

# Open Charge Point Protocol v2.0

ACTIVATION GUIDE ENGLISH

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# wallboy

# 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
СР	The Charge Point is the physical system where an electric vehicle can be charged.
СРО	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]



# **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	Ρ1	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: <u>https://support.wallbox.com/article-categories/copper-sb/</u>

### **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: <u>https://support.wallbox.com/article-categories/mywallbox/</u>

# **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 to 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



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.

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

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



4. Set the OCPP parameters and press the "SAVE" button  $% \left( \left( {{{\rm{AVE}}} \right)^2} \right)$ 

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- 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:



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



The charger is connected through OCPP to the Central System



The Charge Point can not establish the connection with the Central System

# myWallbox App



OCPP Connecting

OCPP Connected



OCPP Connection Error

#### **Chargers'** List

myWallbox Portal			
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#### **Chargers' Details**









# **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

			LED
Action	Copper SB	Pulsar Plus	
Charge point will be locked while available			wallbox
Show your authorized RFID card to the RFID reader or unlock the charger with the CPO App	/App	Арр	RFID SOCKET
Once authorized, the charger will unlock			OUTLET
Connect your EV charging cable to the Charge Point		N/A	
Connect your EV cable to the EV			LED HALO
Charge process will start			wallbox
Use the same RFID card, or the CPO App, to stop the charging process			FRONT COVER
Disconnect your EV cable from the Charge Point and from the EV			

## How to use the charger

#### 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)	<ul> <li>Image: A start of the start of</li></ul>
Restore (factory conditions)	~
Bulk actions: • Add chargers • Add users • Software update • Restart	~
Charging schedules	<ul> <li>Image: A start of the start of</li></ul>
Power Sharing Smart	✓
Dynamic Power Sharing	✓
MID Meter	<ul> <li>Image: A start of the start of</li></ul>
Power Boost	<ul> <li>Image: A start of the start of</li></ul>
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





# OCPP and myWallbox functionalities Compatibility myWallbox Portal

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

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

## 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:

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