OCPP

Open Charge Point Protocol V2.0

wallbox

Contents

wallbox

Overview

The OCPP is a standard and open protocol for communication between Charge Points and a Central System where a Charge Point Operator can, among others, monitor the status of the Charge Points, authorize who is allowed to charge or perform remote actions like to stop an ongoing transaction.
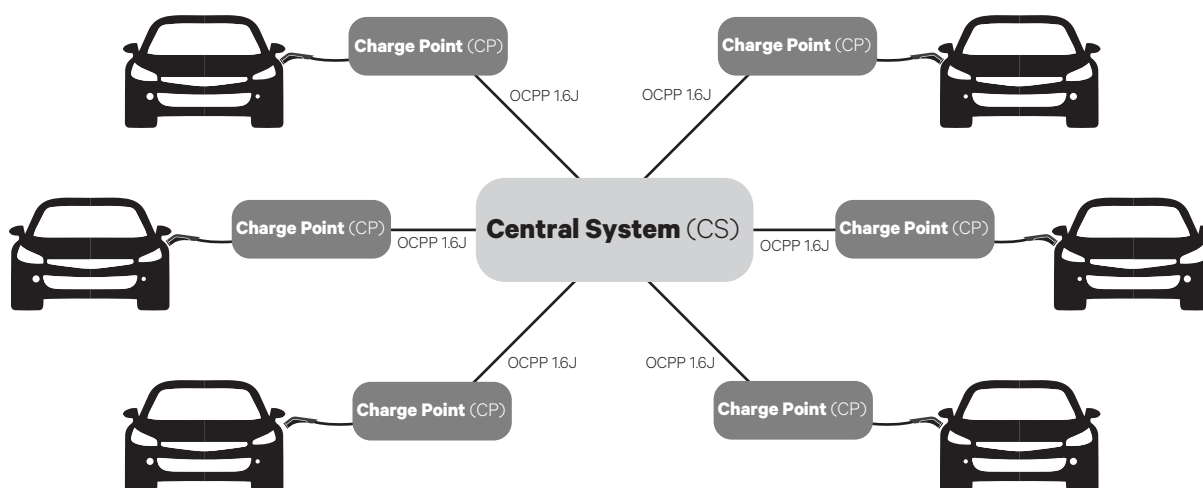
Terms and conventions

Acronym	Model
CP	The Charge Point is the physical system where an electric vehicle can be charged.
CPO	The Charge Point Operator manages a set of CPs using a Central System
CS	The Central System that manages Charge Points and has the information for authorizing users for using its Charge Points
OCPP	Open Charge Point Protocol
VPN	"Virtual Private Network"

References

[Open Charge Point Protocol 1.6 edition 2]

wallbox

Part Number Activation

OCPP is only available in:

- Copper SB and Pulsar Plus chargers with OCPP selected in the section 5 of the part number.

Family	Model	Cable	EVC	Power	Version	Custom	Revision
CP	B1	S - Socket W - Socket w/ shutter	2 - Type 2	3 - 11 kW 4 - 22 kW	8 - Residual Current Detection (DC 6 mA) + RFID + OCPP	-	-
PL	P1	0 - 5 m M - 7 m	1 - Type 1 2 - Type 2	2 - 7,4 kW 3 - 11 kW 4 - 22 kW	9 - Residual Current Detection (DC 6 mA) + OCPP F - Earthing Protection (UK) + Residual Current Detection (DC 6 mA) + OCPP	-	-

> You can know more about OCPP at: https://support.wallbox.com/article-categories/copper-sb/

Charge Point Setup

To achieve the OCPP connection between the Charge Point and the Central System, the Charge Point administrator shall set up the network connection and the OCPP parameters using myWallbox App or Portal.

Wallbox is NOT responsible for any unexpected performance of the Central System if it has failed to successfully pass the Factory Acceptance Test between both parties.

If the Central System has failed to pass the Factory Acceptance Test, please contact: sales@wallbox.com

myWallbox Account

You can find all the instructions to use myWallbox App or Portal at:

https://support.wallbox.com/article-categories/mywallbox/

Network Connection

To establish a connection between the Charge Point and the Central System it is necessary to connect the Charge Point to the network using one of the available connection methods.

