



Charge Amps **Aura**

Installation Manual

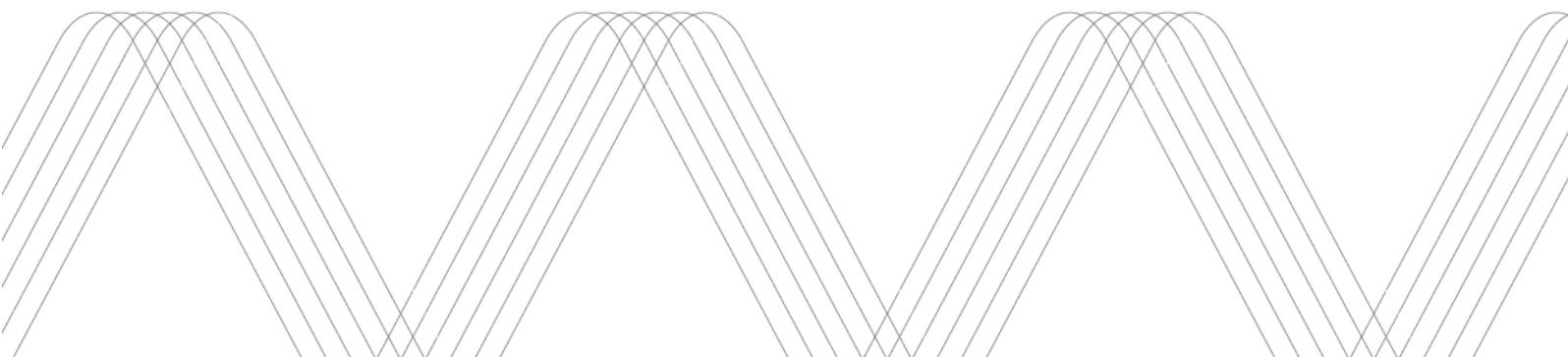


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Respect the environment! Must not be discarded with household waste! This product contains electrical or electronic components that should be recycled. Leave the product for recycling at a designated location e.g. the local authority's recycling station.



Disposal of the product must comply with the local environmental laws and guidelines. The product consists of recycled aluminium, plastic and electronics, and should be recycled as specified for these materials.



Approved in accordance with the relevant EU directives.

Neglecting to follow and carry out the directions, instructions and safety precautions in this Installation Manual implies that any warranty provisions will be cancelled and that Charge Amps AB can reject any and all claims for compensation in connection with any injuries/damage or incidents – direct or indirect – that are a result of such negligence.

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1. Safety

WARNING! Read all instructions before use.

- The product must only be installed by a qualified electrician in accordance with the Installation Manual.
- Make sure the power is switched off at the main switch before installation or servicing.
- Improper use and neglecting to follow the instructions of this Installation Manual may create a risk of personal injury.
- Local rules and regulations for installation apply.
- Only use this product for charging compatible electric vehicles.
- Inspect the product for visible damage before use.
- Never attempt to repair or use the product if it is damaged.
- Make sure that the product is in good condition and that all cables are properly seated before use.
- Do not immerse the product in water, subject it to physical abuse or insert foreign objects in any part of the product.
- Never attempt to disassemble the product in any way.
- Make sure no flammable, explosive, corrosive or combustible materials, chemicals or fumes are near to the mounting position.
- Make sure that all terminal screws are securely fastened before reattaching the front cover.
- Be careful not to touch the circuit board during installation to avoid the risk of static electricity.
- Heavy object! To avoid muscle strain or back injury, use lifting aids and proper lifting techniques.

2. Technical Data

Charging standard	Mode 3
EV power supply identifier	
Identification	RFID (i/a) HF, 13.56 MHz
Internet connection	Wi-Fi 802.11b/g/n, 2.4 GHz
Communication protocol	OCPP 1.6J
Metering	3-phase voltage, current and power
Operating temperatures	-30°C to +45°C
Voltage	230/400 V
Sockets	Type 2, 2 x 22 kW simultaneously
IK-rating	IK10
IP-rating	IP55
Dimensions (B x D x H)	367 x 159 x 405 mm
Weight	10 kg
RFID Frequency Range	13.553–13.567 MHz
RFID type/s	ISO/IEC 14443 Type A 13.56 MHz Mifare
RFID Output	31 dBm
Wi-Fi Frequency Range	2412–2484 MHz
Wi-Fi Output	802.11 b/g/n: 20/17/14 dBm
Rated voltage (Un) (of the ASSEMBLY)	230/400 V
Rated operational voltage (Ue) (of a circuit of an ASSEMBLY)	230/400 V

