

**circontrol**

# User Manual

eVolve Smart Series



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# Wallbox & Post eVolve Smart User Manual

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# Here's your guide to use and configure eVolve Smart

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# 1

This manual provides information about the usability and configuration of the Wallbox and Post eVolve Smart, which has been designed and tested to allow electric vehicle charging, specified in IEC 61851.

It contains all the necessary information for safe use and help to get the best performance from it with step-by-step configuration instructions.

## THE FOLLOWING SYMBOLS ARE USED FOR IMPORTANT SAFETY INFORMATION IN THIS DOCUMENT



### ATTENTION!

Indicates that the damage to property can occur if appropriate precautions are not taken.



### INFORMATION

Informs about useful information to take on account.

- Complies with IEC 61851, Electric vehicle conductive charging system (IEC 61851-1 and IEC 61851-21-2).
- Complies with IEC 62196, Plugs, socket-outlets, vehicle couplers and vehicle inlets (IEC 62196-1 and IEC 62196-2).
- Complies with Directives: 2014/35/EU, LVD;2014/30/EU, EMC.
- Complies with *The Electrical equipment (safety) regulations 2016 guidance* and *The Electromagnetic compatibility regulations 2016 guidance*
- RFID complies with ISO/IEC 14443A/B.
- RFID and Modem 4G complies with 2014/53/EU, RED; and *Radio Equipment Regulations 2017*.

# So, hello!

## IMPORTANT SAFETY INFORMATION



Read carefully all the instructions before manipulating the unit.

The Charge Point may not include elements of electrical protection.

- Read all the instructions before using and configuring this product.
- Do not use this unit for anything other than electric vehicle charging.
- Do not modify this unit. If modified, CIRCONTROL will reject all responsibility and the warranty will be void.
- Comply strictly with electrical safety regulations according to your country.
- Do not make repairs or manipulations with the unit energised.
- Only trained and qualified personnel should have access to electrical parts inside the device.
- Check the installation annually by a qualified technician.
- Remove from service any item that has a fault that could be dangerous for users (broken plugs, caps that don't close...).
- Use only Circontrol supplied spare parts.
- Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
- Adaptors or conversion adaptors and cord extensions set are not allowed to be used.

## 2

### A General

**Authorisation:**

Procedure to verify if an EV is allowed to charge.

**Charge Point (also EVSE, Electric vehicle supply equipment)**

Independently operated and managed part of the Charging Station that can deliver energy to ONE EV at a time. A Charge Point has one or more connectors.

**Charging Schedule:**

Part of a Charging Profile. Defines a block of charging power or current limits. Can contain a start time and length.

**Charging session:**

A Charging Session is started when first interaction with user or EV occurs. This can be a card swipe, remote start transaction, connection of cable and/or EV, parking bay occupancy detector, etc.

**Identification:**

Procedure for the EV charging controller or USER to provide its identifying information for the purpose of authorisation, mostly to provide its capability for payments.

**Locking mechanism:**

A mechanical mean that prevents from intentional and unintentional disconnection under load of the vehicle connector and/or plug.

**Plug:**

Accessory having contacts designed to engage with the contacts of a socket-outlet, also incorporating means for the electrical connection and mechanical retention of flexible cables or cords.

**Plug and Charge:**

Charging method where Charging Session is started without any local identification.

**Power balance:**

Local management of the available power of the input supply of the Charging Station.

# Glossary

**Socket-outlet:**

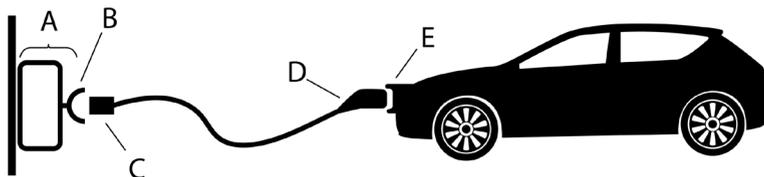
Accessory having socket-contacts designed to engage with the contacts of a plug and having terminals for the connection of cables or cords.

**User:**

Party who will specify, purchase, use and/or operate the Charging Station, or someone acting on their behalf.

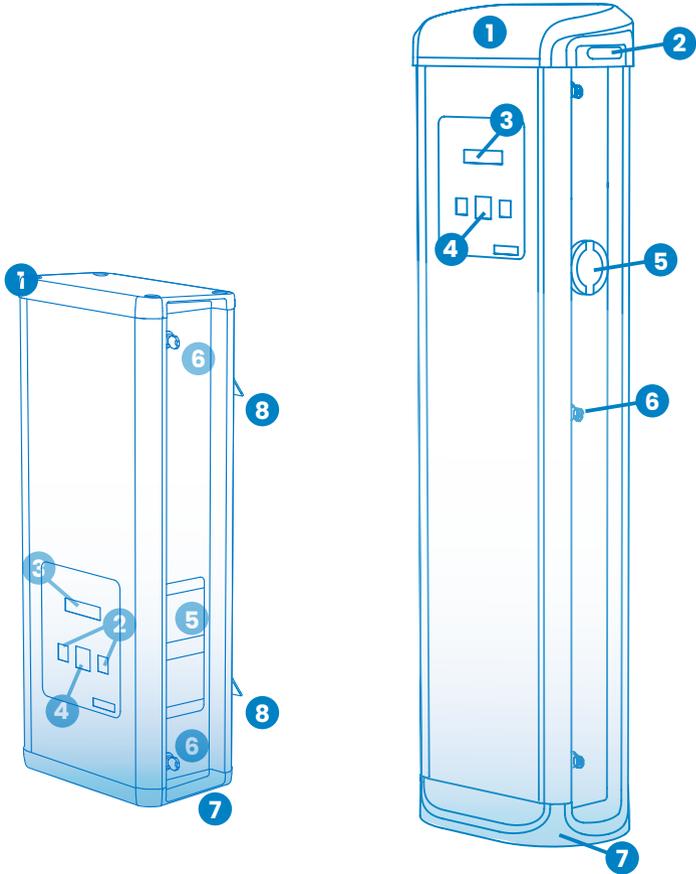
## **B** Abbreviations

- **AC:**  
Alternating current.
- **DC:**  
Direct current
- **EV**  
Electric vehicle
- **HMI:**  
Human machine interface
- **http(s):**  
HyperText Transport Protocol (Secure)
- **MCB:**  
Miniature circuit breaker
- **OCPP**  
Open Charge Point Protocol
- **RCD**  
Residual Current Device
- **RFID**  
Radiofrequency identification
- **Type 2**  
EU AC charging connector



- A) Charging Station
- B) Socket-outlet
- C) Plug
- D) Vehicle connector
- E) Vehicle inlet

# 3



**1 – Hat**

**4 – RFID Reader**

**7 – Base**

**2 – LED Beacons**

**5 – Socket-outlet\***

**8 – Wall support**

**3 – Display LCD**

**6 – Key lock access**

(\* ) Socket-outlet may vary depending on the model

# Features

## MAIN FEATURES OF THE UNIT

Charge Point may not include elements of electrical protection.

- **Display:** Information about the status of the connectors and detailed data as kWh and duration time.
- **Connector Lock:** Type 2 connector has a lock system to avoid disconnection of EV meanwhile is charging.
- **Light beacon:** RGB led indicates the status of the connectors.
- **RFID:** User authentication.
- **Ethernet:** TCP/IP communication for remote supervision and configuration.
- **Wi-Fi connection:** To avoid using Ethernet cable.
- **4G Modem (optional):** For those places where wired communications are not sufficient.
- **Energy metering:** Integrated meter built is measuring power and energy consumed by the EV during a charge transaction.
- **Remote access:** For supervision and control from everywhere.
- **Chargetransactionhistorics:** Charge Point is capable of storing information about the charge transactions.
- **OCPP:** Open standard communication protocol, allows communication between the Charge Point and the Central System.

# 4

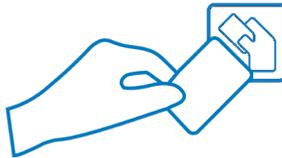
## A Before Start Charging

Before doing anything, the Charge Point's Display shows the following sequence of messages:

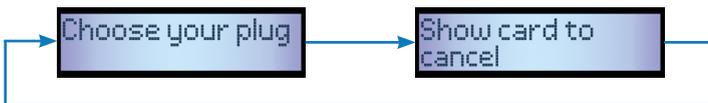


## B Start Charging

1. The first step is to **show the RFID card** to the reader\*



Once done, the Led Beacon turns **Blue** and the Display shows the following sequence of messages:



\*If the RFID card reader is disabled, charge transaction starts automatically when a vehicle is detected.

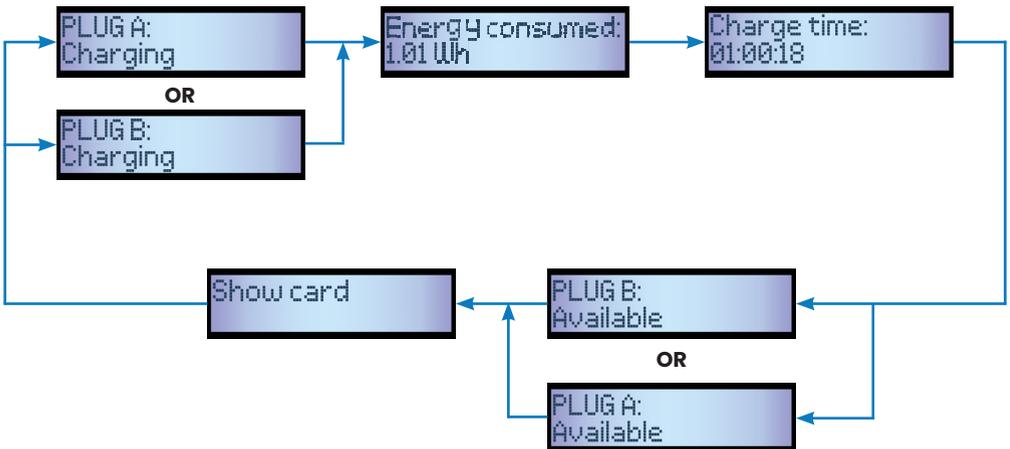
# How to use it?