- Ethernet (where available)
- Mobile Connectivity (where available)
- Wi-Fi

You can find all the instructions at:

https://support.wallbox.com/article-categories/mobile-connectivity/

https://support.wallbox.com/knowledge-base/how-to-set-up-wi-fi-in-copper-sb/

OCPP Parameters setup

Wallbox App

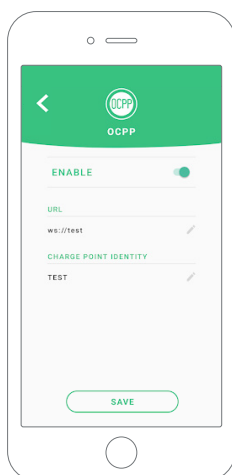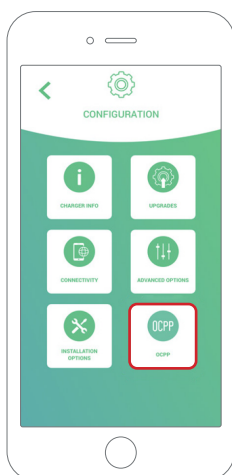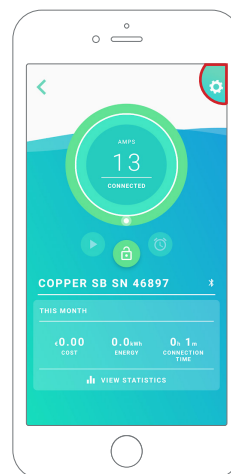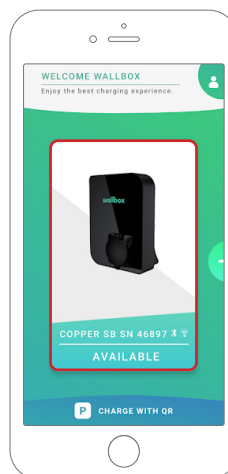To complete the OCPP setup using myWallbox App perform the following steps:

1. Log in to the myWallbox App and access to the charger's screen.

The Wallbox app is available on PlayStore and AppStore.

2. Select the required charger and ensure it's connected to the network

3. Enter the charger status screen and click the configuration ⚙ button.

4. Go into the OCPP configuration menu.

Note: If the charger is not compatible with OCPP, the OCPP button will not be displayed.

5. Set the OCPP parameters and press the "SAVE" button

- Enable: On / Off switch
- URL: Central System connection endpoint (required field)
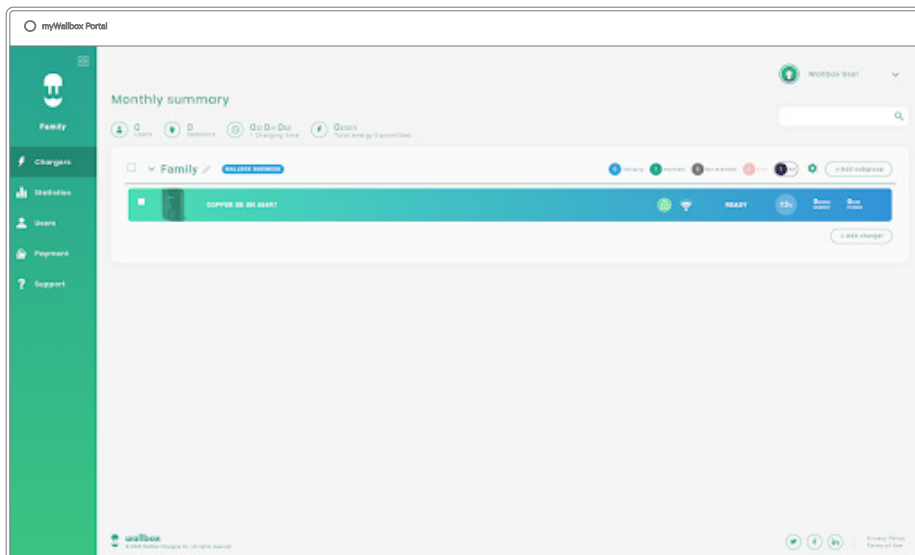- Charge Point Identity: Charge point ID (required field)

