

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 Communication	3G/GPRS/GSM
Surge protection	Four pole transient surge protector 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	CHA
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.