2. Plug the **cable to the vehicle**, choose one available socket (in case there are more than one) and plug the **cable to the Charge Point**.

Once done, the Display shows the following message:

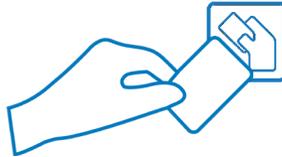


After the last message, the Display shows the following sequence of messages while charging:



# Stop Charging

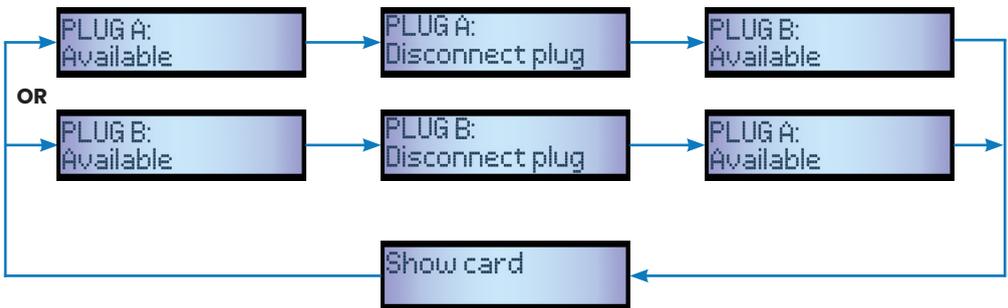
1. The first step is to **show the RFID card** to the reader\*



Once done, the Led Beacon turns **Green** and the Display shows the next message:



After the last message, the Display shows the next sequence:



\*If the RFID card reader is disabled, charge transaction stops automatically when a cable is disconnected from the vehicle.

2. **Unplug** the cable from both sides.

Once done, the connector becomes available and the Display shows the following sequence of messages:



# 5

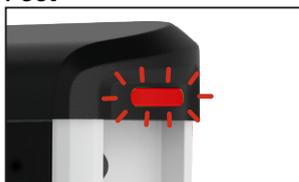
The eVolve Smart is capable of detecting the following operating errors. All of them will be displayed with a specific number of red light blinks:

- D state Error
- E state Error
- Proximity Error
- Negative PWM voltage Error
- Non-current selected Error (Dip-Switch)
- Welded contact Error
- Locking System Error
- Communication Error
- No input voltage Error
- Maximum temperature Error
- Minimum temperature Error

*Wallbox*



*Post*



Whatever the error case is, the Charge Point will stop charging and technical assistance will be required, except from the temperature errors. In this last case, the Charge Point starts charging when the operating temperature is reached again.

In the following sections it will be explained how the eVolve indicates the above mentioned errors and the actions taken by the Charge Point.



Please note each LED beacon is independent of the other.

## 1 – D STATE ERROR

In some old EVs, this state means that there are some gases coming out from the batteries. So, an external ventilation in the car park might be required. If this is the case, the status LED bar flashes permanently.

**1** Blink Sequence

# Status LED beacons' errors

## 2 – E STATE ERROR

This means that there has occurred a communication error between the EV and the Charge Point. If this is the case, the status LED light bar flashes in a sequence of two blinks.

**2** Blink Sequence

## 3 – PROXIMITY ERROR

When the Charge Point is connected to the EV, a Proximity short-circuit to earth may occur. Then, the status LED light bar turns flashes in a sequence of three blinks.

**3** Blink Sequence

## 4 – NEGATIVE PWM VOLTAGE ERROR

When the Charge Point is connected to the EV, the PWM signal, used to communicate the Charge Point with the EV, can be negative. Then, the status LED light bar flashes in a sequence of four blinks.

**4** Blink Sequence

## 5 – NON-CURRENT SELECTION ERROR (DIP-SWITCH)

If the on-board current limit selection is not set up according to the hardware features, the Charge Point detects it and shows this error. In this case, the status LED light bar flashes in a sequence of six blinks.

**6** Blink Sequence

## 6 – WELDED CONTACT ERROR

An internal short-circuit has been detected. In this case, the status LED light bar flashes in a sequence of seven blinks.

**7** Blink Sequence

## 7 – LOCKING SYSTEM ERROR

This may occur if the connector is not properly connected to the socket-outlet. In this case, the status LED light bar flashes in a sequence of eight blinks.

**8** Blink Sequence

## 8 – COMMUNICATION ERROR

This means that there has occurred a communication error. If this is the case, the status LED light bar flashes in a sequence of nine blinks.

**9** Blink Sequence

## 9 – NO INPUT VOLTAGE ERROR

This means that there is not input voltage going through the Mode 3 PCB. If this is the case, the status LED light bar flashes in a sequence of ten blinks.

**10** Blink Sequence

## 10 — MAXIMUM TEMPERATURE ERROR

When the Charge Point's temperature is above a certain value, the status LED light bar flashes in a sequence of eleven blinks. If this is the case, the Charge Point will not be operating, temperature is too high to charge, so you will have to wait until the operating temperature is reached. Then Charge Point starts charging again.

**11 Blink Sequence**

## 11 — MINIMUM TEMPERATURE ERROR

When the Charge Point's temperature is below a certain value, the status LED light bar flashes in a sequence of twelve blinks. If this is the case, the Charge Point will not be operating, temperature is too low to charge, so you will have to wait until the operating temperature is reached. Then Charge Point starts charging again.

**12 Blink Sequence**

## 12 — TAMPER ERROR

This means that the Charge Point has been opened accidentally or without pulling out the tamper (Maintenance position).

**Fixed LED Bar**

# 6

## A Introduction

The Charge Point can be configured and monitored to establish preferences or specific setup using integrated Ethernet communication port allocated in the main controller device.

## B What's needed

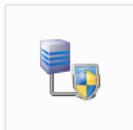
Before proceeding with the configuration, make sure all the following is ready:



Computer running Microsoft Windows, at least Windows XP .



UTP Cable



IPSetup.exe

IPSetup.exe (Software provided by Circontrol)

# How to configure it?

## ③ Connection

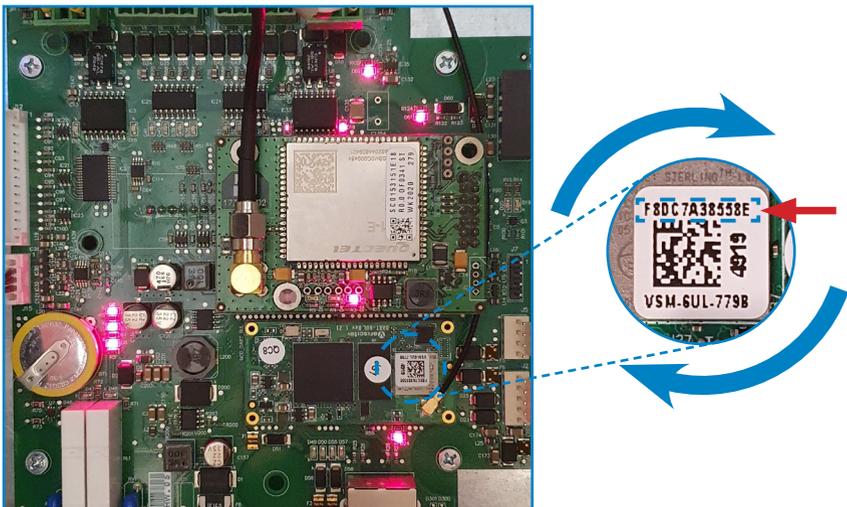
Charge Point is delivered with default network setting of "DHCP enabled". It means that the charge station will try to obtain an IP address from a DHCP server available on the network.

Connecting a PC directly with the Charge Point needs to be done with static IP address. The PC and the Charge Point must be in the same network and in the same range.

In order to change the IP of the Charge Point, use "IP Setup".

- Enter the MAC of the device

Follow the image below to locate the MAC:



- Enter the desired IP Address
- Click on “Configure”



Once done, the Setup Webpage is opened automatically on the default web browser.

