

SWARCO

RAPTION 150

THE BEST SOLUTION FOR eBUSES AND PETROL STATIONS

APPLICATION

A perfect solution for service stations, petrol forecourts and bus depots, where vehicles with large batteries require a speedy top up so they can be back out on the road again as swiftly as possible.



CONCEPT DESIGN

The Raption 150 has been designed to address the main problems identified by charge point owners & operators concerning need to be able to quickly recharge. Based upon tried & tested state-of-the-art technology from the popular Raption DC portfolio, the Raption 150 ensures high uptime with its unique modular construction. The sophisticated external design, which is slim and yet robust, makes this ideal for all settings, be they urban, rural or industrial.

Raption 150's modular architecture allows power scalability from 100 kW to 150 kW.

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, so two models are possible; Raption150 Lite (max output 100 kW) and Raption 150 (max output 150 kW).**

- It offers a **unique connector care concept** by means of gun locking feature (optional) and cable floating design, which reduces the risk of cables breaking (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.
- Capable of being configured as a Controller for the **Controller-Receiver solution.**

For Charge Point User

- Its **8" colour antivandal 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 series can be optionally equipped with an **Integrated payment terminal** to facilitate the payment by credit card and increase the user experience. Our payment terminal allows payment without a membership model and can operate with or without back office platform.

RAPTION 150 SERIES

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 or OCPP 1.6J
RFID system	ISO / IEC14443-1/2/3 MIFARE Classic
Display HMI	8" colour antivandal touch screen
Power limit control	DC by software
DC cable length CCS	3.4 meters
DC cable length CHAdeMO	3.4 meters
Lights for status indication	RGB colours indicator
Dimensions (D x W x H)	378x420x2067mm
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 protections	MCB
Safety protection (pu)	RCD Type B
Dimensions (D x W x H)	800x1000x2100mm
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	5.5m (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⁾	CCS200 CHA125	CCS250 CHA200	CCS250 CCS250 ⁽¹⁾
Maximum output power	CCS:150 kW ⁽²⁾	CCS:150 kW ⁽³⁾ CHA:50 kW	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 CHA:100-500V	CCS:100-920V CCS:100-920V
Maximum output current	CCS:250A	CCS:200A CHA:125A	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⁾ 150 kW @750-920V or 80 kW @400V ⁽⁴⁾ HW ready up to 100 kW by FW update

RAPTION 150 LITE MODELS	CCS250 ⁽¹⁾	CCS200 CHA125	CCS250 CHA200	CCS250 CCS250 ⁽¹⁾
Maximum output power	CCS:100 kW ⁽²⁾	CCS:100 kW ⁽²⁾ CHA:50 kW	CCS:100 kW ⁽²⁾ CHA:50 kW ⁽³⁾	CCS:100 kW ⁽²⁾ CCS:100 kW ⁽²⁾
Output voltage range	CCS:100-920V	CCS:100-920V CHA:100-500V	CCS:100-920V CHA:100-500V	CCS:100-920V CCS:100-920V
Maximum output current	CCS:250A	CCS:200A CHA:125A	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⁾ 100 kW @400V ⁽³⁾ HW ready up to 100 kW by FW update