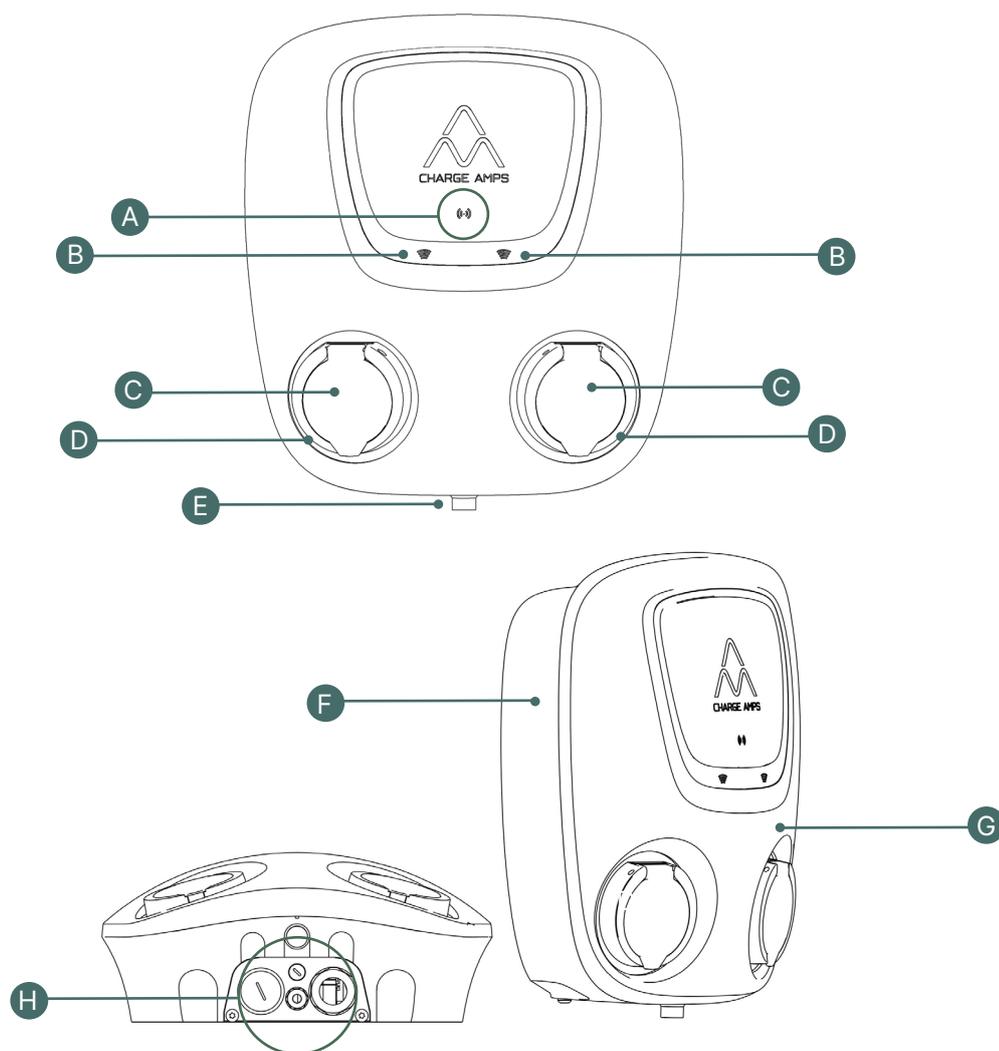
Rated current of the ASSEMBLY (InA)	63 A
Rated current of a circuit (Inc)	32 A/socket
Rated frequency (fn)	50 Hz
Types of system earthing for which the ASSEMBLY is designed	TN, TT and IT
Residual current safety functionality	Separate DC fault current protection and a type A RCBO are integrated into the charging station for each socket.
Indoor and outdoor installation	Yes
Stationary or movable	Stationary
Intended for use by ordinary persons	Yes
External design	Enclosed wall-mounted surface type ASSEMBLY
Type of construction	Fixed
Locations with restricted access or non-restricted access	Non-restricted access
Method of mounting	Wall mounted ASSEMBLY* Stationary floor-mounted installation with pole mount accessory