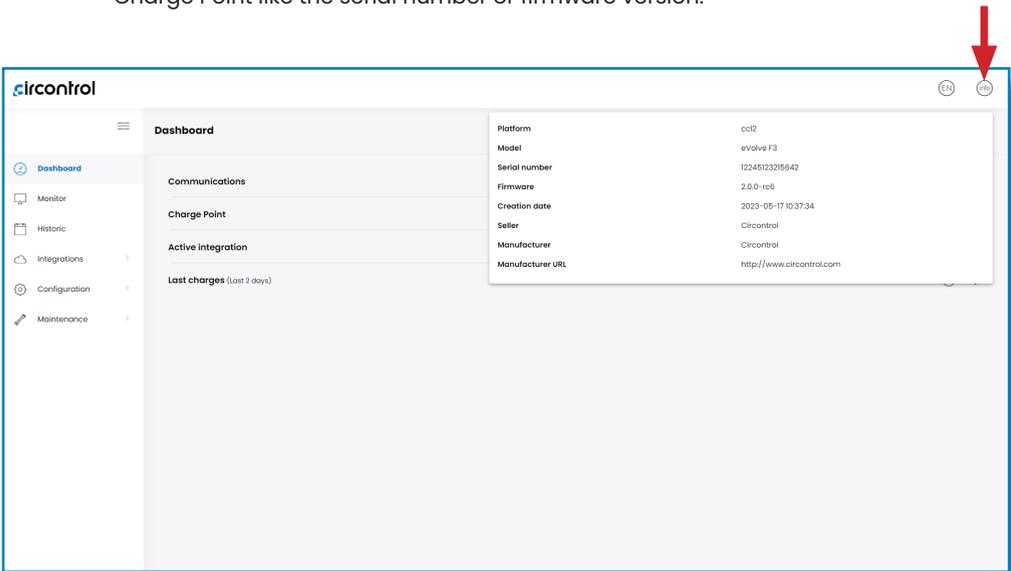
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# 7

Setup webpage allows managing network setup, upgrading devices and other options.

To access the setup web page, open a web browser and enter the IP address previously configured.

In the main page, **'Info'** button shows some relevant information about the Charge Point like the serial number or firmware version.



 Please remember to save your changes before switching at another option.

# Setup Webpage

## A Dashboard

### Overview

As a relevant information, Dashboard shows different states of:

- Communications
- Charge Point
- Active Integration
- Last charges

The screenshot displays the circontrol dashboard interface. On the left is a navigation sidebar with options: Dashboard, Monitor, Historic, Integrations, Configuration, and Maintenance. The main content area is titled 'Dashboard' and contains several status cards:

- Communications:** Shows three indicators: Ethernet (CONNECTED, 192.168.1.50, F8DC:7A:38:95:8E), Modem Int. (DISABLED), and Wi-Fi (DISCONNECTED).
- Charge Point:** Shows a vertical battery icon and a status indicator for 'Available'.
- Active integration:** Shows a cloud icon and two status indicators: 'OCPP 1.6J' (Available) and 'Offline'.
- Last charges (last 2 days):** A table with the following columns: Begin date, End date, Charge time, Energy (kWh), Identifier, Plug, and Stop reason.

### Communications

The information shown in this section is basically relative to the state of the Ethernet, Modem and Wi-Fi communications.



### Charge Point

The information shown in this section is basically relative to the state of the Charge Point.



### Active Integration

The information shown in this section is basically relative to the state of the integrations.

The chosen integration can also be seen once selected.



## Last Charges (Last 2 days)

The information shown in this section is basically relative to the charges of the last 2 day.

Relevant information will be displayed for each charge.

Last charges (last 2 days)						
Begin date	End date	Charge time	Energy (kWh)	Identifier	Plug	Stop reason

## **B** Monitor

This section provides the status of the Charge Point, the type of connectors it has and the availability of them. It is also possible to change the following states:

- Start/Stop
- Lock/Unlock
- Enable/Disable

The screenshot shows the 'Monitor' section of the Circontrol interface. On the left is a navigation menu with options: Dashboard, Monitor (selected), Historic, Integrations, Configuration, and Maintenance. The main content area is titled 'Monitor' and shows a 'Charge Point' status as 'Available' with a green dot. Below this are two sections for sockets:

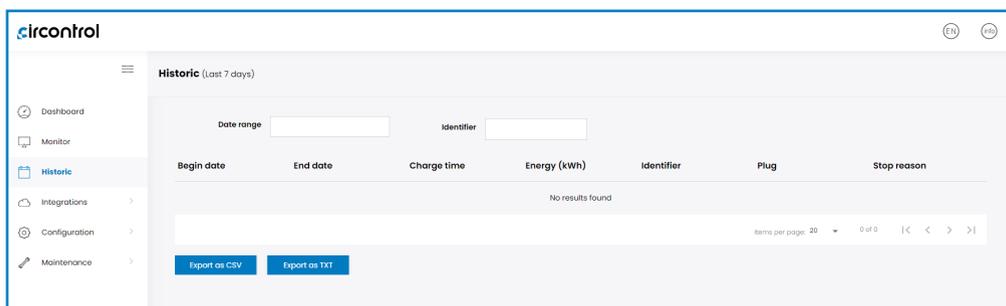
- PLUG A - SOCKET A:** Status: Available (green dot), Lock: Unlocked (lock icon), Availability: Enabled (checkmark icon). Action buttons: Start, Lock, Disable.
- PLUG B - SOCKET B:** Status: Available (green dot), Lock: Unlocked (lock icon), Availability: Enabled (checkmark icon). Action buttons: Start, Lock, Disable.

## **Historic**

This section provides relevant information on each charge made up to the 7 last days.

It can be checked date and hour of begin and end of a charge transaction, energy charged, alias of the user and type of charge used.

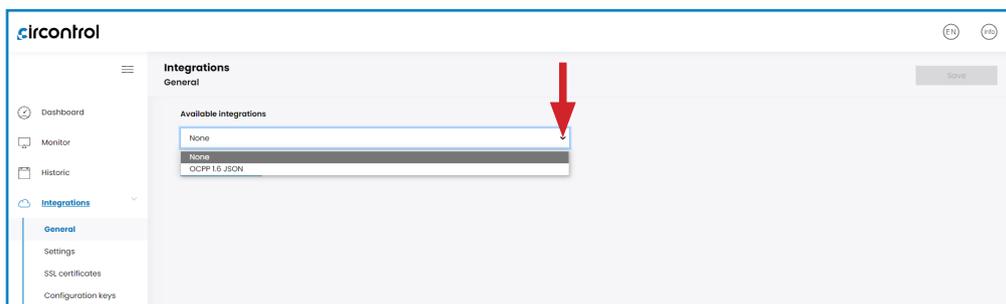
It is also possible to export this information to a 'CSV' or 'TXT' file.



## **Integrations**

### **General**

Clicking over the '**Available Integrations**' tab, user will be able to activate OCPP integrations.

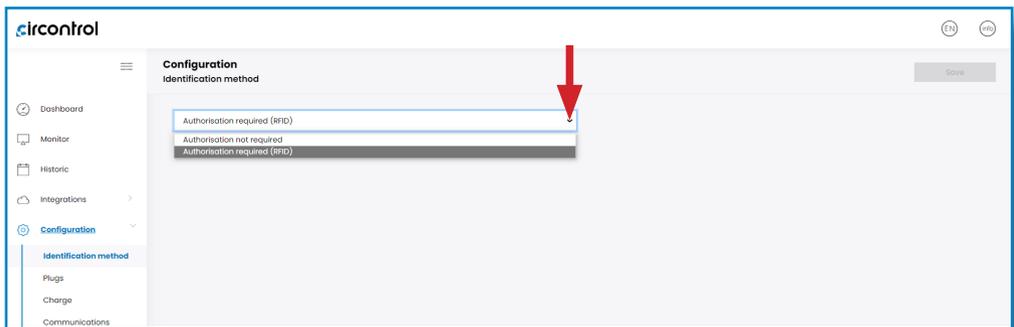


For more information about the parameters and configuration, please refer to '**OCPP 1.6J**' chapter of this manual.

# E Configuration

## Identification method

This section allows the user to select whether the Charge Point needs authorisation via RFID or not.



## Plugs

This section provides the current limit of each plug. This current limit can be modified by just pressing the desired plug and the 'Edit' button. Then, write the desired value.

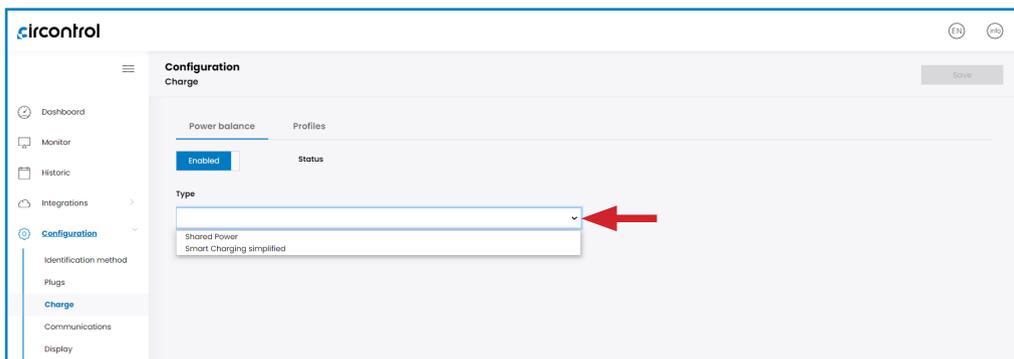


## Charge

In the **'Power Balance'** section, it can be enabled the status of the Charge Point.

Two different options can be allowed after enable the status:

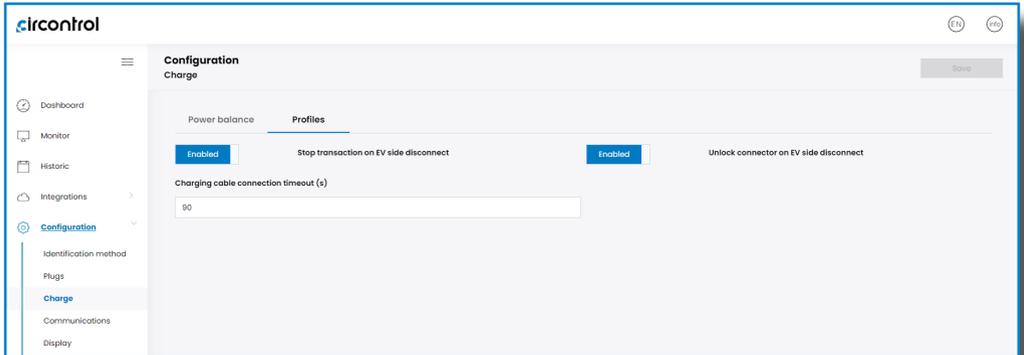
- Shared Power: it indicates the power available to divide between the connected vehicles.
- Smart Charging Simplified: the power balance is made via OCPP.



