

Raption 150

*DC High Power Charging Station for
Electric Vehicles*

Application

Designed to be installed in highways' 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 minimize charging time.

Concept Design

Conceived to address the main problems identified by Charge Point Owners / Operators when Fast Charging (low uptime), Raption 150 series is based on state-of-the-art modular power technology.

Another key attribute considered has been its external design. Sophisticated, slim and robust are just some attributes that can be used to describe this series and that makes it ideal for any type of site (from the most stylish rest areas to industrial sites).



Product highlights

For Charge Point Operator / Owner

- **Simultaneous DC charge** able to charge 2 EV's at the same time by splitting the available power (e.g. 75kW+75kW).
- Its **modular power technology** ensures high uptimes (reducing the non-operation expenditure) since in case of power module failure the rest of 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** from 100kW to 150kW.
- It offers a unique **connector care concept** by means of gun locking feature (optional) and cable floating design, which results on a reduction of cable breaking risk (i.e. lower OpEx and higher uptime).
- Its **frontal key-locked door** provides an easy access to the inside of the charger which results in a lower OpEx due to a quicker installation and servicing (preventive/corrective). Moreover, it allows the charger to be installed next to a wall, optimising the available space.

For Charge Point User

- Its **8" touch-screen daylight readable** not only provides clear charging instructions (e.g. wrong EV shift position to start the charge) and plug status (e.g. reserved charge point) but also allows the user to select amongst 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 contained in operator instruction labels.
- **Accessibility for the disabled** has also been considered, complying with international standards regarding the height of connectors/display that facilitates its operation.

Raption 150 Series

General Specifications

Compliance	CE / Combo-2 (DIN 70121; ISO15118) IEC 61851-1; IEC 61851-23 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

Charge Post

Network connection	Ethernet 10/100BaseTX
Interface protocol	OCPP 1.5 (1.6 J optional)
RFID system	ISO / IEC14443A / B MIFARE Classic / DESFire EV1 ISO 18092 / ECMA-340 NFC 13.56MHz
Display HMI	8" anti vandal touch screen
Power limit control	DC by software
DC cable length CCS	3 meters
DC cable length CHAdeMO	3 meters
Lights for status indication	RGB colours indicator
Dimensions (D x W x H)	378x420x2067mm
Weight	150 kg
Operational noise level	Not perceptible
AC Meter	Compliant with the EN 50470 (MID European standards) or IEC 62052-11




Power Unit

AC power supply	3P + N + PE
AC Voltage	400 V AC +/- 10%
Maximum AC input current	237 A
Required power supply capacity	163kVA
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 protections (pu)	MCB
Safety protection (pu)	RCD 30mA Type A
Dimensions (D x W x H)	800x1000x2100mm

Optional devices

Wireless Communication	4G LTE /WiFi Hotspot/GPRS/GSM
Surge protection	Four pole transient surge protector IEC 61643-1 (class II)
Safety protection	RCD type B
Cable Length	5.5m (all cables)
Anti-vandal connector protection	CHAdeMO, CCS (mechanical connector locking)
RFID Extension	Legic Advant / Legic Prime ISO 15693/ISO 18092. Sony FeliCa
Cold Option	-30°C to +50°C

Models Specifications

Models	CCS CHA	CCS	CHA
Maximum output power	CCS: 150kW* CHA: 50kW	150kW*	50kW
Output voltage range	CCS: 100-920 V _{DC} CHA: 100-500 V _{DC}	100-920 V _{DC}	100-500 V _{DC}
Maximum output current	200A CCS 125A CHA	200A	125A
Number of plugs	2	1	1
Connection	CCS 2 JEVS G105 	CCS 2 	JEVS G105 

* 150kW @750 ~ 920 V
80kW @400 V

Charge Post

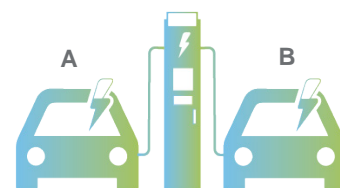
Customizable for branding



Power Unit



Simultaneous DC Charge



The DC power available is splitted into two EVs

A	B
@750V 75kW	@400V 50kW