Raption 50

The perfect combination of power, design and reliability

Application

Designed to be installed in both public access environments (urban spaces, shopping centres, airports, road-side rest areas...) and private areas (companies with EV fleets, taxi ranks...) where vehicles need to be ready to continue their journey in less than half an hour.

Concept Design

Designed to address the main problem identified by charge point owners/ operators when fast charging (low uptime), the Raption 50 series is bases on state-of-the-art modular power technology.

Another key attribute considered was its exterior design. Sophisticated, slim and robust are just some adjectives that can be used to describe this series and features that make it ideal for any type of site (from the most stylish urban area to industrial sites).



Product highlights

For Charge Point Operators / Owners

- Its **modular power technology** ensures a very high uptime (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** from 25 kW to 50 kW to meet present and future EV battery demands.
- 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.
- The **double door** at the front with key access provides an easy access to the charger for quicker installation and service. 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 (p. 22).
- **480 V model** available for Mexico and other countries in Latin America.

For Charge Point Users

- Its 8" anti-vandal daylight readable colour touchscreen not only provides clear charging instructions (e.g. incorrect EV shift position to start the charge) and operating status (e.g. reserved charge point), but it 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 operator instruction labels.
- Accessibility for disabled users has also been considered, complying with international standards regarding the height of connectors/ displays, facilitating their use.
- Integrated contactless payment system: Offers an easy, intuitive and contactless card payment experience.





Raption 50 Series



General Specifications

AC Power Supply	3P + N + PE	
AC Voltage	400V AC +/- 10%	
Power Factor	>0.98	
Efficiency	95% at nominal output power	
Frequency	50 / 60 Hz	
Electrical input protection	Main breaker disconnection	
Overcurrent protection	MCB	
Safety protection	RCD Type B	
Network connection	Ethernet 10/100BaseTX	
Interface protocol	OCPP 1.5 or OCPP 1.6J	
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	-30 °C to +50 °C	
Ambient temperature sto- rage	-40 °C to +60 °C	
Operating humidity	5% to 95% Non-condensing	
Socket protection	Locking System	
RFID system	ISO / IEC14443-1/2/3 MIFARE Classic	
Display HMI	8" anti-vandal colour touchscreen	
Power limit control	DC & AC by software	

DC cable length CCS	3 metres
DC cable length CHAdeMO	3 metres
AC cable length	3 metres
Lights for status indication	RGB colour indicator
Dimensions (D x W x H)	355x940x1800 mm (without cable engaged)
Weight	235 kg
Cooling system	Air cooling fans
Operational noise level	< 55 dBA
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
Optional devices	
Wireless Communication	LATAM/APAC/4G LTE/GPRS/GSM
Wireless Communication Surge protection	LATAM/APAC/4G LTE/GPRS/GSM Four pole transient surge protector IEC 61643-1 (class II)
	Four pole transient surge protector
Surge protection	Four pole transient surge protector IEC 61643-1 (class II)
Surge protection Cable Length Anti-vandal connector	Four pole transient surge protector IEC 61643-1 (class II) 5.5 metres (all cables) CHAdeMO, CCS
Surge protection Cable Length Anti-vandal connector protection	Four pole transient surge protector IEC 61643-1 (class II) 5.5 metres (all cables) CHAdeMO, CCS (mechanical connector locking)
Surge protection Cable Length Anti-vandal connector protection Type 2 charging socket	Four pole transient surge protector IEC 61643-1 (class II) 5.5 metres (all cables) CHAdeMO, CCS (mechanical connector locking) Shutter
Surge protection Cable Length Anti-vandal connector protection Type 2 charging socket 25 kW DC version	Four pole transient surge protector IEC 61643-1 (class II) 5.5 metres (all cables) CHAdeMO, CCS (mechanical connector locking) Shutter Power output DC of 25 kW
Surge protection Cable Length Anti-vandal connector protection Type 2 charging socket 25 kW DC version	Four pole transient surge protector IEC 61643-1 (class II) 5.5 metres (all cables) CHAdeMO, CCS (mechanical connector locking) Shutter Power output DC of 25 kW Switch TCP ethernet 8 ports
Surge protection Cable Length Anti-vandal connector protection Type 2 charging socket 25 kW DC version Network hub	Four pole transient surge protector IEC 61643-1 (class II) 5.5 metres (all cables) CHAdeMO, CCS (mechanical connector locking) Shutter Power output DC of 25 kW Switch TCP ethernet 8 ports Switch TCP ethernet 12 ports Legic Advant / Legic Prime