Note: The charger will automatically reboot and new configuration will be applied
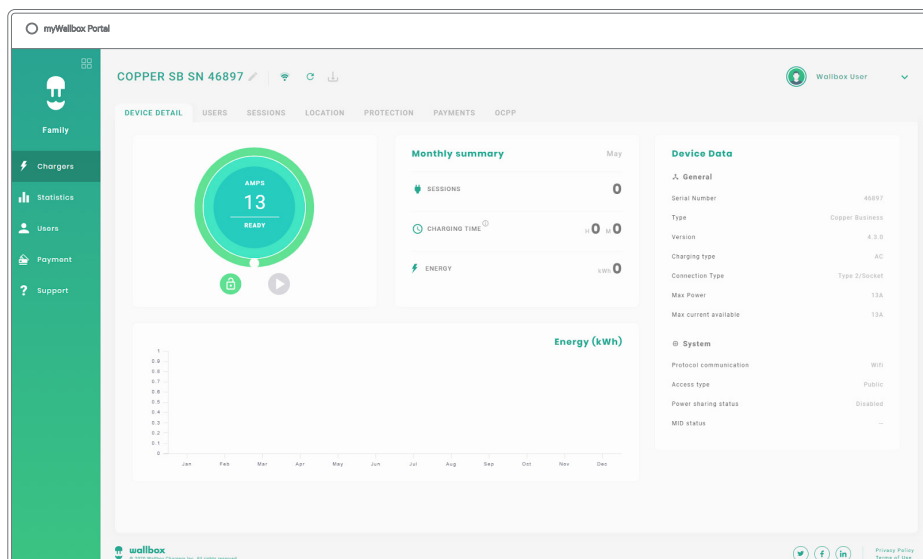
myWallbox Portal

To complete the OCPP setup using myWallbox portal perform the following steps:

1. Log in to the myWallbox portal and access the charger's page

2. Select the required charger and ensure it's connected to the network.

3. Enter the charger status page and click the OCPP tab.

Note: If the charger is not compatible with OCPP, the OCPP tab will not be displayed.

myWallbox Portal

4. Set the OCPP parameters and press the "SAVE" button

- Enable: On / Off switch
- URL: Central System connection endpoint (required field)
- Charge Point Identity: Charge point ID (required field)

Note: The charger will automatically reboot and new configuration will be applied

OCPP Connection Status

The status of the OCPP connection between the charger and the Central System is shown in myWallbox App and Portal as:

OCPP — The OCPP is activated and the charger is connecting to the Central System

OCPP — The charger is connected through OCPP to the Central System

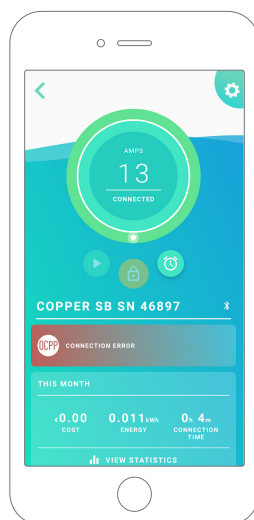**OCPP** — The Charge Point can not establish the connection with the Central System