In the **Profiles** section, the following options can be enabled or disabled:

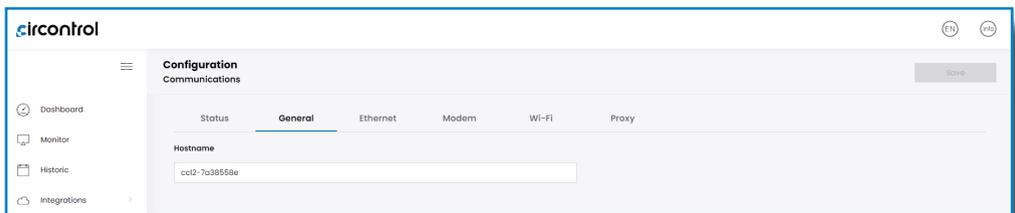
- Stop transaction on EV side disconnect.
- Unlock connector on EV side disconnect.

It is also possible to set a timeout for the charging cable connection.



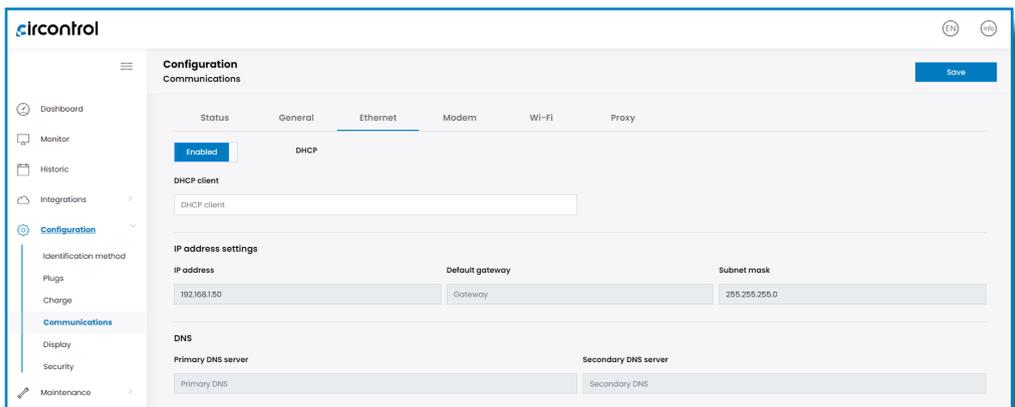
## Communications

In the **General** section, Hostname can be modified.



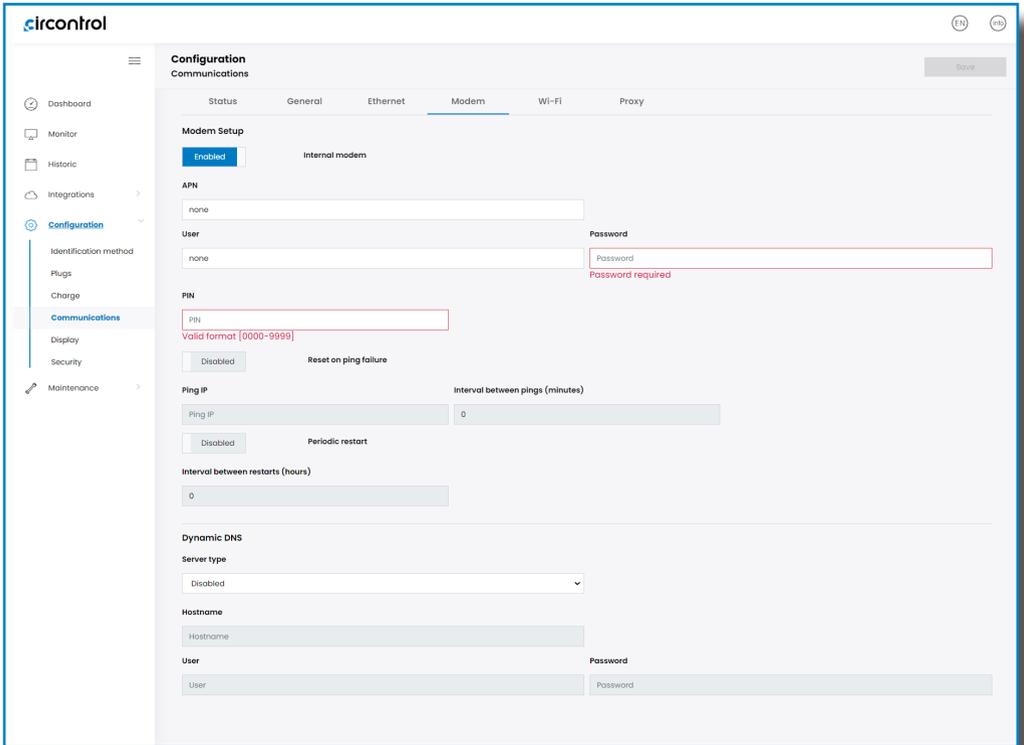
In the **Ethernet** section, if DHCP is enabled, an automatic IP address will be assigned.

Otherwise, you must manually configure the IP address.



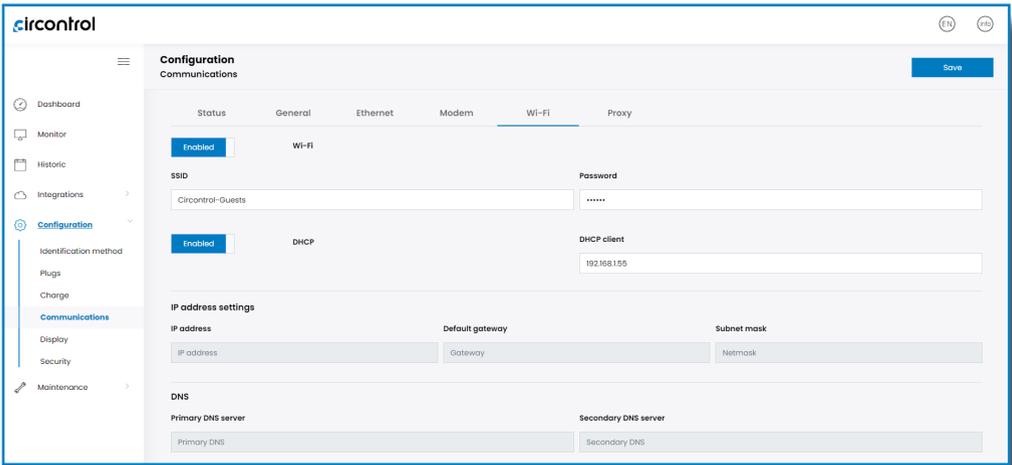
Value	Description
DHCP Client	Client ID associated to the DHCP server (if enabled).
IP Address	IP Address assigned to the Charge Point.
Default Gateway	Gateway of the network.
Subnet Mask	Mask of the network.
Primary DNS Server	IP address of the Primary DNS Server.
Secondary DNS Server	IP address of the Secondary DNS Server, if any.

Insert the SIM card into the modem before configuring the cellular communications in the **Modem** section.



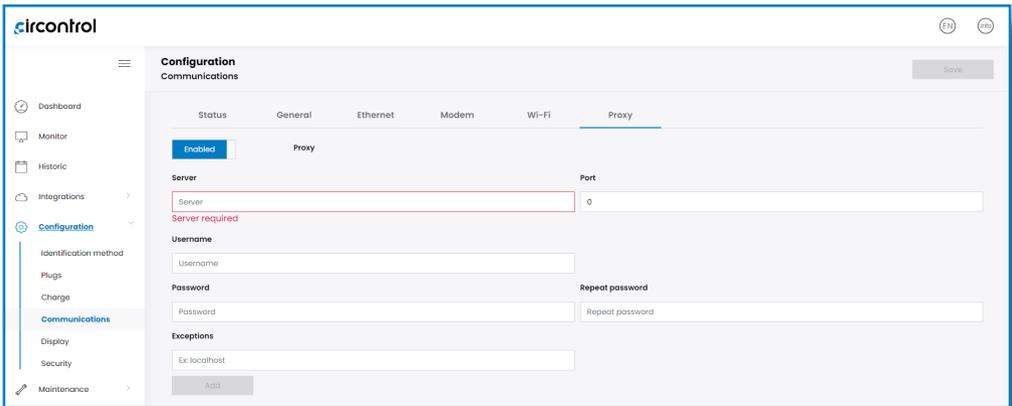
Value	Description
Internal modem	Enable/Disable Modem communication.
APN	Access Point Name (consult the SIM card provider).
User/Password	Credentials assigned to the APN (consult SIM provider). <b>Note:</b> if credentials are not needed, insert "1234" on both fields.
PIN	Consult the SIM card network provider for the PIN.
Reset on ping failure	Enable/disable to reset the Modem when there is a ping failure.
Ping IP	IP address where the Charge Point pings.
Interval between pings (minutes)	Period between pings.
Periodic restart	Enable/Disable to restart the Modem each time it is specified.
Interval between restarts (hours)	Time to reset the modem and communications.
Server type	<b>Disabled</b> <b>DynDNS:</b> in addition to an IP, set a domain to access the Charge Point's WebSetup via DynDNS. <b>No-ip:</b> In addition to an IP, set a domain to access the Charge Point's WebSetup via No-ip.
Hostname	Name of the Charge Point on the network for the server type selected.
User/Password	Credentials assigned to the Dynamic DNS for the server type selected.

