

# Raption 50 & 50 HV EVO

*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 based 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.
- Raption 50 HV EVO is **upgradable to 100 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.
- 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-Satellite** solution.
- **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 & 50 HV EVO 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 / 1.6J, HW ready for update to OCPP 2.0                                               |
| Compliance                  | CE / Combo-2<br>(DIN 70121; ISO15118)<br>IEC 61851-1; IEC 61851-23, 21-2<br>CHAdeMO compatible |
| Enclosure rating            | IP54 / IK10                                                                                    |
| Enclosure material          | Stainless steel                                                                                |
| Operating temperature       | -30 °C to +50 °C                                                                               |
| Storage temperature         | -40 °C to +60 °C                                                                               |
| Operating humidity          | 5% to 95% Non-condensing                                                                       |
| RFID Reader                 | ISO / IEC14443-1/2/3 MIFARE Classic                                                            |
| Display HMI                 | 8" anti-vandal colour touchscreen                                                              |
| Power limit control         | DC & AC by software                                                                            |

|                                  |                                                             |
|----------------------------------|-------------------------------------------------------------|
| Cable length                     | 3 meters (CCS, CHA, Type2)                                  |
| 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 dB                                                     |
| AC Meter                         | Compliant with the EN 50470-1 and EN 50470-3 (MID EU)       |
| Wireless Communication EU        | 4G LTE/WiFi Hotspot/GPRS/GSM                                |
| <b>Optional devices</b>          |                                                             |
| Wireless Communication           | LATAM/APAC/4G LTE/GPRS/GSM                                  |
| Surge protection                 | Four pole transient surge protector IEC 61643-1 (class II)  |
| Cable Length                     | 5.5 metres (all cables)                                     |
| Anti-vandal connector protection | CHAdeMO, CCS (mechanical connector locking)                 |
| Type 2 charging socket           | Shutter                                                     |
| Network hub                      | Switch TCP ethernet 8 ports                                 |
| RFID Extension                   | Legic Advant / Legic Prime ISO 15693/ISO 18092. Sony FeliCa |
| Contactless payment              | Integrated credit card payment terminal                     |

## Model Specifications

| Models                         | CCS                                                                                 | CCS T2C32                                                                                                                                                               | CCS T2S32                                                                                                                                                               | CCS CHA T2S32                                                                                                                                                                                                                                                     | CCS CHA T2C32                                                                                                                                                                                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum AC input current       | 76 A                                                                                | 108 A                                                                                                                                                                   | 108 A                                                                                                                                                                   | 108 A                                                                                                                                                                                                                                                             | 108 A                                                                                                                                                                                                                                                             |
| Required power supply capacity | 53 kVA                                                                              | 75 kVA                                                                                                                                                                  | 75 kVA                                                                                                                                                                  | 75 kVA                                                                                                                                                                                                                                                            | 75 kVA                                                                                                                                                                                                                                                            |
| Maximum output power           | 50 kW (@400 VDC)                                                                    | DC: 50 kW (@400 VDC)<br>AC: 22 kW                                                                                                                                       | DC: 50 kW (@400 VDC)<br>AC: 22 kW                                                                                                                                       | DC: 50 kW (@400 VDC)<br>AC: 22 kW                                                                                                                                                                                                                                 | DC: 50 kW (@400 VDC)<br>AC: 22 kW                                                                                                                                                                                                                                 |
| Output voltage range           | DC: see table below                                                                 | DC: see table below<br>AC: 400 V                                                                                                                                        | DC: see table below<br>AC: 400 V                                                                                                                                        | DC: see table below<br>AC: 400 V                                                                                                                                                                                                                                  | DC: see table below<br>AC: 400 V                                                                                                                                                                                                                                  |
| Maximum output current         | DC: 125 A                                                                           | DC: 125A<br>AC: 32 A                                                                                                                                                    | DC: 125A<br>AC: 32 A                                                                                                                                                    | DC: 125 A<br>AC: 32 A                                                                                                                                                                                                                                             | DC: 125 A<br>AC: 32 A                                                                                                                                                                                                                                             |
| Connection                     | CCS 2                                                                               | CCS 2<br>Type 2 Tethered cable                                                                                                                                          | CCS 2<br>Type 2 Socket (Lock system)                                                                                                                                    | CCS 2 - JEVS G105<br>Type 2 Socket (Lock system)                                                                                                                                                                                                                  | CCS 2 - JEVS G105<br>Type 2 Tethered cable                                                                                                                                                                                                                        |
|                                |  |   |   |    |    |

## Raption 50 Series

| Series            | German "Eichrechts" Compliant                                                       | DC output range | Upgradable to 100 kW                                                                  |
|-------------------|-------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------|
| Raption 50        | Optional                                                                            | 50 - 500 V      |  |
| Raption 50 HV EVO |  | 50 - 920 V      | Optional                                                                              |