

eVolve Rapid Master

The most cost-effective multiple charging solution

Application

The eVolve Rapid series is designed to adapt DC charging to a compact format, applying it to contexts where AC charging is insufficient, thereby improving charging speed and reducing the required investment. The master-satellite system, which can be combined with the entire eVolve (AC) and Raption (DC) range, also makes it ideal for all multi-point and multi-speed charging scenarios.

Concept Design

The worlds of AC and DC come together in the eVolve Rapid to maintain high charging power in the typical compact AC format, making it possible to supply 25 kW of DC power to all electric vehicles. The master-satellite system minimises the initial investment (CAPEX) and operating expenses (OPEX) in facilities with various chargers. In turn, this makes it simple to manage all satellite chargers through the master, both in terms of communication and the user interface: a solution that avoids loss of performance and reduces costs.



Product highlights

- Using a typical **small AC enclosure**, eVolve Rapid is capable of supplying **25 kW of DC power in a fast charge** to any electric vehicle, cutting down charging times.
- A single modem of the master device can be used as a **back-office integration point** (through OCPP 1.5, 1.6J or future 2.0), reducing operating costs.
- For environments without access to **backend systems** (OCPP), an AC charge balance function is available with user control via RFID.
- The **door at the front with lock and security key** enables maintenance access and makes it more difficult to vandalise. It also allows it to be installed next to a wall.
- As a **master charger**, it can operate up to 8 eVolve satellites (16 AC outlets), and they can be combined with each other. User authentication from a single point reduces CAPEX costs.
- The eVolve Rapid range has been designed with Raption family technology to work within a **voltage range of 200 to 920 V**. This enables it to adapt to new and future EV models and facilitates the charging of other heavier vehicles, such as buses or lorries.
- Its 8-inch **anti-vandal colour touchscreen** can be read in daylight, not only displaying clear charging instructions and the operational status of the charger, but also allowing users to select their language from among over 30 options.
- The eVolve Rapid Master features a **contactless payment** system that offers easy, intuitive and quick transactions.
- To meet the most stringent billing requirements, the eVolve Rapid series includes **MID-certified meters**.

Serie eVolve Rapid Master

General specifications

AC power supply	3P + N + PE
AC input voltage	400 V AC +/- 10% three-phase
Power factor	>0.98
Efficiency	95% at nominal output power
Frequency	50/60 Hz
Power supply capacity	27 kVA
Maximum AC input current	39 A
Maximum output current	70 A
Compliance	CE / Combo-2 (DIN 70121; ISO 15118) IEC 61851-1; IEC 61851-23 IEC 61851-21-2
Enclosure material	Aluminium and ABS
Enclosure rating	IP54 and IK10
Operating humidity	Up to 95%
Operating temperature	-35 °C and +45 °C
Storage temperature	Between -40 °C and +60 °C
Environment	Outdoor/indoor
Light beacon	RGB colour indicator
Enclosure door lock	Enclosure door lock
Enclosure access	Door at front
Cable length	5.5 metres
Cable support	Holder support and integrated cable roller

Dimensions (D x W x H)	459 x 1750 x 288 mm
Weight	77 kg
Meter	MID Meter Class 1 - EN 50470-3
Connections	10/100TX (TCP-IP)
Interface protocol	OCPP 1.5 / 1.6J / 2.0 HW Ready
HMI screen	8" anti-vandal touchscreen
RFID reader	ISO/IEC 14443 A/B MIFARE Classic/DESFire EV1 ISO 18092 ECMA-340 NFC 16.53MHz
Wireless connection	EMEA - 4G LTE/WiFi Hotspot/ GPRS/GSM
Connectivity	Switch TCP ethernet 8 ports
Optional devices	
Customisation	Frontal Labelling
Wireless connection	LATAM/APAC - 4G LTE/GPRS/ GSM
Connectivity	Switch TCP ethernet 16 ports
RFID extension	Legic Advant / Legic Prime ISO 15693 / ISO 18092, Sony FeliCa
Contactless payment*	Built-in credit card payment terminal

*Ask for availability

Model specifications

Models	Master CCS Post
Safety protections	Type B RCD 30 mA C-curve MCB
Maximum output power	25 kW
Output voltage	150-920 V DC
Connection	CCS2 