*Specification of LTE version	
RF technology	GSM, GPRS, EDGE, UMTS/HSPA+, LTE
Max RF output	33 dBm@GSM, 24 dBm@WCDMA, 23 dBm@LTE
RF Range	698–960/1710–2690 MHz
SIM card	Standard SIM

3. Product Overview

3.1. Parts



- A. RFID reader
- B. RFID light
- C. EV socket
- D. Socket light
- E. Cylinder lock
- F. Back cover
- G. Front cover
- H. Cable slide: data and power cable in/out.

3.2. Package contents

- Charge Amps Aura
- Cable slide with fittings, plugs and screw
 - Cable fitting for power: 13–17.5 mm and 17–25 mm.
 - Cable fitting for data: 4–8 mm.
- Two keys for the cylinder lock
- Two RFID cards
- Quick User Guide

4. Before Installation

4.1. Recommended tools

- 3.5 mm flat head screwdriver
- Drill
- Multimeter
- Laser/spirit level
- Wire stripper for cabling
- Mobile phone, tablet or computer

4.2. Materials provided by installer

- 4 x M6x30 mm or longer, flat head stainless screws type A2 or A4 with associated washers type A2 or A4 having a maximum outer diameter of 20 mm and plugs (if required, depending on wall conditions).
- Installation cable, according to the charging capability of the selected product
- LAN cable

4.3. Mounting requirements

- If possible, do not mount the Charge Amps Aura in direct sunlight.
- Make sure the wall can support a weight of 10 kg and the tractive force from the inserted cabling.
- Do not install Charge Amps Aura in confined spaces.
- Use screws and plugs (*if required*) suitable for the wall material.
- Charge Amps Aura must be mounted upright.
- Permissible mounting height 900–1450 mm. Measured from the ground to the bottom of Charge Amps Aura.
- For alternative mounting requirements for a pole mount, contact Charge Amps Support.

4.4. Electrical requirements

N.B. Local regulations may add further requirements for the electrical installation.

- ATTENTION: Only insert the power cable through the specified cable entry. Cables must not be passed through the rear housing.
- Charge Amps Aura must be earthed through a permanent electrical installation.
- Make sure the product is properly fused, up to 63 A, B or C Curve MCB* depending on installation.
- Let through energy (I^2t) must be less than or equal to 75,000 A²s.
- These are minimum levels. Local regulations must always be met.
- Cable connection: L1–L3, N, PE. The WAGO terminals are designed for a cable area of 2.5 to 16 mm².
- Make sure the incoming cabling is dimensioned to connect the Charge Amps Aura.

* MCB = Miniature Circuit Breaker, B Curve MCBs trip at 3–5 times the rated current and C Curve MCBs trip at 5–10 times the rated current.

4.5. Internet access

Wi-Fi

The Wi-Fi connection is deactivated if one of the LAN ports is actively connected.

Charge Amps Aura LTE version is delivered connected to the LAN port.

To connect Charge Amps Aura LTE version using Wi-Fi, the LAN connection must first be disconnected.

4G (LTE)

N.B. Only applicable to Charge Amps Aura LTE version.

Up to four Charge Amps Auras can be connected in series. Use a router or an Aura4G as an access point.