myWallbox App
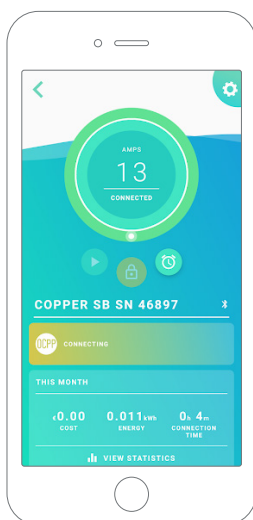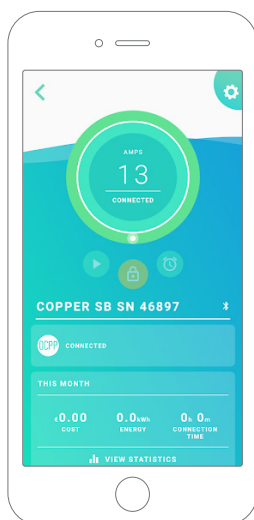
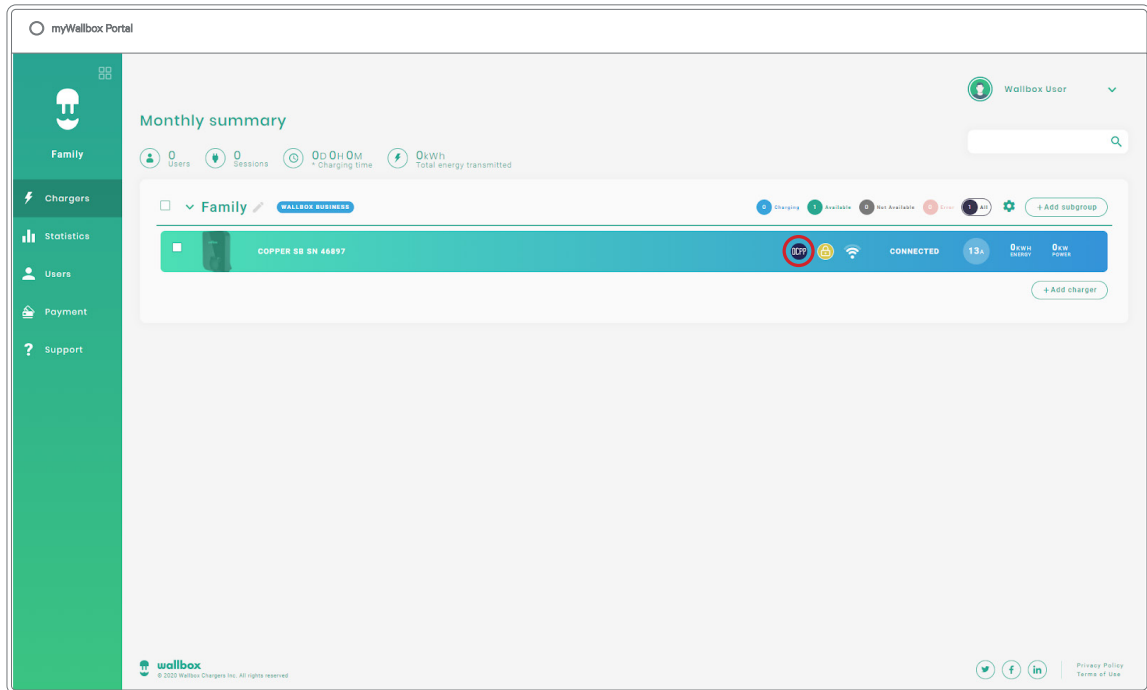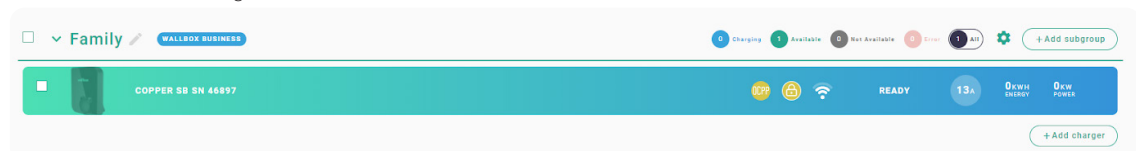*OCPP Connecting*   *OCPP Connected*   *OCPP Connection Error*
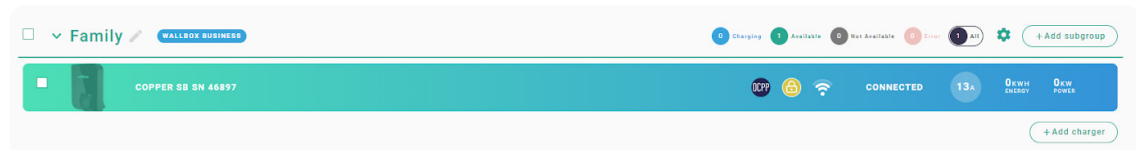
myWallbox Portal
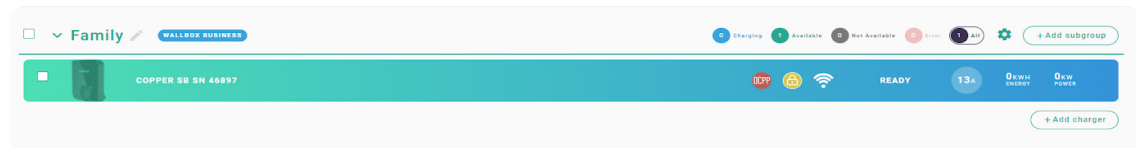
Chargers' List

