

Cir Intelligent charging solutions for electric Life vehicles

Raption 22 DC Fast Charging Station for Electric Vehicles

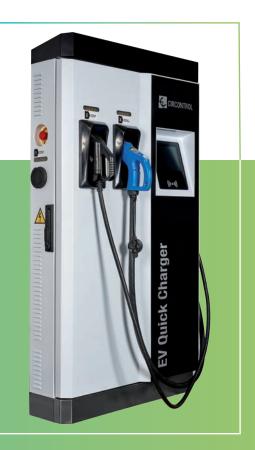
Application

Designed to be installed in both public access environments (urban spaces, shopping centres, airports, public car parks...) and private ones (companies with EV fleet, EV car rental/sharing...) with limited/ expensive power availability and/or DC charging is appreciated but the main interest is to have the users spending (without rushing) on the surrounding businesses.

Concept Design

Conceived to address the main problem identified by Charge Point Owners / Operators when Fast Charging (low uptime), Raption 22 series bases its functioning in state-of-the-art modular power technology.

Another key attribute considered has been 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 urban area to industrial sites).



Product highlights

For Charge Point Operator / Owner

- Its **modular power technology** ensures a very high uptime (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.
- **Simultaneous AC and DC** capability, enabling two cars charging at the same time
- 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 service (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.
- Accessibility for the disabled has also been considered, complying with international standards regarding the height of connectors/ display that facilitates its operation.

Raption 22 Series

General Specifications

| AC power supply | 3P + N + PE | | |
|-----------------------------|---|--|--|
| AC Voltage | 400V AC +/- 10% | | |
| Power Factor | >0,98 | | |
| Efficiency | 94 % at nominal output power | | |
| Frequency | 50 / 60 Hz | | |
| Electrical input protection | Main breaker disconnection | | |
| Overcurrent protections | MCB | | |
| Safety protection | RCD 30 mA Type A | | |
| Network connection | Ethernet 10/100 BaseTX | | |
| Interface protocol | OCPP 1.2 / 1.5 | | |
| Compliance | CE / Combo-2 (DIN 70121; ISO15118) EN61851-1; EN61851-23 | | |
| | CHAdeMO certified | | |
| Enclosure rating | IP54 / IK10 | | |
| Enclosure material | Stainless steel | | |
| Operating temperature | -5 °C to +50 °C | | |
| Ambient temperature storage | -40 °C to +60 °C | | |
| Operating humidity | 5 % to 95 % Non-condensing | | |
| 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 & AC by software | | |
| DC cable length CCS | 3 meters | | |
| DC cable length CHAdeMO | 3 meters | | |
| AC socket | Type 2 socket (lock system) | | |
| Lights for status indication | RGB colour indicator | | |
| Dimensions (D x W x H) | 350x840x1700 mm | | |
| Weight | 230 Kg | | |
| Cooling system | Air Cooling fans | | |
| Operational noise level | < 55 dBA | | |
| AC Meter | Complies with the EN 50470 (MID European standards) and IEC 62052-11 | | |

| Optional devices | | | |
|----------------------------------|---|--|--|
| Wireless Comunication | 3G/GPRS/GSM | | |
| Surge protection | Four pole transient surge protec- tor IEC 61643-1 (class II) | | |
| Safety protection | RCD type B | | |
| Heater Climate control | -30 °C to + 45 °C | | |
| Cable Length | 4.5m (all cables) | | |
| Anti-vandal connector protection | CHAdeMO, CCS (mechanical connector locking) | | |

Models Specifications

| Models | CCS CHA T2S32 | CCS CHA | CCS | СНА |
|--------------------------------|---|-------------------|-------------------|-------------------|
| Maximum AC input current | 64A | 35A | 35A | 35A |
| Required power supply capacity | 45 kVA | 24 kVA | 24 kVA | 24 kVA |
| Maximum output power | 22,5 kW (@400VDC) AC:22 kW | 22,5 kW (@400VDC) | 22,5 kW (@400VDC) | 22,5 kW (@400VDC) |
| Output voltage range | DC: 150 - 500 VDC AC: 400V AC | DC:150 - 500 VDC | DC:150 - 500 VDC | DC:150 - 500 VDC |
| Maximum output current | DC:56A DC AC:32A AC | DC:56A DC | DC:56A DC | DC:56A DC |
| Number of plugs | 3 | 2 | 1 | 1 |
| Connector Type | CCS 2- JEVS G105 Type 2 socket (Lock system) | CCS 2 - JEVS G105 | CCS 2 | JEVS G105 |
| | | | | |

Customisation Examples

Raption 22 series offers a wide frontal surface that can be **easily customised**.







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