second time. The charging session will end, and the gun on the charger side will be unlocked.

F) Another solution to stop charging is to end the charging session from the EV side. After the gun on the EV side is unlocked and plugged out, the charging session will end, and the gun on the charger side will be unlocked automatically.

5. Most Common Issues and Fixes

Problems	Possible Causes	Solutions
Input over voltage	AC input voltage may be too high.	• Check the input voltage from the backend. • If the voltage is over 456Vac for a short time, wait till the power grid recovers to the normal voltage range.
Input lower voltage	AC input voltage may be too low.	• Check the input voltage from the backend. • If the voltage is under 230VAC for a short time, wait till the power grid recovers to the normal voltage range.
Input over current	AC input current may be too large.	• Shut off the leakage current protection switch of the power distribution cabinet immediately. • Check whether there is a low resistance connection between the AC output cables of the charger.
Input over frequency	AC input frequency may be too high.	• Check the input voltage frequency from the backend. • If the frequency exceeds 55Hz for a short time, wait till power grid recover to normal voltage range.
Input lower frequency	AC input frequency may be too low.	• Check the input voltage frequency from the backend. • If the frequency is lower than 45Hz for short time, wait till power grid recover to normal voltage range.
Over temperature	Temperature may be too low inside the charger.	• Check the surrounding conditions of chargers installed for a heating device nearby. Make sure the environmental temperature is under 60°C.
Over leakage current	Leakage current to the earth may be too high.	• Shut off the leakage current protection switch of the power distribution cabinet immediately. • Check whether there is broken AC output cables or a low resistance connection to the earth.

Leakage current sensor abnormal	Detection of leakage current sensor is abnormal.	• Shut off the leakage current protection switch of power distribution cabinet immediately. • Check whether there is a broken AC output cables or low resistance connection to the earth.
Grounding fault	Inappropriate grounding connection of input/output cables or inverse connection of L/N input cables.	• Shut off the leakage current protection switch of power distribution cabinet immediately. • Check if AC input/output cables are normal and if inverse connection of L/N input cables.
CAN communication abnormal	Poor connection between AC charger and CITA-GATEWAY.	• Check whether CAN bus connection is reliable and correct.
Charging cable connection abnormal	Poor connection of charging cable with EV/Charger.	• Check if charging cable connection is correct and firm.
Charger not paired with local Wi-Fi	Wi-Fi SSID or password has been changed.	• Check the Wi-Fi status light on the PCB. • If the light is off, the charger is not paired with any Wi-Fi netowrk. • If the light is blinking green, the charger is attempting to pair with the Wi-Fi netowrk. • If the light is solid green, the charger is sussessfully paired. • You can reset the Wi-Fi module on the PCB to Begin the pairing process again.

Note: If the above problems cannot be solved, please contact the CITA Support Team.

6. Disposal

The packaging materials are environmentally friendly and can be recycled. Put the packaging in applicable containers to recycle it. Do not dispose of this device with household waste. It shall be handed over to the applicable collection point for the recycling of electrical and electronic devices. For more detailed information about recycling of this device, please contact your local city office, your household waste disposal service, or the shop where you purchased the device.

7. Warranty

1.1 CITA Smart EV Charger warrants to Customer on delivery and for a period of three (3) years after that the Products are free from material defects in material and workmanship and conform in all material aspects with the specifications as explicitly listed in the Documentation, except for charging cables, their connectors and software, for which the warranty is limited to three (3) months from the date of delivery.

1.2 Subject to clause 1.3, CITA Smart EV Charger shall, at its option, repair or replace defective Products, or refund the price of faulty Products if:

(A) Customer gives notice in writing during the warranty period within fourteen (14) days after the Customer has discovered or should reasonably have discovered that some or all of the Products do not comply with the warranty as set out in clause.

(B) The Customer may return such Products to CITA Smart EV Charger (at the location designated by CITA Smart EV Charger) at the Customer's expense, following the RMA (Return Merchandise Authorization) instructions provided by CITA Smart EV Charger, provided that the nature of the Product permits such a return.

(C) CITA Smart EV Charger is given a reasonable opportunity of examining such Products and provided by Customer with all information it may reasonably require to proceed to such examination. Concerning repair, CITA Smart EV Charger is entitled to apply problem avoiding restrictions and/or Workarounds.

1.3 CITA Smart EV Charger shall not be liable for the Products' failure to comply with the warranty in clause 1.1 if:
(A) Customer makes any further use of such Products after giving a notice in accordance with or failed to provide notification within fourteen (14) days as set out in clause.

(B) The Error arises because Customer failed to follow CITA Smart EV Charger's oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Products or (if there are none) good trade practice (such as but not limited to use of the Products with parts, accessories or software not provided or approved by CITA Smart EV Charger).

(C) The Error arises as a result of CITA Smart EV Charger following any customisation or Product specification supplied by Customer.

(D) Repairs or other interventions on the Products are performed by persons not trained for this purpose, against CITA Smart EV Charger's oral or written instructions, or with parts not supplied or approved by CITA Smart EV Charger.

(E) The Error arises as a result of fair wear and tear, willful damage or negligence by Customer and/or a third party, or abnormal working conditions (such as but not limited to damages resulting from vandalism, animals, high-pressure cleaners, or Error in connected vehicles).

1.4 In all cases, the following are excluded from the coverage of the warranty:
(A) Travel costs and labour costs of repair, including time spent on preliminary work or on disassembly and reassembly, if the repair of the Products is to take place at the installation site due to the nature of the Products.

(B) Cleaning, routine maintenance and preventative maintenance operations of the Products as defined in the Documentation, as well as the supply of products necessary for these operations.

(C) Restarting operations after the Product has been secured, for example by circuit breakers, ground fault circuit interrupters (GFCIs), fuses or emergency stops.

(D) In general, all operations on-site, especially if no parts need to be replaced.

1.5 The Agreement shall apply to any repaired or replacement Products supplied by CITA SMART SOLUTION LIMITED. This warranty statement is subject to change.

Please refer to the following articles for more details:
Warranty Policy: **https://citaevcharger.co.uk/warranty-policy**
Terms and Conditions: **https://citaevcharger.co.uk/terms-and-conditions**

Warranty Registration

To activate your 3-year warranty, please email support@citaevcharger.co.uk with the following details: Name, Phone Number, Email, Charger Serial Number, and Proof of Purchase.

Alternatively, you can submit your information through our online form at:
https://citaevcharger.co.uk/warranty-registration

8. Declaration of Conformity

CITA Smart Solutions Limited,
52 Deerdykes View, Westfield Park, Cumbernauld, Glasgow, G68 9HN, United Kingdom

Declares under its' sole responsibility that the following Product:
CITA Smart 22 - 22kW, 32A, Single Phase Installation Charger

Provided that they are installed, maintained, and used in the applications for which they were designed - in accordance with professional practices, relevant installation standards, and the manufacturer's instructions for use and installation - these products are OZEV EVHS & WCS certified, CE/UKCA/ADQCC/SASO certified, and comply with the essential requirements of EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU, and RED Directive 2014/53/EU, in accordance with the following standards: IEC 61851-1, IEC 61851-22, IEC 62196-2.

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Disclaimer: The information provided has been carefully checked and is believed to be accurate; however, no responsibility is assumed for any inaccuracies. Due to continuous product development, specifications, colours, and product details mentioned in this manual are subject to change without prior notice.

For further inquiries, please contact your nearest sales office via email at **info@citaevcharger.co.uk** or by phone.