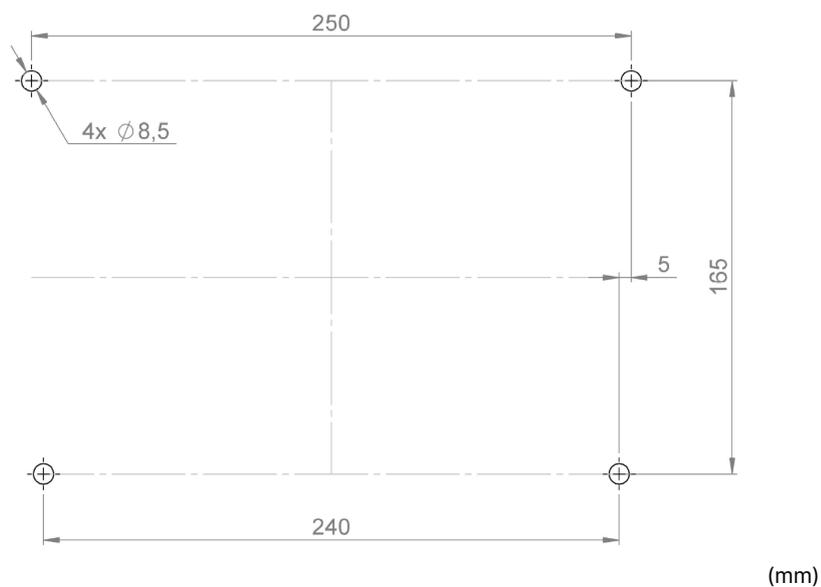
LAN cable

A network cable, Cat5 or better, is required.

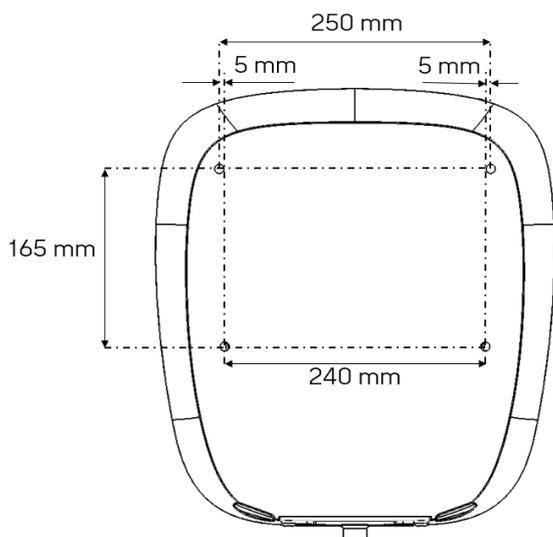
5. Installation

5.1. Mounting

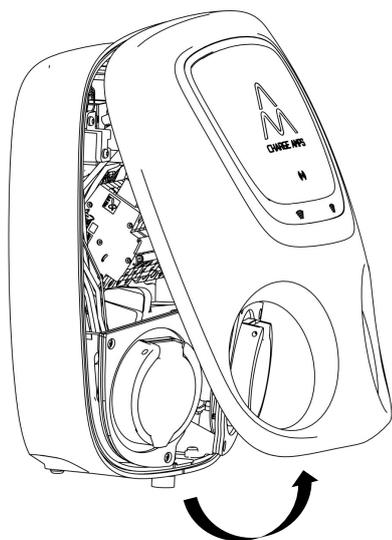
1. Unpack Charge Amps Aura. Make sure that Charge Amps Aura is in a good condition and that all cables are properly seated. Do not place the face plate directly on to the ground.
2. Mark the mounting holes on the wall.



Not to scale.

