Raption 150

The best solution for eBuses and petrol stations

Application

Designed to be installed in road-side rest areas and petrol stations where vehicles with large batteries require high charging power to be ready to continue their journey in less than half hour and minimise charging time.

Concept Design

Designed to address the main problems identified by charge point owners/ operators when fast charging (low uptime), the Raption 150 series is based on state-of-the-art modular power technology.

Another key attribute considered was the exterior design. Sophisticated, slim and robust are just some adjectives that can be used to describe this series features that make it ideal for any type of site (from the most stylish urban areas to industrial ones). The Raption 150's modular architecture allows power scalability from 100 kW to 150 kW.

Product highlights

For Charge Point **Operators / Owners**

- **Simultaneous DC charge** able to charge 2 EVs at the same time by splitting the available power (e.g. 75 kW + 75 kW).

- Its **modular power technology** ensures high uptimes (reducing the non-operation expenditure), because in the event of a power module failure, the rest of the modules continue charging.

- Lower energy consumption (and therefore OPEX) is achieved due to a **sustained high efficiency level** resulting from disconnecting power modules when lower charging power is requested by the EV.

- The modular architecture allows **power scalability, so two models are possible; Raption 150 Lite (max output 100 kW) and Raption 150 (max output 150 kW).**

- It offers a unique **connector care concept** by means of the connector locking feature (optional) and floating cable design, which reduces the risk of the cable breaking (i.e., lower OPEX and higher uptime).

- The door at the front with **key access** provides access to the interior of the charger which results in a lower OPEX due to quicker installation and servicing (preventive/corrective). Moreover, it allows the charger to be installed next to a wall, optimising the available space.

- Possible to configure as a Master for the **Master-Slave solution.**

For Charge Point **Users**

- Its **8" anti-vandal colour touchscreen daylight readable** not only provides clear charging instructions (e.g. incorrect EV position to start the charge) and operating status (e.g. reserved charge point), but also allows the user to select from several languages.

- User satisfaction is also increased due to its **built-in courtesy light** which both facilitates locating the charge point in dark areas and reading the messages included on operating instruction labels.

- **Accessibility for disabled users** has also been considered, complying with international standards regarding the height of connectors/ displays, facilitating their use.

- The Raption series can be optionally equipped with an **integrated payment terminal** to facilitate payments by credit card and enhance the user experience. Our payment terminal allows payment without a membership model and can operate with or without a back-office platform.

General Specifications

Compliance	CE / Combo-2 (DIN 70121; ISO15118) IEC 61851-1; IEC 61851-23; IEC 61851-21-2
	CHAdeMO compatible
Enclosure rating	IP54 / IK10
Enclosure material	Stainless steel
Operating temperature	-10 °C to + 50 °C
Ambient temperature storage	- 20 °C to + 60 °C
Operating humidity	5% to 95% Non-condensing

Dispenser	
Network connection	Ethernet 10/100BaseTX
Interface protocol	OCPP 1.5 / 1.6J, HW ready for update to OCPP 2.0
RFID system	ISO / IEC14443-1/2/3 MIFARE Classic
Display HMI	8" anti-vandal colour touchscreen
Power limit control	DC by software
DC cable length CCS	3.4 metres
DC cable length CHAdeMO	3.4 metres
Lights for status indication	RGB colours indicator
Dimensions (D x W x H)	380x470x2070 mm
Weight	115 kg
Operational noise level	Not perceptible
AC Meter	Compliant with the EN 50470-1 and EN 50470-3 (MID European standards) or IEC 62052-11
Wireless Communication EU	4G LTE /WiFi Hotspot/GPRS/GSM

Power Unit	
AC power supply	3P + N + PE
AC Voltage	400V AC +/- 10%
Maximum AC input current	237A / 160A*
Required power supply capacity	163kVA / 110kVA*
Power Factor (pu)	>0.98
Efficiency (pu)	94% at nominal output power
Frequency (pu)	50 / 60 Hz
Cooling system	Forced air
Operational noise level	< 55 dBA
Electrical input protection	Main circuit disconnection
Overcurrent protection	MCB
Safety protection (pu)	RCD Type B
Dimensions (D x W x H)	800x1000x2100 mm
Weight	420 kg

Optional devices	
Wireless Communication	**LATAM/APAC**/4G LTE /GPRS/GSM
Surge protection	Four pole transient surge protector IEC 61643-1 (class II)
Cable Length	5.3 metres (all cables)
Anti-vandal connector protection	CHAdeMO, CCS (mechanical connector locking)
RFID Extension	Legic Advant / Legic Prime ISO 15693/ISO 18092. Sony FeliCa
Low Temperature Kit	-30°C to +50°C
Contactless payment**	Integrated credit card payment terminal

*Raption 150 Lite Models
**Ask for availability.

Model Specifications

Raption 150 Models	CCS250 (1)	CCS250 CHA200	CCS250 CCS250 (1)
Maximum output power	CCS: 150 kW (2)	CCS: 150 kW (2) CHA: 50 kW (4)	CCS: 150 kW (2) CCS: 150 kW (2)
Output voltage range	CCS: 100-920V	CCS: 100-920V CHA: 100-500V	CCS: 100-920V CCS: 100-920V
Maximum output current	CCS: 250A	CCS: 250A CHA: 200A	CCS: 250A CCS: 250A
Connection			

(1) Also available with cable of 200 A (max output power: 150 kW @920 V or 80 kW @400 V)
(2) 150 kW @720-920V or 100 kW @400V
(3) HW suitable for up to 100 kW following FW update

Raption 150 Lite Models	CCS250 (1)	CCS250 CHA200	CCS250 CCS250 (1)
Maximum output power	CCS: 100 kW (2)	CCS: 100 kW CHA: 50 kW (3)	CCS: 100 kW CCS: 100 kW
Output voltage range	CCS: 100-920V	CCS: 100-920V CHA: 100-500V	CCS: 100-920V CCS: 100-920V
Maximum output current	CCS: 250A	CCS: 250A CHA: 200A	CCS: 250A CCS: 250A
Connection			

(1) Also available with cable of 200 A (max output power: 100 kW @920 V or 80 kW @400 V)
(2) 80 kW @400V
(3) HW suitable for up to 100 kW following FW update