

eVolve Smart

The perfect combination of robustness, design and communications

Application

Designed to be installed in both public access environments (urban spaces, shopping centres, car parks, airports, petrol stations...) and private areas (companies, community park sites...) where its intelligent capabilities offer a range of possibilities which improve the user and/or operator experience.

Concept Design

Nowadays, the concept of smart cities demands an innovative design for its urban equipment, especially for EVSE (EV Supply Equipment) due to its innovative nature. With its stylised shape and modern lines, the eVolve series meets this demand.

In addition, not only has the exterior design been taken into account, but also the daily conditions (operational and environmental) that EVSE has to withstand.



Product highlights

For Charge Point Operators / Owners

- The **Integrated Load Management** allows for a lower TCO (Total Cost of Ownership) by charging two EVs simultaneously even when the charger is not supplied with its maximum output power.
- The door at the front with **key access** provides an access to the interior 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.
- In terms of the charger's **housing**, aluminium and ABS plastic have been combined in a robust structural design that provides protection against both mechanical stress and severe environmental conditions, increasing the charger's lifespan, meaning it will not need to be replaced after just a few years.
- In terms of **communication**, either through the Ethernet port (by default) or 4G/3G/GPRS modem (optional), the charger can be connected to a back-office system (by means of OCPP) obtaining benefits such as user management, billing or remote error diagnosis.
- To comply with the most demanding requirements regarding billing, the eVolve series includes **MID certified metres**.

For Charge Point Users

- Clear charging instructions and operating status are shown using a **backlit display**, increasing user satisfaction, especially useful when the charger has been previously reserved by another user.
- eVolve series offers a **flexible authentication**, meaning that the user can authenticate either before or after the cable to the EV. Additionally, the authentication process can also be disabled for a Connect 'n' Charge mode.
- **Accessibility for disabled users** has also been considered, complying with international standards regarding the height of connectors/displays, facilitating their use.
- The eVolve series includes the necessary **electrical protections** not only to minimise the human safety risk of electrical shock, but also to ensure the maximum uptime thanks to independent protections per connector.

eVolve Smart Series

General Specifications

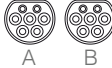

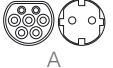
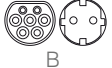

Network connection	10/100BaseTX (TCP-IP)
Interface protocol	OCPP 1.5 / OCPP 1.6 J
Enclosure rating	IP54 / IK10
Enclosure material	Aluminium & ABS
Enclosure door lock	Anti-vandal key
Enclosure access	Frontal door
Operating temperature	-5 °C to +45 °C
Ambient temperature storage	-40 °C to +60 °C
Operating humidity	5% to 95% Non-condensing
Light beacon	RGB colour indicator
Display	Multi-language LCD
Power limit control	Mode 3 PWM control according to ISO/IEC 61851-1
Dimensions (D x W x H)	Post: 290x450x1550 mm Wallbox: 220x380x930mm
Weight	Post: 55 Kg Wallbox: 30 Kg
RFID Reader	ISO / IEC14443A / B MIFARE Classic/DESFire EV1 ISO 18092 / ECMA-340 NFC 13.56MHz
Meter	MID Class 1 - EN50470-3

Power output management	Integrated Load Management
Overcurrent protection	MCB (curve C)**
Safety protection	RCD Type A (30mA) Autorecovery function optional*,**
Type 2 socket protection	Locking System
Compatible with DLM	
Optional devices	
Low temperature kit	-30 °C to +45 °C
Safety protection	RCD Type A (30mA) + 6mA DC autorecovery function optional*,** RCD Type B (30mA) with autorecovery function optional*,**
Surge protection (Post)	Four pole transient surge protector IEC 61643-1 (class II)**
Type 2 charging socket	Shutter
Wireless Communication	4G / 3G / GPRS / GSM
Tethered Cable (spring) (Cable length: 4 m)	Type 1 + Type 1 Type 2 + Type 2
RFID Extension (Post)	Legic Advant / Legic Prime ISO 15693 / ISO 18092, Sony FeliCa
Customisation	Vinyl and logo

*As per regulations this autorecovery function is not available for cable.

**Not available for TM4 model

Model Specifications

Models	S	T	TM4	C63 One*		
AC power supply	1P + N + PE	3P + N + PE	3P + N + PE	3P + N + PE		
AC input voltage	230 V AC +/-10%	400 V AC +/-10%	400 V AC +/-10%	400 V AC +/-10%		
Maximum input current	64 A	64 A	64 A	63 A		
Maximum input power	14,7 kW	44 kW	44 kW	43 kW		
Number of plugs	2	2	4	1		
Simultaneous charging sessions	2	2	2	1		
Outlet A	Maximum output current	32 A	32 A	16 A	63 A	
	Maximum output power	7,4 kW	22 kW	22 kW	3,7 kW	43 kW
	AC output voltage	230 V AC (1P + N + PE)	400 V AC (3P + N + PE)	400 V AC (3P + N + PE)	230 V AC (1P + N + PE)	400 V AC (3P + N + PE)
Outlet B	Maximum output current	32 A	32 A	32 A	16 A	63 A
	Maximum output power	7,4 kW	22 kW	22 kW	22 kW	3,7 kW
	AC output voltage	230 V AC (1P + N + PE)	400 V AC (3P + N + PE)	400 V AC (3P + N + PE)	230 V AC (1P + N + PE)	400 V AC (3P + N + PE)
Connection	2x Type 2 Socket (lock system) 	2x Type 2 Socket (lock system) 	2x Type 2 Socket (lock system) 	2x CEE/7 	Type 2 Cable (4m) 	

*Only in post

Customisation Examples

The eVolve series features a broad frontal panel that can be easily customised.

