

# RVE-CM / RVE-SL

Smart solution for car parks with many outlets



## Description

The multipoint system of the **RVE** family has been designed to offer an smart electrical vehicles charge solution to car parks with multiple outlets for electrical vehicles.

This solution allows an intelligent electrical vehicle charge management from high number of electrical vehicles, controlling different parameters of the electric network and the vehicles connected to it, as well as user and car park manager preferences. That way users can get polite results on vehicles recharge allowing them to charge their vehicles under the better conditions as for electrical rates or for immediate charge if needed. Also the car park manager can get a maximum optimization with this solution that also takes care of a power demand control managing the loads of electrical vehicles and the network capacity in order to avoid a overload but in the same way taking the maximum advantage of it. In addition this solution is ready to detect a very high number of possible problems on the electrical networks in order to report and operate to prevent them.

The system also allows the integration with payment systems as well as the exportation of accurate electrical data like total consumption, partial consumption, different problems

on the electrical network, events, historical load data, etc.

The system consists of 2 units, on one side we have the remote outlet **RVE-SL** that allows the vehicle to connect to the electrical network and on the other side we have the master controller **RVE-CM20** that brings intelligence to the system.

The units **RVE-SL** L has been specifically designed to be installed next to the vehicle parking space in order to connect it in a simple and handy way when recharging the electrical vehicles. This unit consists of a robust box made to be mounted on car park wall and hold up a continuous utilization from the users. One outlet for electrical vehicle connection is available as a well as a light indicator to show the user the recharge status. Energy metering is also internally included in order to let the user know the electrical vehicle consumption plugged into. The same unit has communications with the master controller as well as RCCB and MCB electrical protections in order to manage the electrical power in an intelligent way. This protections also prevents users and the installation from any kind of problem.

The CCL-CM20 unit brings intelligence and user interface to the system. This unit has a touch screen for user input as well as a RFID card reader to identify the user. Likewise the unit CCL-CM20 can be integrated with other readers as magnetic stripe or bar code in order to integrate the user identification with car park tickets. This has been designed also to allow integration with other payment systems in the car parks.

The CCL-20 has TCP-IP connection available as well as an open protocol for its easy integration. Each CCL-CM20 controller manages up to 32 CCL-SL remote outlets and if an upgrade in remote outlets number is needed more CCL-CM20 units can be added making up a single system when operating and integrating.

The main functions of the master controller are:

- Make the selection of the electricity outlet,
- Energy record and management,
- Power control of all devices,

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- Communication with external energy metering elements like electricity companies counters or harmonic filters .
- Communication with other car park elements like payment systems to send consumption data information or other interesting information for the car park manager. In the same way can also communicate with the car park guidance system to know the status and location of electrical vehicles parked in reserved electrical vehicles bays

### Applications

This equipment is specially designed for its use on indoor car parks with multiple parking spaces for electrical vehicles. An example of this could be indoor public car parks, private indoor car parks, airports, car rental companies, cleaning companies, etc.

## RVE-CM20

### Features

Features	
	Stainless steel body
	Access and prepayment with proximity cards
	Identification with magnetic band cards or bar code (optional)
	Touch LCD screen 15"
	Control up to 20 outlets
	TCP-IP communication
	Smart aesthetic design
	Integrated power control management
	Integration with other systems (Payment systems, couters from electricity suppliers, car park guidance systems and other control devices)
	Alarms management
	Reports with events generation
Technical features	
Power input	230 V c.a.
Tolerance	± 10 %
Frequency input	50 ... 60 Hz
Input device	Touch screen
Interface	Integrated colour LCD screen 15"
RFID reader	ISO 14443A
RFID frequency	13,56 MHz
Maximum recharge power	200 W
Communications	TCP-IP, RS-485, RS-232 y Zigbee
Temperature range	-20 ... + 50 °C
Build features	
Surface	Grey polyester paint RAL 9006
Surround	FE ST37 2mm thickness
IP protection degree	IP 20
Anchor	4 points for wall mount
Weight	24 kg
Dimensions	600 mm; 380 mm; 210 mm
Standards	
EN 61851-1 : 2001 part 1, IEC 61000, IEC 60364-4-41, IEC 60884-1, IEC61010, UNE-EN55011	

## RVE-SL

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## RVE-SL

### Features

Features	
	Anti-vandalism stainless steel body
	Small size
	Visual indicator for charging status monitoring
	Communication with master controller
	Integrated energy measurement
	Integrated electrical protections (optional)
	Protection system against energy attempted theft
	Smart aesthetic design
Características técnicas	
Power input	230 V c.a.
Tolerance	± 10 %
Frequency input	50 ... 60 Hz
Maximum current output	16 A
Connector	Schuko "CEE 7/4" (Others under request)
Energy	Integrated energy meter
Maximum recharge power	3,6 kW
Earth leakage protection	Yes
Circuit breaker	Yes
Temperature range	-20 ... + 50 °C
Build features	
Surface	Grey polyester paint RAL 9006
Surround	FE ST37 2mm thickness
IP protection degree	IP 20
Anchor	4 points for wall mount
Weight	2 kg
Dimensions	178 mm; 166 mm; 88 mm (107 mm)
Standards	
EN 61851-1 : 2001 part 1, IEC 61000, IEC 60364-4-41, IEC 60884-1, IEC61010, UNE-EN55011	

### References

	Type	Code
Remote controller for 32 outlets	RVE - CM20	V22110
Car park box 1 outlet - Remote controller	RVE - SL	V22120