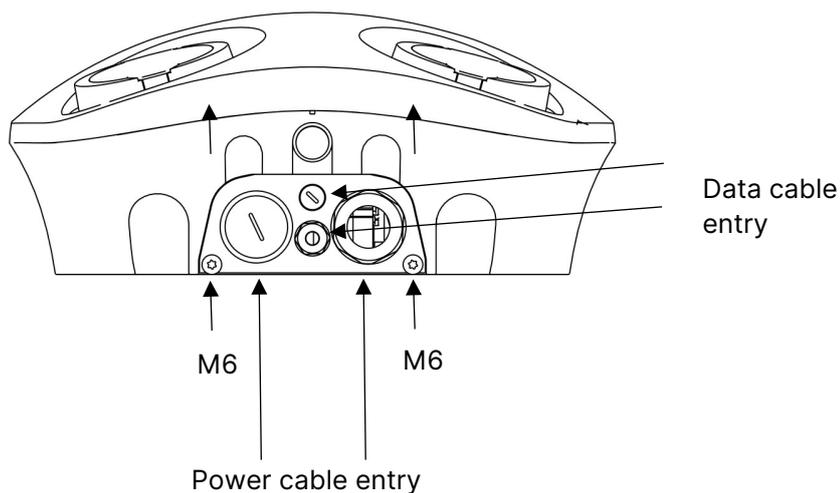


3. Unlock the cylinder lock.
Rotate the front cover upwards and suspend the front.

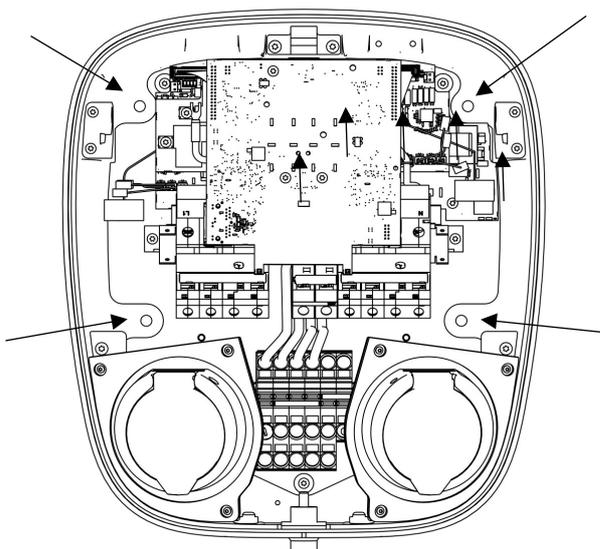


4. Remove the cable slide by unscrewing the two M6 screws. Attach cable fittings and plugs.

The hole for the electrical lead-through is designed for M32.
The hole for the data lead-through is designed for M12.



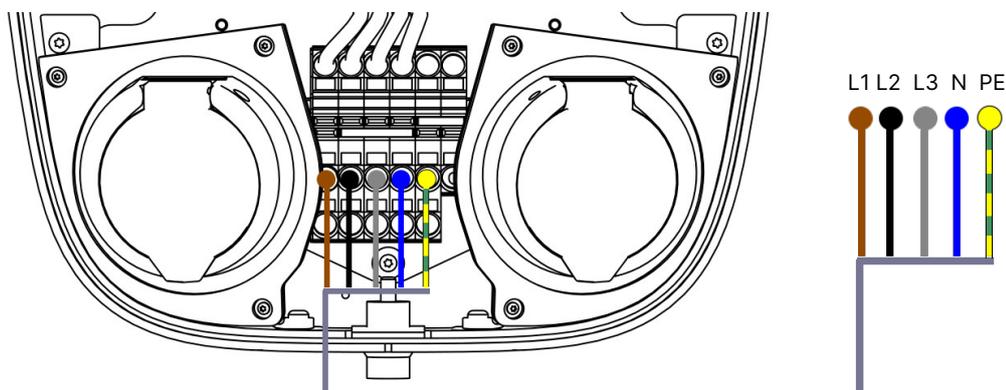
5. Reattach the cable slide to the back cover by securing the two M6 screws.
6. Align Charge Amps Aura to the wall and mount.



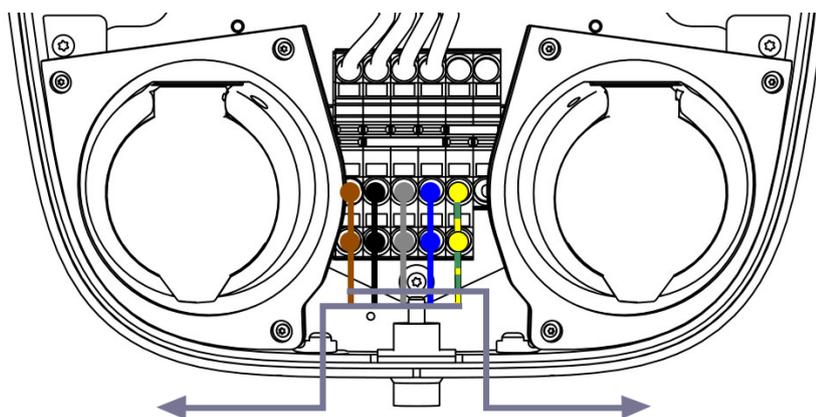
5.2. Connection

N.B Only insert the power cable through the specified cable entry.

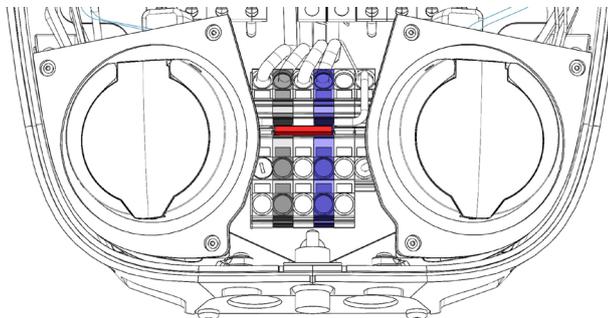
1. Turn the power off at the main switch.
2. Make sure the power cable is isolated.
3. Pull the power cable through the cable entry.
4. Strip approximately 20 mm off the end of the conductors.
5. Connect conductors L1–L3, N and PE to the terminals.