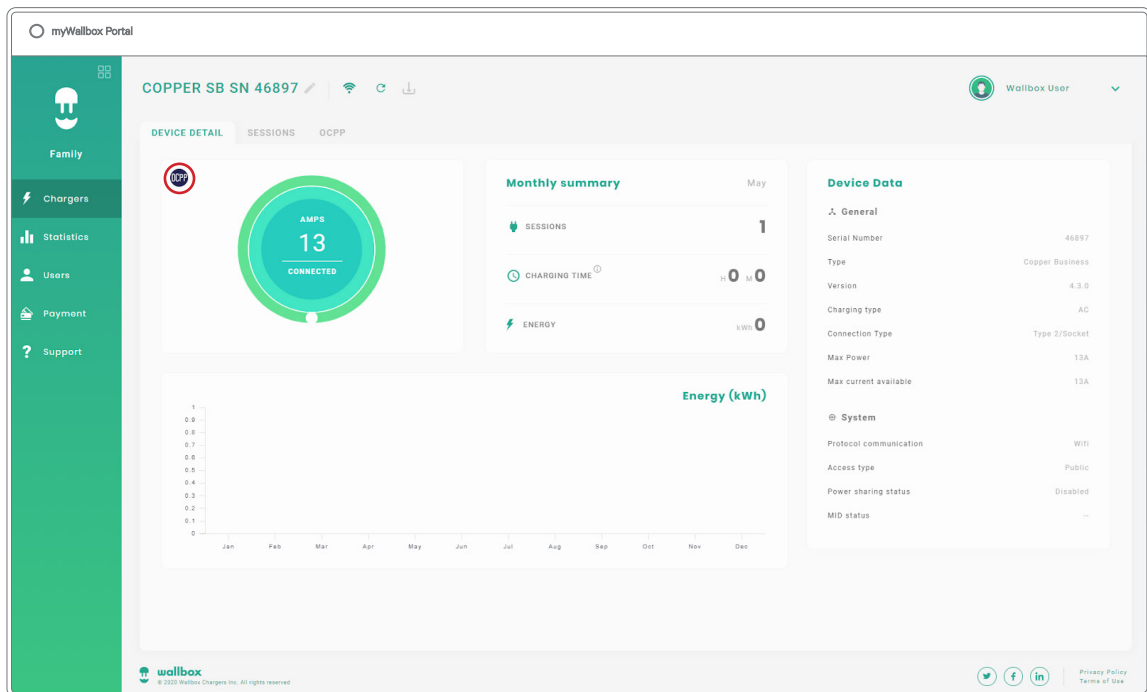### 1. OCPP Connecting

2. OCPP Connected
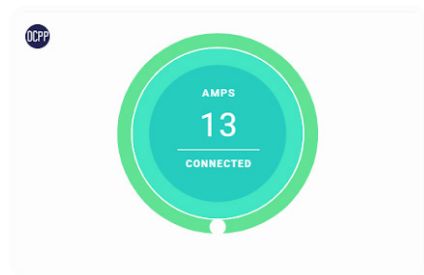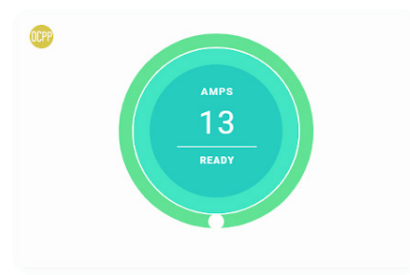

3. OCPP Connection Error
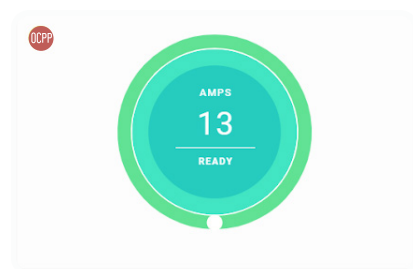
myWallbox Portal

Chargers' Details

1. OCPP Connected

2. OCPP Connecting

3. OCPP Connection Error

OCPP Functionalities

Copper SB implements the beneath OCPP 1.6j Core profile functions as described in the "OCPP 1.6 Edition 2" specification:

