

SWARCO

RAPTION 200

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 200 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 200's modular architecture allows power scalability from 150 kW to 200 kW.

PRODUCT HIGHLIGHTS

For Charge Point Operator / Owner

- Its separated dispenser make a clean area - easy to use and a **reduced footprint** allows to minimize the used space into the parking bay.
- 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: 150kW or 200kW max. output. Moreover, this allows an upgrade from 150kW to 200kW by a simply HW upgrade becoming it in a futur proof charger.

- 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).
- The system can be **set as a controller** in the controller-receiver solution including DC & AC charge points.

For Charge Point User

- Thanks to its two outputs, **it can charge CHAdeMO or CSS output EVs in any case** giving this possibility to charge to each user.
- 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.

RAPTION 200

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	4 metres
DC cable length CHAdeMO	4 metres
Lights for status indication	RGB colours indicator
Dimensions (D x W x H)	380x470x2070 mm
Weight	120 kg
Operational noise level	Not perceptible
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	318 A / 237A*
Required power supply capacity	220kVA / 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
Main disconnector	Load Break Switching (LBS)
Dimensions (D x W x H)	800x600x2100 mm
Weight	220 kg / 202 kg*
AC Meter	Compliant with the EN 50470-1 and EN 50470-3 (MID European standards) or IEC 62052-11

OPTIONAL DEVICES	
Wireless Communication	LATAM/APAC/4G LTE /GPRS/ GSM
Cable Length	5.5 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 Models

**Ask for availability.

MODEL SPECIFICATIONS

RAPTION 200 MODELS	CCS	CCS CHA
Maximum output power	CCS: 200 kW @530V	CCS: 200 kW @530V CHA: 100 kW Non-simultaneous Output
Output voltage range	CCS: 100-920V	CCS: 100-920V CHA: 100-500V
Maximum output current	CCS:375A	CCS:375A CHA:200A
Connection		
RAPTION 200 LITE MODELS	CCS	CCS CHA
Maximum output power	CCS: 150 kW @400V	CCS: 150 kW @400V CHA: 100 kW Non-simultaneous Output
Output voltage range	CCS: 100-920V	CCS: 100-920V CHA: 100-500V
Maximum output current	CCS:375A	CCS:375A CHA:200A
Connection		

HW: Suitable for up to 200 kW following HW update