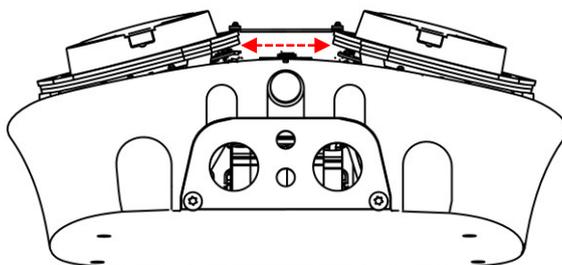
6. To route the power onwards, connect the cable to be routed onwards to the second input of the terminals.



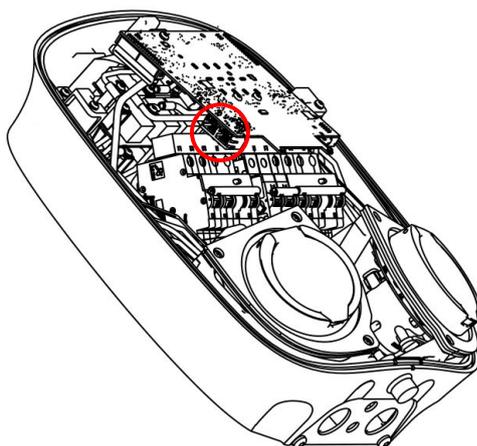
7. If installing in an IT network, connect phase cables L1 and L3, and use terminal blocks 1-3. L2 and N will be connected.



8. Make sure that any cabling does not arch over the dotted red line as illustrated below.



9. Connect the Ethernet cable to the RJ45 port on the control card if a fixed cable is used.



10. Once the cables are installed, make sure that the RCDs and the MCB are turned on.
11. Close the front cover and lock in place.
12. Turn the power on at the main switch.
A start-up sequence with self-tests is carried out.
Charge Amps Aura is ready for use when both ring lights around the sockets are green.

6. Configuration

6.1. Connect to Wi-Fi

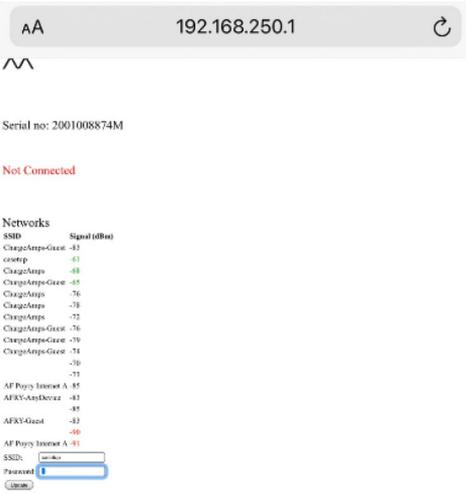
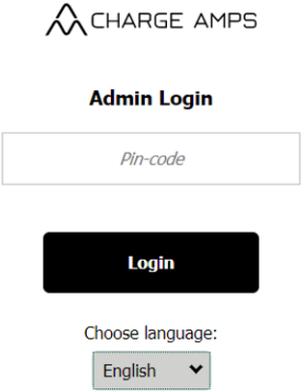
6.1.1. Access the Charge Amps Aura Wi-Fi access point

N.B. Not needed if LAN is used. See Chapter 6.2 *Connect via LAN*.

The Charge Amps Aura Wi-Fi access point is not connected to a network.

The Charge Amps Aura Wi-Fi access point is only accessible for 10 minutes once the power is switched on.

1. Connect to Charge Amps Aura Wi-Fi using a smartphone, tablet or a computer.
To avoid conflicting Wi-Fi, set to airplane mode.
 - SSID: AURA_nnnnnnM (nnnnnn equals the last 6 digits of the serial number).
 - Password: Enter the Charge Amps Aura pin code.
2. Start a web browser and type in 192.168.250.1 as the search path.
3. Proceed to the chapter specified in the table below.