Model Specifications

Models	CCS CCS T2C32		CCS T2S32		
Maximum AC input current	76 A (38 A*) 108 A (70 A*)		108 A (70 A*)		
Required power supply capacity	53 kVA (26 kVA*) 75 kVA (48 kVA*)		75 kVA (48 kVA*)		
Maximum output power	50 kW (25 kW*) DC: 50 kW (25 kW*) (@400 VDC) (@400 VDC) AC: 22 kW		*) DC: 50 kW (25 kW*) (@400 VDC) AC: 22 kW		
Output voltage range	DC: 50 - 500 V	DC: 50 - 500 V AC: 400 V		C: 50 - 500 V C: 400 V	
Maximum output current	DC: 125 A (63 A*)	DC: 125A (63 A*) AC: 32 A		C: 125A (63 A*) C: 32 A	
Connection	CCS 2	CCS 2 Type 2 Tethered cable		CCS 2 Type 2 Socket (Lock system)	
Models	CCS CHA	CCS CHA T2S32	CCS CHA T2C32	CCS CHA T2C63	
Maximum AC input current	76 A (38 A*)	108 A (70 A*)	108 A (70 A*)	138 A (101 A*)	
Required power supply capacity	53 kVA (26 kVA*)	75 kVA (48 kVA*)	75 kVA (48 kVA*)	96 kVA (70 kVA*)	
Maximum output power	50 kW (25 kW*) (@400 VDC)	DC: 50 kW (25 kW*) (@400 VDC) AC: 22 kW	DC: 50 kW (25 kW*) (@400 VDC) AC: 22 kW	DC: 50 kW (25 kW*) (@400 VDC) AC: 43 kW	
Output voltage range	DC: 50 - 500 V	DC: 50 - 500 V AC: 400 V	DC: 50 - 500 V AC: 400 V	DC: 50 - 500 V AC: 400 V	
	DC: 125 A (63 A*)	DC: 125 A (63 A*)	DC: 125 A (63 A*) AC: 32 A	DC: 125 A (63 A*) AC: 63 A	
Maximum output current		AC: 32 A	AU. 32 A	AC. 00 A	
Maximum output current Connection	CCS 2 - JEVS G105	AC: 32 A CCS 2 - JEVS G105 Type 2 Socket (Lock system)	CCS 2 - JEVS G105 Type 2 Tethered cable	CCS 2 - JEVS G105	

* 25 kW DC version

Raption 100

Ideal to satisfy the rapid charging needs of new EVs

Application

Designed to be installed in both public access spaces (urban and inter-urban spaces, service areas...) and private ones (EV fleets, taxi ranks...) where EVs need to minimise their charge times as much as possible.

Concept Design

Designed to satisfy the rapid charging needs of new EV models with larger batteries capable of offering greater autonomy, but without sacrificing the design nor most of the features that defined its predecessor, the Raption 50: modular power technology, elegant yet robust design, user-friendliness and reliability.

Product highlights

For Charge Point Operators / Owners

- Greater charging power: Its 25 kW charging modules allow it to offer up to 100 kW, doubling the charging power of the Raption 50.
- Scalability and flexibility: Its modular architecture allows for power scalability of 50 kW or 100 kW depending on the contracted power, and for this power to be adapted to the growing battery sizes of new EV models. Furthermore, the modular power guarantees very high uptime, as if one of the modules fails, the others will keep working. Likewise, when an EV needs less charging power, modules can be disconnected and energy consumption reduced thanks to its sustained efficiency.
- Compact and 100% customisable design: It maintains the elegant, high-quality and robust enclosure of the Raption 50, one of the most highly rated charge points on the market.
- **Reduced OPEX:** It maintains features such as the connector locking and the floating cable design, which result in increased durability. Furthermore, the door at the front with key access reduces repair and maintenance times and allows the charger to be installed next to a wall, optimising the available space.
- Configurable as a Master: Can be configured as a Master for multi-point solutions.

For Charge Point Users

8-inch colour touch screen: The user receives clear charging instructions as well as the connector status on the touch screen. It also allows the user to select from several languages.

PRAPTION 100

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- Built-in courtesy light: Facilitates locating the charge point in dark areas and reading the operator instructions.
- **Accessibility:** The height of the connectors and the screen have been adapted to comply with standards in order to improve accessibility for disabled people.
- Integrated contactless payment system: Offers an easy, intuitive and contactless card payment experience.