In the **Wi-Fi** section can be configured multiples settings such as the Wi-Fi Network where the equipment is connected and the IP address to access the Charge Point when connected to the Wi-Fi.



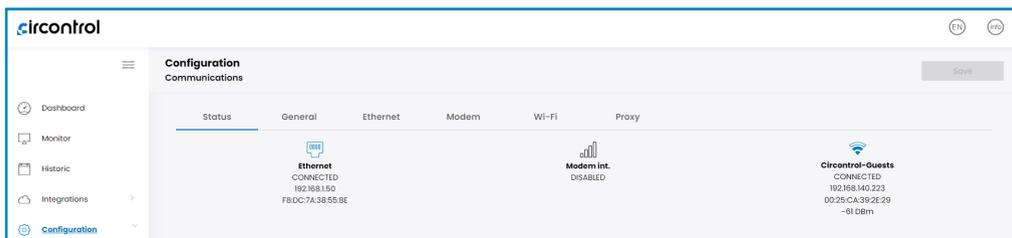
Value	Description
SSID	Name of the Wi-Fi network.
Passwords	Password of the Wi-Fi network.
IP Address	IP Address assigned to the Charge Point.
Subnet mask	Netmask of the network.
DHCP Client ID	Client ID associated to the DHCP server (if available).
Default Gateway	Gateway of the network.
Primary DNS Server	IP address of the Primary DNS Server.
Secondary DNS Server	IP address of the Secondary DNS Server, if any.

In the **Proxy** section, a server, with credentials and exceptions, can be configured as an intermediary between the connections with the Charge Point.



Value	Description
Server	IP of the proxy server.
Port	Port of the proxy server.
Username	Credentials of the proxy server.
Password/Repeat password	
Exceptions	Devices to avoid going through the proxy server.

In the **Status** section, the user can see the current state of Ethernet, Modem and Wi-Fi, and more relevant information about each one.

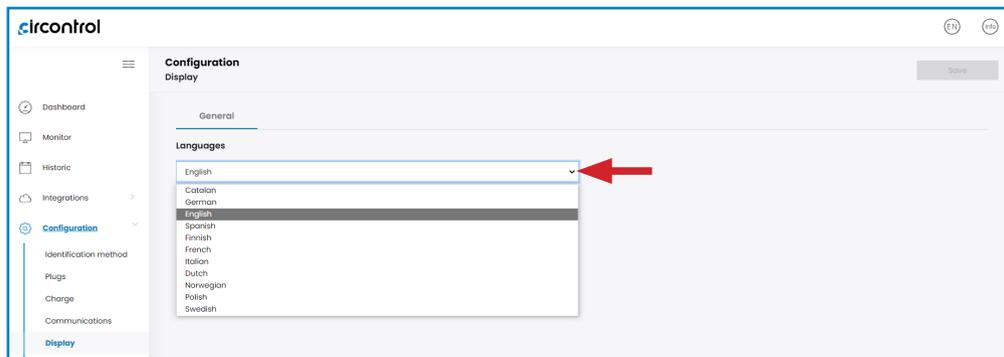


The following diagram shows an approximated range of signal strength that can be obtained depending on the location of the Charge Point.



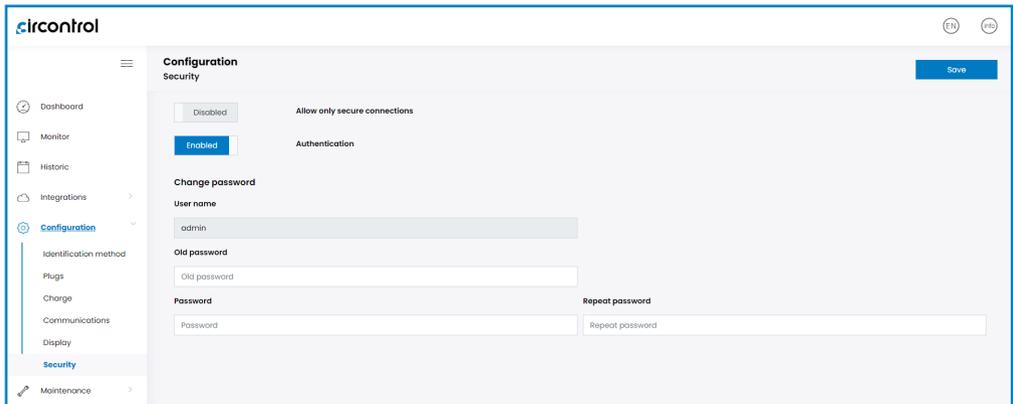
## Display

In this section, the language of the display can be chosen.



## Security

This section provides basic configuration of the security parameters, avoiding unauthorised access to the Setup Web page.



Value	Description
Allow only secure connections	<p><b>Enabled:</b> information transferred between Charge Point and laptop is strictly encrypted.</p> <p>Disabled: not possible to assure secure connections between Charge Point and laptop.</p>
Authentication	<p><b>Enabled:</b> credentials shown below are needed to enter the WebSetup.</p>
Old password	Section to change the password.
Password/Repeat password	

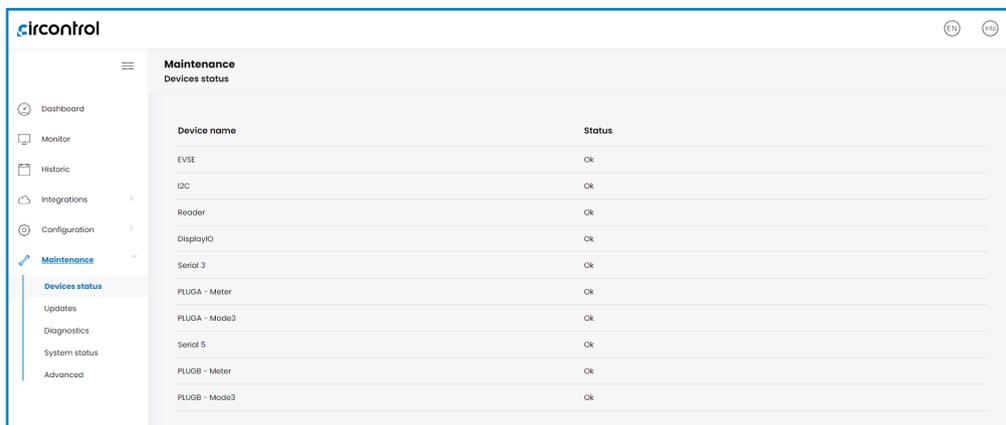


Do not forget the credentials. There is no way to restart the Charge Point to default factory settings.

# F Maintenance

## Device Status

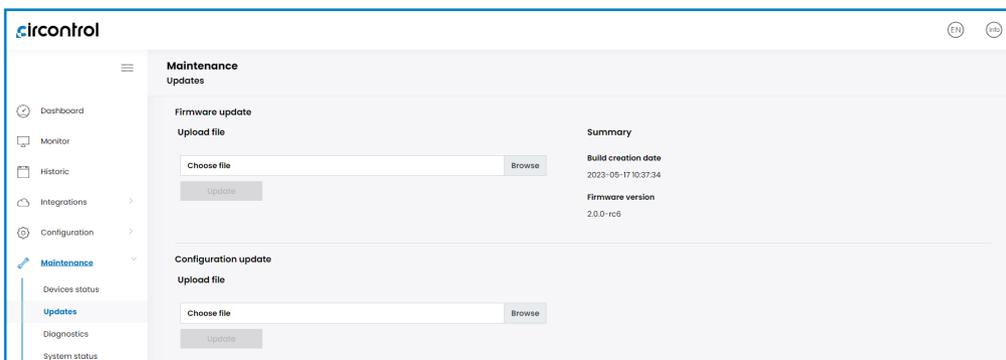
This section provides the status of some devices of the Charge Point.



## Updates

This section is related to the firmware and configuration updates. To upgrade to a new version, it is necessary to upload the file.

There is also a brief summary with relevant information.



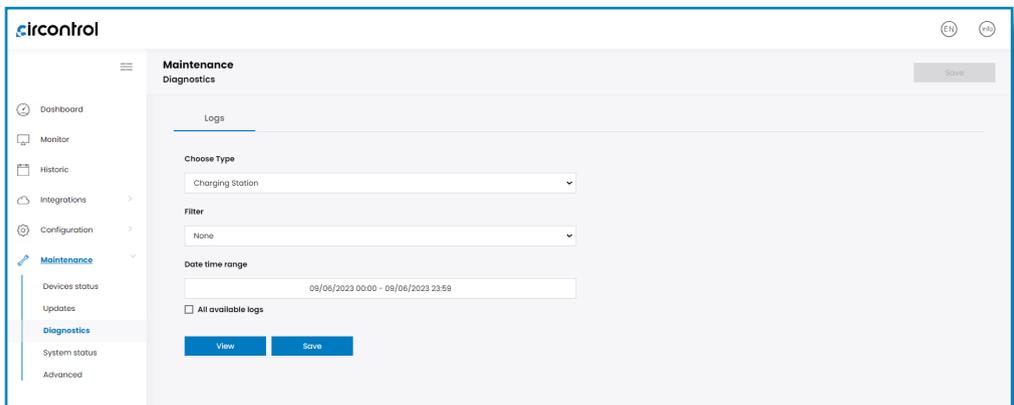


To obtain the latest firmware version and configuration file please contact CIRCONTROL **Post Sales Department**. More information in 'Need help?' chapter.