Charge Amps Aura See Chapter <i>6.1.2 Connect to Wi-Fi</i>	Charge Amps Aura OCPP version See Chapter <i>6.1.3 Connect to Wi-Fi</i>
	

6.1.2. Connect to Wi-Fi

1. Enter the sign-in details of the facility network to connect Charge Amps Aura to the internet.
2. Click *Refresh* to save.

6.1.3. Connect to Wi-Fi

N.B. Only available for Charge Amps Aura OCPP version.

N.B. Not needed if a LAN cable is used.

1. Sign in to the local management interface.
Enter the pin code and sign in to the local management interface.
2. Click on the arrow in the top right corner to navigate between tabs. Select the *Wi-Fi* tab.
3. Enter the sign-in details of the facility Wi-Fi to connect Charge Amps Aura to the internet.
4. Click *Refresh* to save.

6.2. Connect via LAN

N.B. Only available for Charge Amps Aura OCPP version.

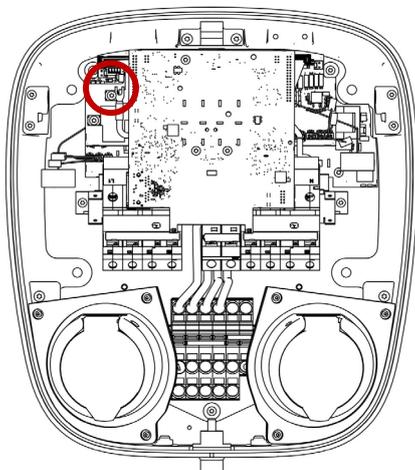
1. Make sure that Charge Amps Aura is connected to the local network via a LAN cable.
2. Start a web browser using a computer or smart phone and enter the IP address assigned to Charge Amps Aura as a search path.
The IP address can be seen in the router or DHCP server that manages the distribution of IP addresses.
3. Enter the PIN code and sign in to the local management interface.

6.3. Connect via 4G

N.B. Only available for Charge Amps Aura 4G LTE version.

To access the local management interface, see *6.1.1 Access the Charge Amps Aura Wi-Fi access point*.

1. Insert a SIM card into the SIM card holder.



6.4. Local management interface settings

N.B. Only available for Charge Amps Aura OCPP version.
Click on the arrow in the top right corner to navigate between tabs.

6.4.1. Electrical installation settings

1. Select the *Installation* tab and follow the instructions.
2. Click *Refresh* to save.

6.4.2. RFID management for offline chargers

N.B. If connecting to a cloud service, the locally added RFID tags are ignored.

1. Select the “RFID” tab and follow the instructions.
2. Click *Refresh* to save.

6.4.3. Connect to a cloud provider

N.B. Not applicable to Charge Amps Cloud users.

1. Select the OCPP tab and enter the cloud provider’s URL.
2. Click *Refresh* to save.

7. Cloud connectivity

Charge Amps Cloud and Charge Amps App are available for Charge Amps Aura connected to Charge Amps as the cloud provider.

To connect Charge Amps Aura to other cloud providers, please refer to your cloud provider for inquiries about portals and apps.

Contact the cloud provider to verify a successful connection.

Charge Amps **App**



Charge Amps **Cloud User**



<https://my.charge.space/>

Charge Amps **Cloud Partner**



<https://my.charge.space/partner>

Visit the link to obtain full product documentation.



<https://www.chargeamps.com/product/charge-amps-aura/>

7.1. Create a Charge Amps Partner account

Installation of Charge Amps products requires a Charge Amps Partner account.

Use your login credentials or create a new account.

1. Create a user account at Charge Amps Cloud <https://my.charge.space/>
2. Send an email to Charge Amps (support@charge-amps.com) stating the following:
 - a. User account login name
 - b. Company name
 - c. Company postal address
 - d. Company email
 - e. Company phone number
 - f. Corporate identity number
 - g. Company representative
3. Charge Amps will notify you by email when your Partner account has been created.

8. Dismounting

N.B. Dismounting must only be performed by an authorised electrician.

Perform a factory reset of Charge Amps Aura before powering it down. Contact the supplier before performing this action.

The power supply to the charger must be isolated before dismounting starts.

Use this Installation Manual and follow the steps in reverse to dismount Charge Amps Aura in the correct order.

9. Product support and service

If your question is not answered in the manual, please contact the supplier or cloud provider, see chargeamps.com/support.