- Authorize
- Change availability
- Get / Change configuration
- Status notification
- Heartbeat

- Transaction start / stop
- Remote start / stop transaction
- MeterValues
- Reset

How to use the charger

Action	Copper SB	Pulsar Plus
Charge point will be locked while available	🟡	🟡
Show your authorized RFID card to the RFID reader or unlock the charger with the CPO App	📇 /App	App
Once authorized, the charger will unlock	⚪	🟢
Connect your EV charging cable to the Charge Point	🟢	N/A
Connect your EV cable to the EV	🔵	🔵
Charge process will start	🔵	🔵
Use the same RFID card, or the CPO App, to stop the charging process	🔵	🔵
Disconnect your EV cable from the Charge Point and from the EV	🟡	🟡

LED

RFID

SOCKET
OUTLET

LED HALO

BODY

FRONT COVER

Notes:
- *Other procedures could be defined by your Charge Point Operator.*
- *Mifare UID shall be introduced in Central System's authorization whitelist as little-endian.*

OCPP and myWallbox

To keep aligned with the OCPP specification, some Wallbox functionalities are not available when OCPP is enabled. Non-conflicting functionalities will always remain available at myWallbox App and Portal.

myWallbox cloud will continue gathering all the information regarding the Charge Point status and usage for a faster and better after sales service as well as managing the remote updates of the Charge Point.

Features	Available when OCPP Enabled
Charger List Monitoring	✓
Charger Detail Dashboard	✓
Statistics	✓
User Authorization White-list	✗
Payments Solution	✗
Remote diagnostics	✓
Lock / unlock of the charger	✗
Play / pause of the charger	✗
Set current limit	✓
Software update	✓
Restart (charger reboot)	✓
Restore (factory conditions)	✓
Bulk actions: • Add chargers • Add users • Software update • Restart	✓
Charging schedules	✓
Power Sharing Smart	✓
Dynamic Power Sharing	✓
MID Meter	✓
Power Boost	✓
TN/TT Ground system	✓

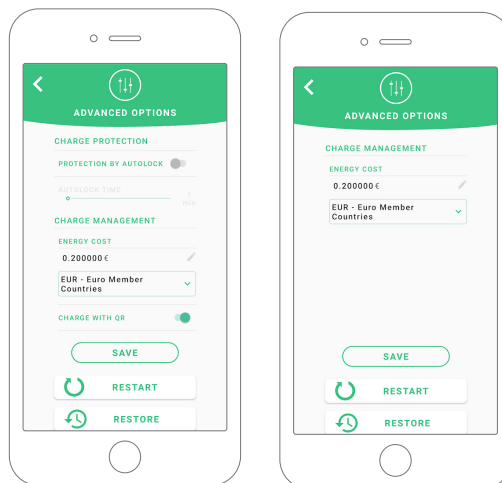*Note: These features will not be available if the network connection is in a VPN.*

Note: Wallbox functionalities will remain available according to your myWallbox plan: "Basic", "Standard" and "Business".