## Diagnostics

The logs shown in this section are automatically produced by the Charge Point. It is a detailed list of the charging sessions, system performance or user activities.

When Charge Point is powered ON, system begins to register log files. If the Charge Point is restarted, these logs are lost and immediately are created new ones.



## System Status

The information shown in this section is regard to the drivers that the Charge Point needs in order to recognize the different devices inside the Charge Point, such as the meters, the RFID reader, etc.

The information shown below, about the repository sources, is basically related to the internal behavior of the Charge Point.

This is necessary for the technical service staff but does not show any information regarding the external connection of the Charge Point or the charging session.

**iricontrol** Maintenance System status

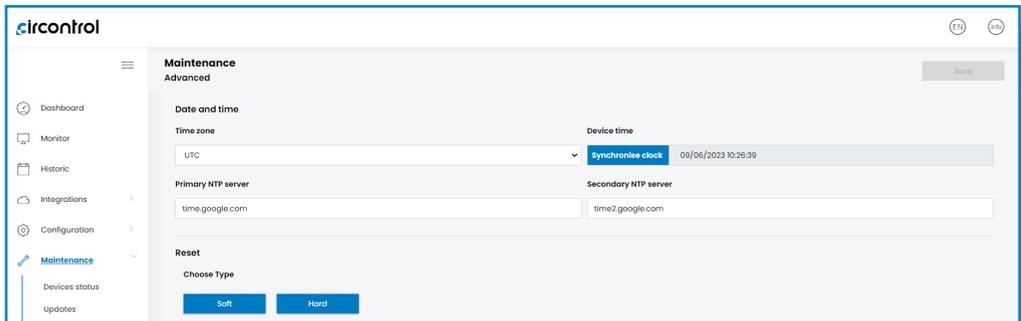
Uptime 32m 23s

**Drivers**

- CEM-4
- CCL2 Embedded
- CEM-C30
- CVM-MINI
- Display CCLi
- Generic Modbus
- MICD
- SMARTMETER
- TCP2RS ModbusTCP
- TWINREADER
- X2s
- CEM-8
- CEM-C10
- CHARGEDEMO
- CVM-NRG66
- Display CCLiMini
- LM-4
- MSCD
- TCPIRS-Plus
- TCP2RS TCP
- TWINREADER
- X2s Mix
- CCLi Engine
- CEM-C20
- CVM-ID
- Comms simulator
- EDMK
- LM-4A
- RS232/485
- TCP2RS
- TCP2RS-Plus
- Tag reader

## Advanced

This section allows setting the time and region time for the Charge Point. Also, it offers the possibility to reset the Charge Point.



Value	Description
Time zone	Select the regional time for the Charge Point according to the location.
Device time	Current date and time of the Charge Point.
Primary NTP server	Synchronize the time through internet automatically.
Secondary NTP server	
Reset	<p><b>Soft:</b> restart of the Charge Point, closing applications and clearing any data in RAM. Unsaved data in current use may be lost but data stored on the hard drive, applications and settings are not affected.</p> <p><b>Hard:</b> also known as a factory reset or master reset, is the restoration of the Charge Point to the state it was in when it left the factory.</p>

# 8

## A Introduction

The goal of the Open Charge Point Protocol (OCPP) is to offer a uniform solution for the communication between Charge Point and a Central System. With this open protocol it is possible to connect any Central System with any Charge Point, regardless of the vendor.

Follow and check the following steps in order to configure and to ensure the correct function of OCPP 1.6J in the Circontrol Charge Points.

# OCPP 1.6J

## **B** Before starting

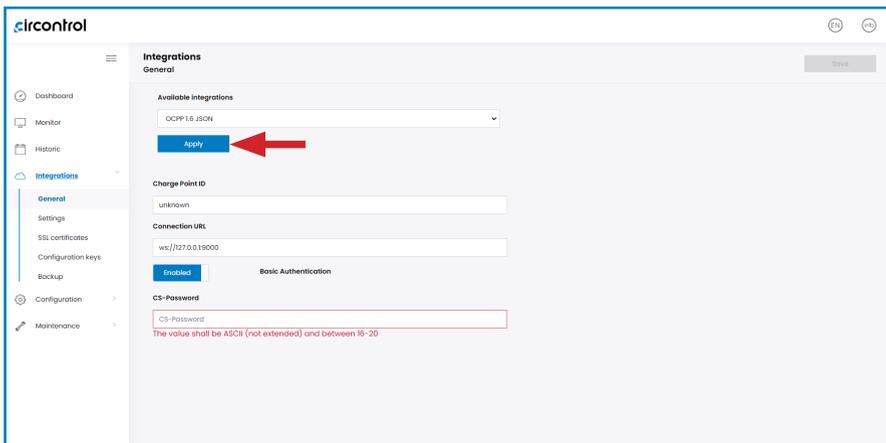
Go to the **Integrations** > **'General'** tab

Charge Point supports different versions of OCPP but only one can be enabled at the same time. At the moment, only OCPP 1.6J can be selected.

Choose the option selected under **'Available integrations'** according to your backend policies as shown in the picture below.



After pressing the 'Apply' button, multiple options will then appear:



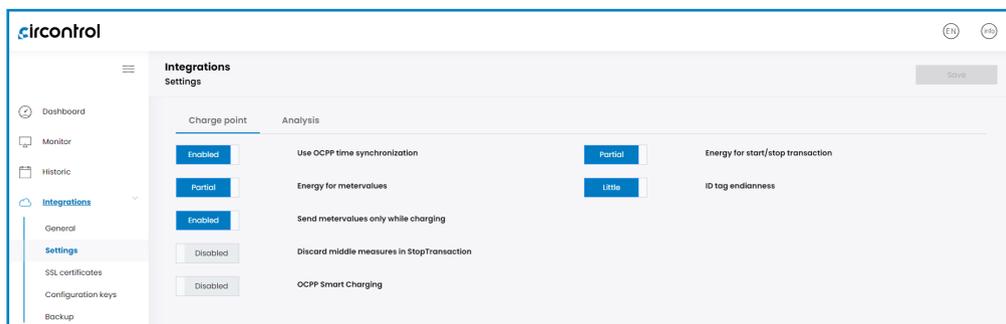
Value	Description
Charge Point ID	Charge Point identifier.
Connection URL	URL address of the central system.
Basic Authentication	Set an authentication if required, being the options 'Enabled' and 'Disabled'.
CS-Password	Introduce CS-Password if required.

 If **'None'** option is selected, the Charge Point will be working as stand-alone. All ID cards are authorized to start/stop a new charge transaction and no requests are sent to the backend.

## Configuration

Go to the **Integrations > 'Settings'** tab

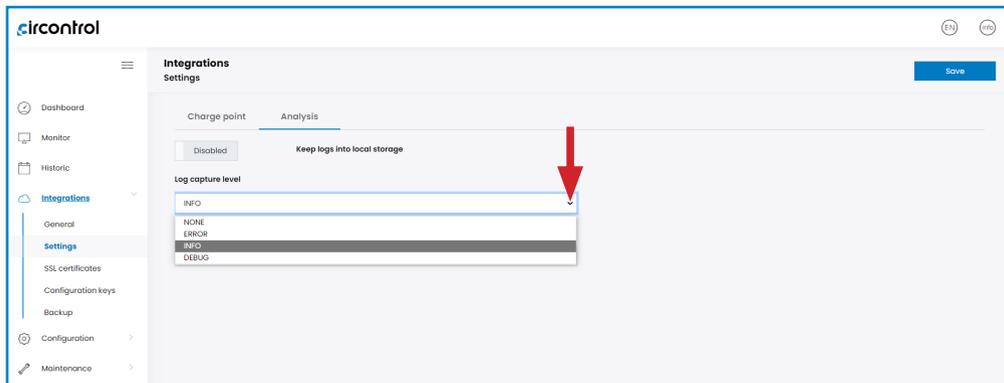
Once OCPP 1.6J option is selected, multiple options appears allowing to make changes to the OCPP configuration:



Value	Description
Use OCCP time synchronization	Enabled/Disabled
Energy for metervalues	<p><b>Partial:</b> sends partial energy consumption while vehicle is charging.</p> <p><b>Total:</b> sends the actual count of the total accumulated energy meter.</p>
Send metervalues only while charging	Enabled/Disabled
Discard middle measures in StopTransaction	Enabled/Disabled
OCCP Smart Charging	Enabled/Disabled
Energy for Start/Stop transaction	<p><b>PARTIAL:</b> Consumed value of energy by the vehicle sent between start and stop.</p> <p><b>TOTAL:</b> actual count of the total accumulated energy meter sent between start and stop.</p>
ID tag endianness	Storage type for system data: Little/Big

Go to the **Integrations** > **'Settings'** > **'Analysis'** tab

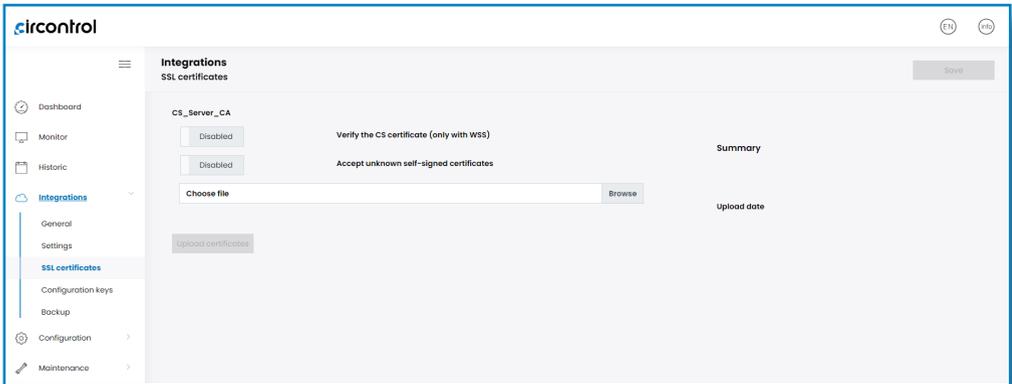
In this section, it can be set the capture level of the logs. It can also be enabled the option to keep the logs into local storage.