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Raption 100 Series



General Specifications

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AC Power Supply	3P + N + PE
AC Voltage	400V AC +/- 10%
Power Factor	>0.98
Efficiency	95% at nominal output power
Frequency	50 / 60 Hz
Electrical input protection	Main breaker disconnection
Overcurrent protection	MCB
Safety protection	RCD Type B
Network connection	Ethernet 10/100BaseTX
Interface protocol	OCPP 1.5 or OCPP 1.6J
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	-30 °C to +50 °C
Ambient temperature sto- rage	-40 °C to +60 °C
Operating humidity	5% to 95% Non-condensing
Socket protection	Locking System
RFID system	ISO / IEC14443-1/2/3 MIFARE Classic
Display HMI	8" anti-vandal colour touchscreen
Power limit control	DC & AC by software
DC cable length CCS	3 metres

DC cable length CHAdeMO	3 metres
AC cable length	3 metres
Lights for status indication	RGB colour indicator
Dimensions (D x W x H)	355x940x1800 mm (without cable engaged)
Weight	255 kg
Cooling system	Air cooling fans
Operational noise level	< 55 dBA
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
Optional devices	
Wireless Communication	LATAM/APAC/4G LTE/GPRS/GSM
Surge protection	Four pole transient surge protector IEC 61643-1 (class II)
Cable Length	E E motros (all asplas)
Cable Leligti	5.5 metres (all cables)
CHAdeMo cable upgrade	200 A (100 kW)*
CHAdeMo cable upgrade Anti-vandal connector	200 A (100 kW)* CHAdeMO, CCS
CHAdeMo cable upgrade Anti-vandal connector protection	200 A (100 kW)* CHAdeMO, CCS (mechanical connector locking)
CHAdeMo cable upgrade Anti-vandal connector protection Type 2 charging socket	200 A (100 kW)* CHAdeMO, CCS (mechanical connector locking) Shutter
CHAdeMo cable upgrade Anti-vandal connector protection Type 2 charging socket 50 kW DC version	200 A (100 kW)* CHAdeMO, CCS (mechanical connector locking) Shutter Power output DC of 50 kW
CHAdeMo cable upgrade Anti-vandal connector protection Type 2 charging socket 50 kW DC version	200 A (100 kW)* CHAdeMO, CCS (mechanical connector locking) Shutter Power output DC of 50 kW Switch TCP ethernet 8 ports

* HW ready SW available within 2021. ** Ask for availability.

Model Specifications

Models	CCS	CCS T2C32	CCS T2S32
Maximum AC input current	160 A	192 A	192 A
Required power supply capacity	110 kVA	132 kVA	132 kVA
Maximum output power	100 kW	DC: 100 kW AC: 22 kW	DC: 100 kW AC: 22 kW
Output voltage range	DC: 150 - 920 V	DC: 150 - 920 V AC: 400 V	DC: 150 - 920 V AC: 400 V
Maximum output current	DC: 250 A	DC: 250 A AC: 32 A	DC: 250 A AC: 32 A
Connection	CCS 2	CCS 2 Type 2 Tethered cable	CCS 2 Type 2 Socket (Lock system)
Models	CCS CHA	CCS CHA T2C32	CCS CHA T2S32
Models Maximum AC input current	CCS CHA 160 A	CCS CHA T2C32 192 A	CCS CHA T2S32 192 A
Maximum AC input current	160 A	192 A	192 A
Maximum AC input current Required power supply capacity	160 A 110 kVA CCS 100 kW	192 A 132 kVA DC: CSS 100 kW / CHA 50 kW	192 A 132 kVA DC: CSS 100 kW / CHA 50 kW
Maximum AC input current Required power supply capacity Maximum output power Output voltage range	160 A 110 kVA CCS 100 kW CHA 50 kW	192 A 132 kVA DC: CSS 100 kW / CHA 50 kW AC: 22 kW DC: 150 - 920 V	192 A 132 kVA DC: CSS 100 kW / CHA 50 kW AC: 22 kW DC: 150 - 920 V
Required power supply capacity Maximum output power	160 A 110 kVA CCS 100 kW CHA 50 kW DC: 150 - 920 V	192 A 132 kVA DC: CSS 100 kW / CHA 50 kW AC: 22 kW DC: 150 - 920 V AC: 400 V DC: CSS 250 A / CHA 125 A	192 A 132 kVA DC: CSS 100 kW / CHA 50 kW AC: 22 kW DC: 150 - 920 V AC: 400 V DC: CSS 250 A / CHA 125 A



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.

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Quick Charge

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- 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 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
Dis	spenser
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" 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)	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 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		

*Raption 150 Lite Model **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 suitable for up to 100 kW following 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 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 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) 80 kW @400V

⁽³⁾ HW suitable for up to 100 kW following FW update





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