myWallbox App

1. The charger status screens for OCPP not activated and activated
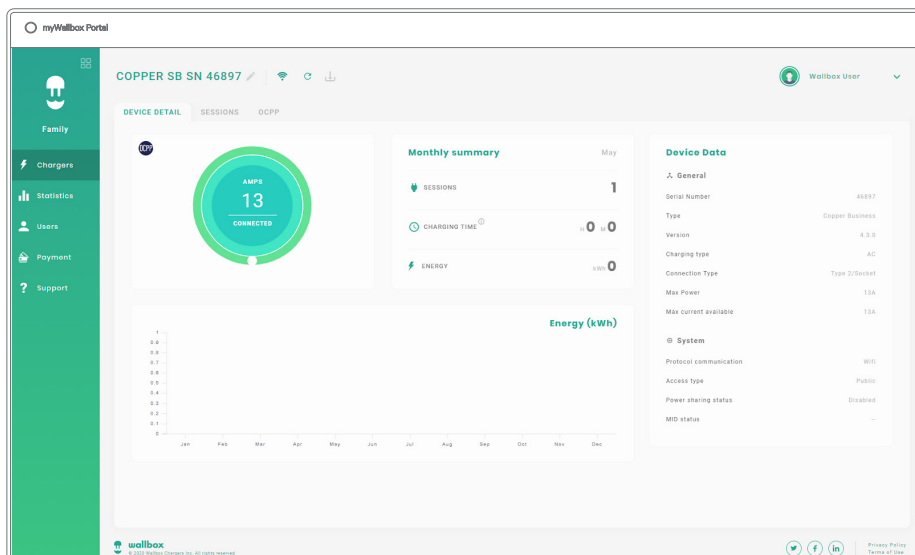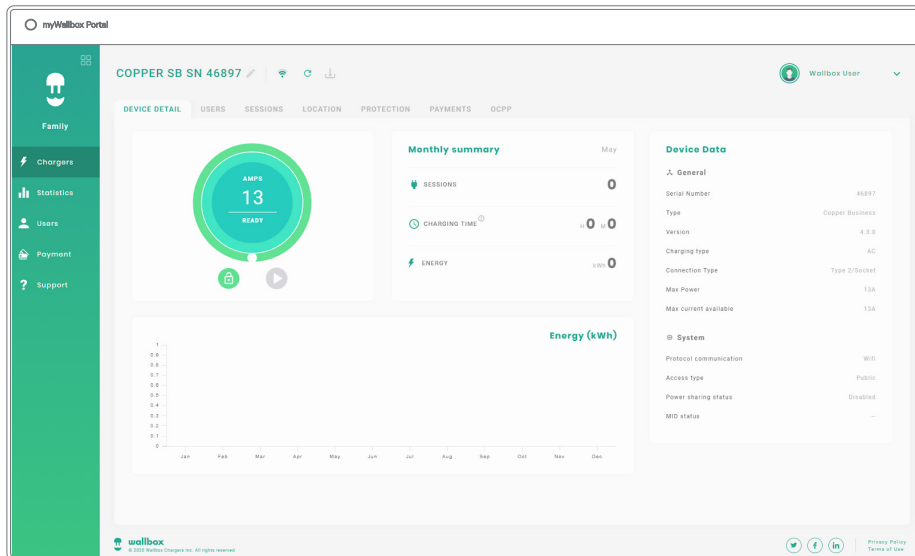

2. Advanced options setup

wallbox

OCPP and myWallbox functionalities Compatibility

myWallbox Portal

1. The charger status screens for OCPP not activated and activated

Find frequently asked questions at: https://support.wallbox.com/article-tags/faqs/

wallbox

Connection to myWallbox in a VPN scenario

In order to keep all myWallbox features available in a VPN scenario, including among others remote diagnostics and remote software updates, the CPO SHALL allow charger connection to myWallbox Cloud by opening:

- Domains: *.wall-box.com
- Ports: 443 and 80
- Access: Outbound

Troubleshooting

OCPP connection status remains in "Connecting"

Check network connection status and OCPP parameters setup

I can not start a new charge

Check OCPP connection status, RFID authorization and Charge Point availability with your Charge Point Operator

Service

Need more assistance? You can reach out to us:

België/Belgique	France	Norge	Schweiz/Suisse
+32 2 808 88 28	+33 1 76 46 09 15	+47 51 74 20 00	+41 43 508 06 75
Danmark	Ireland	Portugal	Sverige
+45 89 87 87 15	+353 14 854 347	+351 308 801 440	+46 852503203
Deutschland	Italia	Österreich	United Kingdom
+49 69 96759775	+39 011 1962 2461	+43 720882116	+44 20 3318 3779
España	Nederland		
+34 932 20 95 75	+31 20 808 0847		

service@wallbox.com   www.wallbox.com

wallbox