Value	Description
Keep logs into local storage	Enabled/Disabled
Log capture level	Level of information detailed ( <b>DEBUG</b> > <b>INFO</b> > <b>ERROR</b> > <b>NONE</b> )
Waiting time between errors (min)	Time between each error.

Go to the **Integrations** > **'SSL Certificates'** tab

For WSS connections, is needed a Central System certificate. Upload it in this section.



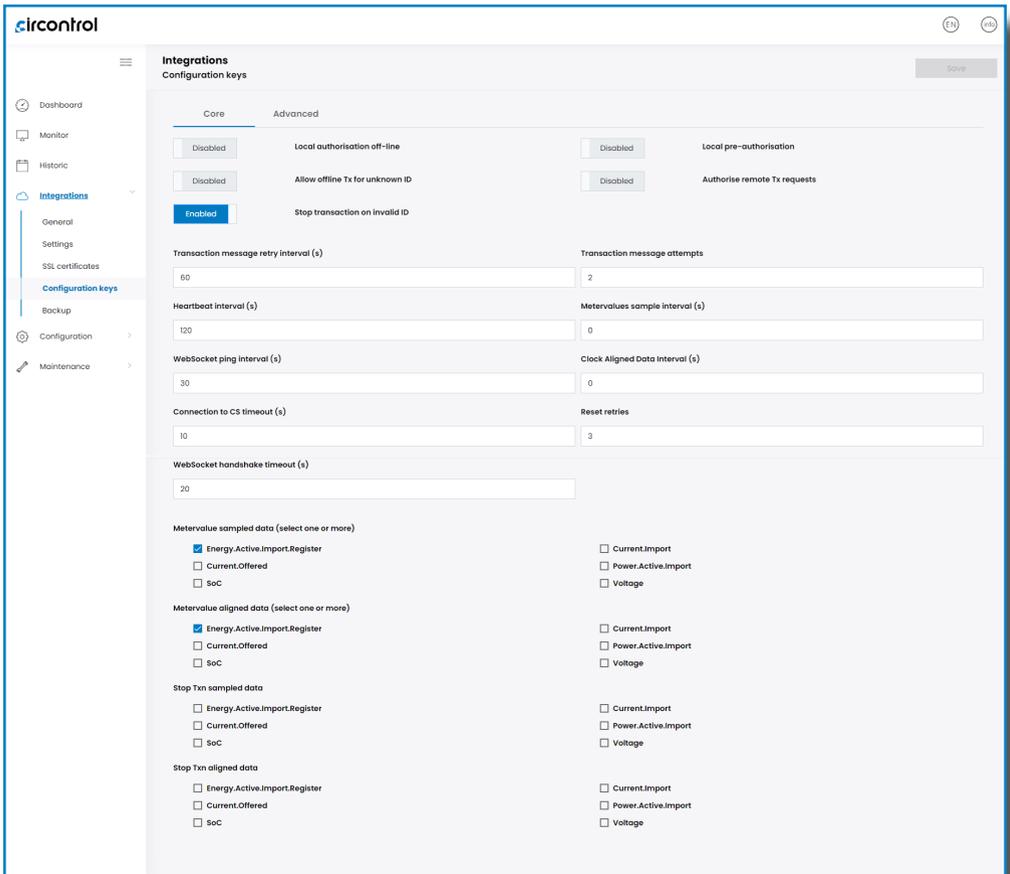
To obtain the latest certificates, please contact Central System you are working with.



Settings are always stored even when the Charge Point is powered off or even the integration is disabled/stopped.

Go to the **Integrations** > **'Configuration Keys'** tab

The **Core** section provides some parameters related to the Setup Webpage that can be enabled/disabled or modified according to the user's preferences.



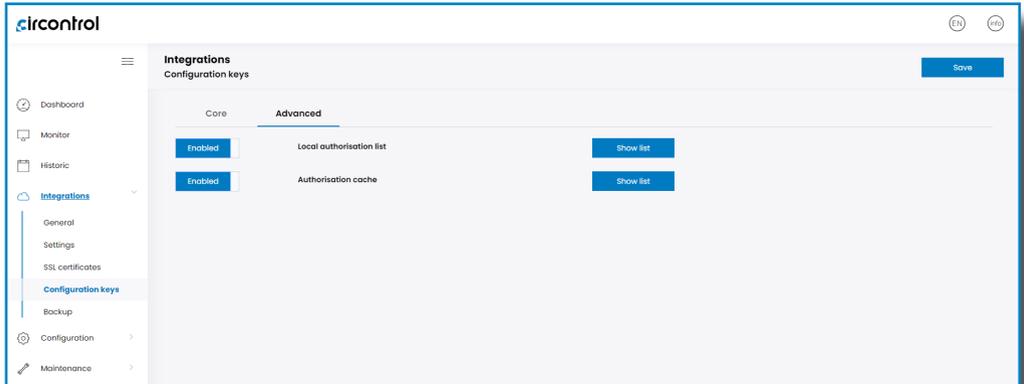
Value	Description
Local authorisation off-line	<p><b>Enabled:</b> during offline period locally-authorized identifiers are allowed to start charging.</p> <p><b>Disabled:</b> during offline period locally-authorized identifiers are NOT allowed to start charging.</p>
Allow offline Tx for unknown ID	<p><b>Enabled:</b> during offline period, unknown identifiers are allowed to start charging.</p> <p><b>Disabled:</b> during offline period, unknown identifiers are NOT allowed to start charging.</p>
Stop transaction on invalid ID	<p><b>Enabled:</b> stop existing charge transaction after response from Central System when user is blocked, expired or invalid.</p> <p><b>Disabled:</b> charge transaction does not stop even if backend rejects the user.</p>
Local pre-authorization	<p><b>Enabled:</b> Charge Point looks for locally-authorized identifiers without waiting for the Central System authorisations.</p> <p><b>Disabled:</b> Charge Point requests authorisation for presented identifiers to the Central System.</p>
Authorise remote Tx requests	<p><b>Enabled:</b> the Charge Point asks for authorisation when the Central System sends a remote start.</p> <p><b>Disabled:</b> the Charge Point starts the charge transaction when the Central System sends a remote start.</p>
Transaction message retry interval	<p>Number of seconds between transaction message attempts.</p> <p><b>*NOTE:</b> setting this value to 0 disables the attempts.</p>
Transaction message attempts	<p>Number of times the Charge Point should try to send a request to the Central System.</p>

<b>Value</b>	<b>Description</b>
Heartbeat interval	Heartbeat send interval (in seconds) for the backend system.  <b>*NOTE:</b> setting this value to 0 disables the Heartbeat.
Metervalues sample interval	Number of seconds between MeterValue during an ongoing charge transaction.  <b>*NOTE:</b> setting this value to 0 disables the MeterValue.
WebSocket ping interval	Number of seconds between pings.  <b>*NOTE:</b> setting this value to 0 disables the Websocket Ping/Pong.
Clock Aligned Data Interval (s)	Number of seconds between clock data alignments.
Connection to CS timeout (s)	Timeout (in seconds) before connecting to the Central System.
Reset retries	Number of times the Charge Point should try to retry a request to the Central System.
WebSocket handshake timeout (s)	Number of seconds to wait for the secure handshake to be initiated and to complete.

Go to the **Integrations** > **'Configuration Keys'** > **'Advanced'** tab

As a relevant information, this section shows:

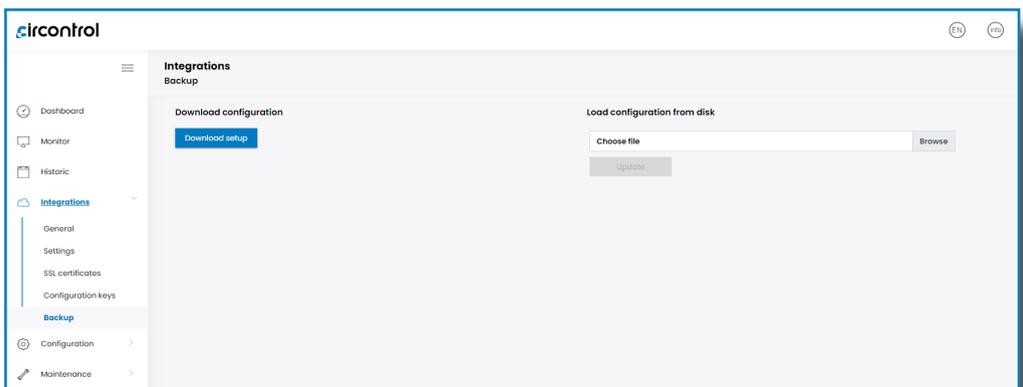
- Local authorisation list
- Authorisation cache



Both options can be enabled or disabled and it is possible to show a list of each one.

Go to the **Integrations** > **'Backup'** tab

This section allows the user to download the current integration configuration and to upload other configuration files from disk.



# 9

## SCADA Client

The IP address assigned previously, is useful to connect with the Charge Point in order to monitor the real-time status.

The main way to connect is using the **CirCarLife client software** (Supplied by Circontrol PS-Support staff) or you can download it from Circontrol Expert Area Webpage.

**NOTE:** Java software needs to be installed on the computer in order to run the client software, please, download last version from: [www.java.com](http://www.java.com)



**In remote connections, where communicating with the Charge Point via 3G/4G data is required in order to monitor its parameters, it should be noted that there will be a HIGH consumption of data.**

# Monitoring

EVSE - CCL2

Opciones Vistas General

Anterior Siguiente Dispositivos Pantallas Gráfico Tabla Succeos Propiedades Imprimir Tareas

EVSE 12/06/23 16:25:56

Estado pila

Manipulación ✔

---

PLUG A

Estado	<span style="color: green;">●</span>	Disponible	Energía activa (kWh)	2,220
Coche conectado			Energía activa parcial (kWh)	-
Reservado		<input type="button" value="Reservar"/> <input type="button" value="Liberar"/>	Potencia activa (kW)	0,0
Recarga		<input type="button" value="Inicio remoto"/> <input type="button" value="Paro remoto"/>	Voltaje (V)	77.2
Habilitar		<input type="button" value="Habilitar"/> <input type="button" value="Deshabilitar"/>	Corriente (A)	0,0
Alimentación	<span style="color: green;">✔</span>		Fecha solicitud recarga	12/06/23 16:20:59
			Fecha inicio recarga	-
			Fecha final recarga	-
			Tiempo de recarga	-
			Parada última recarga	Paro remoto

---

PLUG B

Estado	<span style="color: green;">●</span>	Disponible	Energía activa (kWh)	0,250
Coche conectado			Energía activa parcial (kWh)	0,000
Reservado		<input type="button" value="Reservar"/> <input type="button" value="Liberar"/>	Potencia activa (kW)	0,0
Recarga		<input type="button" value="Inicio remoto"/> <input type="button" value="Paro remoto"/>	Voltaje (V)	77.2
Habilitar		<input type="button" value="Habilitar"/> <input type="button" value="Deshabilitar"/>	Corriente (A)	0,0
Alimentación	<span style="color: green;">✔</span>		Fecha solicitud recarga	12/06/23 16:21:14
			Fecha inicio recarga	12/06/23 16:21:42
			Fecha final recarga	12/06/23 16:22:15
			Tiempo de recarga	00:00:32
			Parada última recarga	Parado por vehículo desconectado

El servidor está activo (Localhost - http://192.168.5.230:80)

12/06/23 16:21:56 : Petición enviada para forzar variables

10

A

## Post

DATA	GENERAL SPECIFICATIONS	
MECHANICAL	<b>Light beacon</b>	RGB Colour indicator
	<b>Enclosure rating</b>	IP54 / IK10
	<b>Enclosure material</b>	Aluminium & ABS
	<b>Enclosure door</b>	Frontal key locked door
	<b>Net weight</b>	55 Kg
	<b>Dimensions (W x H x D)</b>	450 x 1550 x 290 mm
	<b>Socket</b>	Type 2 + Locking System
	<b>Type 2 socket protection (Optional)</b>	Shutter
	<b>Cable (Optional)</b>	Type 2
ELECTRICAL	<b>Power supply</b>	1P+N+PE / 3P+N+PE
	<b>Input voltage</b>	230V AC+/-10% / 400V AC+/-10%
	<b>Frequency</b>	50 Hz / 60 Hz
ENVIRONMENTAL CONDITIONS	<b>Operating temperature</b>	-5°C to +50°C
	<b>Minimum operating temperature with Low Temperature Kit (Optional)*</b>	-30°C
	<b>Operating humidity</b>	5% to 95% Non-condensing
PROTECTIONS	<b>Overcurrent protection</b>	Miniature Circuit Breaker (MCB) IEC 60898-1 (Curve C)
	<b>Residual current protection</b>	RCD Type A (30 mA) + 6 mA DC / Type B (Optional)

(\*) Equipment to be installed outdoors shall be provided with the Low Temperature Kit in order to comply with the IEC 61851-1:2017.

# Technical Data

GENERAL DATA	
<b>Display</b>	LCD Multi-language
<b>RFID reader</b>	ISO/IEC 14443 A&B Felica ISO/IEC 15693/ICODE
<b>Meter</b>	MID Class 1 – EN50470-1/3
<b>Ethernet</b>	10/100BaseTX (TCP-IP)
<b>Wi-Fi</b>	Wi-Fi 2.4 GHz (IEEE 802.11 b/g/n)
<b>Cellular (optional)</b>	Embedded modem 4G LTE/3G/GPRS
<b>Interface protocol</b>	OCPP 1.6J / OCPP 2.0.1 Ready
<b>Charging mode</b>	Mode 3

MODEL	CONNECTORS	OUTPUT CURRENT	OUTPUT POWER	MINIMUM CABLE CROSS SECTION*
<b>T</b>	2 x Type 2 Socket	2 x 32 A	2 x 22 kW	25 mm <sup>2</sup>

OPTIONAL DEVICES — POST eVOLVE SMART	
<b>Wireless Communication</b>	4G / 3G / GPRS / GSM
<b>Safety Protection</b>	<ul style="list-style-type: none"> <li>• PEN Fault</li> <li>• RCD Type B (30 mA)</li> </ul>
<b>Low Temperature Kit</b>	Up to -30°C
<b>Type 2 Charging Socket</b>	Shutter
<b>Tethered Cable</b>	Type 2 + Type 2 (Spring, 4 m length)
<b>Contactless Payment</b>	Payter Cloud**
<b>Customisation</b>	Vinyl and logo

(\*) This is the minimum cable cross section recommended for the maximum AC input current. The final cross section must be calculated by a qualified technician taking into account the specific conditions of installation.

(\*\*) Payter Cloud has IP65 and IK09 enclosure ratings, and reaches -20°C with the Low Temperature Kit.



DATA	GENERAL SPECIFICATIONS	
MECHANICAL	Light beacon	RGB Colour indicator
	Enclosure rating	IP54 / IK10
	Enclosure material	Aluminium & ABS
	Enclosure door	Frontal key locked door
	Net weight	55 Kg
	Dimensions (W x H x D)	222 x 382 x 928 mm
	Socket	Type 2 + Locking System
	Type 2 socket protection (Optional)	Shutter
ELECTRICAL	Cable (Optional)	Type 2
	Power supply	1P+N+PE / 3P+N+PE
	Input voltage	230V AC+/-10% / 400V AC+/-10%
ENVIRONMENTAL CONDITIONS	Frequency	50 Hz / 60 Hz
	Operating temperature	-5°C to +50°C
	Minimum operating temperature with Low Temperature Kit (Optional)*	-30°C
PROTECTIONS	Operating humidity	5% to 95% Non-condensing
	Overcurrent protection	Miniature Circuit Breaker (MCB) IEC 60898-1 (Curve C)
	Residual current protection	RCD Type A (30 mA) + 6 mA DC / Type B (Optional)

(\* ) Equipment to be installed outdoors shall be provided with the Low Temperature Kit in order to comply with the IEC 61851-1:2017.

GENERAL DATA	
<b>Display</b>	LCD Multi-language
<b>RFID reader</b>	ISO/IEC 14443 A&B Felica ISO/IEC 15693/ICODE
<b>Meter</b>	MID Class 1 - EN50470-1/3
<b>Ethernet</b>	10/100BaseTX (TCP-IP)
<b>Wi-Fi</b>	Wi-Fi 2.4 GHz (IEEE 802.11 b/g/n)
<b>Cellular (optional)</b>	Embedded modem 4G LTE/3G/GPRS
<b>Interface protocol</b>	OCPP 1.6J / OCPP 2.0.1 Ready
<b>Charging mode</b>	Mode 3

MODEL	CONNECTORS	OUTPUT CURRENT	OUTPUT POWER	MINIMUM CABLE CROSS SECTION*
<b>T</b>	2 x Type 2 Socket	2 x 32 A	2 x 22 kW	25 mm <sup>2</sup>

OPTIONAL DEVICES — WALLBOX eVOLVE SMART	
<b>Wireless Communication</b>	4G / 3G / GPRS / GSM
<b>Safety Protection</b>	RCD Type B (30 mA)
<b>Low Temperature Kit</b>	Up to -30°C
<b>Type 2 Charging Socket</b>	Shutter
<b>Tethered Cable</b>	Type 2 + Type 2 (Spring, 4 m length)
<b>Customisation</b>	Vinyl and logo

(\*) This is the minimum cable cross section recommended for the maximum AC input current. The final cross section must be calculated by a qualified technician taking into account the specific conditions of installation.

(\*\*) Payter Cloud has IP65 and IK09 enclosure ratings, and reaches -20°C with the Low Temperature Kit.



# Need help?

In case of any query or if further information is required, please contact our **Post-Sales Department**.



[support@circontrol.com](mailto:support@circontrol.com)



[www.circontrol.com](http://www.circontrol.com)



(+34) 937 362 940



(+34) 937 362 941



**CIRCONTROL  
eVOLVE SMART SERIES  
USER MANUAL**

A comprehensive guide on  
how to use and configure  
your Charge Point.

v2.5 – 16<sup>th</sup> October 2023