

WallBox eVolve Smart

The perfect combination of robustness, design and communications

Application

Designed to be installed in both public access environments (urban spaces, shopping centres, parking lots, airports, petrol stations ...) and private ones (companies, community car park sites...) where their 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, eVolve series meets this demand.

In the same way, not only external design has been taken into account but also the daily conditions (both operational and environmental) EVSE have to withstand.



Product highlights

For Charge Point Operator / Owner

- The **Embedded Load Management** allows a lower TCO (Total Cost of Ownership) by charging two EVs simultaneously.
- Its **frontal key-locked door** provides an easy access to the inside of the charger which results in a lower OpEx (Operating Expenditure) 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.
- About the charger's **housing**, aluminium and ABS plastic have been combined in a robust structural design that provides protection to both mechanical stress and severe environmental conditions, increasing the charger lifespan and avoiding its replacement in just a few years.
- In terms of **communication**, either by its 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, remote error diagnostic, etc.
- To comply with the most demanding requirements regarding billing, eVolve series includes **MID certified meters**.
- Available in **two sizes**, the small one with no protections and the large one with protections.

For Charge Point User

- Clear charging instructions and plug status are shown using a **backlight 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 either authenticate before or after connecting the cable to the EV. Additionally, the authentication process can also be disabled for a 'plug & charge' use mode.
- The **accessibility for the disabled** has also been considered, complying with international standards regarding the height of connectors/display that facilitates its operation.
- eVolve series includes the necessary **electrical protections** (optional) not only to minimise the human safety risk of electrical shock but also to ensure the maximum uptime due to independent protections per connector.

WallBox eVolve Smart Series











General Specifications

Network connection	10/100BaseTX (TCP-IP)	Meter	MID Class 1 - EN50470-3
Interface protocol	OCPP 1.5 or OCPP 1.6J	Power output management	Embedded Load Management
Enclosure rating	IP54 / IK10	Type 2 Socket Protection	Locking System
Enclosure material	Aluminium & ABS	Compatible with DLM	
Enclosure door lock	Key lock	Optional devices	
Enclosure access	Frontal door	Low temperature kit	-30 °C to +45 °C
Operating temperature	-5 °C to + 45 °C	Electrical protection Type A*	Overcurrent: MCB (curve C) Safety: RCD Type A (30mA) Autorecovery function optional**
Ambient temperature storage	-40 °C to + 60 °C	Electrical protection Type B*	Overcurrent: MCB (curve C) Safety: RCD Type B (30mA) Autorecovery function optional**
Operating humidity	5 % to 95 % Non-condensing	Type 2 Charging Socket	Shutter
Light beacon	RGB colour indicator	Wireless Communication	4G / 3G / GPRS / GSM
Display	LCD Multi-language	Tethered Cable (spring)* (Cable length: 4 m)	Type 1 + Type 1 Type 2 + Type 2 Type 2 + Type 2 Socket
Power limit control	Mode 3 PWM control according ISO/IEC 61851-1	RFID Extension	Legic Advant / Legic Prime ISO 15693 / ISO 18092, Sony FeliCa
Dimensions (D x W x H)	Small: 222x382x628 mm (Model S & T without protections) Large: 222x382x928 mm	Customisation	Frontal Labelling
Weight	Small: 25 kg Large: 30 kg	Anti-vandal Key	
RFID Reader	ISO / IEC14443A / B MIFARE Classic/DESFire EV1 ISO 18092 / ECMA-340 NFC 13.56MHz		

*Not available in model TM4

** As per directive this function is not available for cable.

Models Specifications

Model	S One	T One	S	T	TM4	
AC power supply	1P + N + PE	3P + N + PE	1P + N + PE	3P + N + PE	3P + N + PE	
AC input voltage	230 VAC +/-10%	400 VAC +/-10%	230 VAC +/-10%	400 VAC +/-10%	400 VAC +/-10%	
Maximum input current	32 A	32 A	64 A	64 A	64 A	
Maximum input power	7,4 kW	22 kW	14,7 kW	44 kW	44 kW	
Number of plugs	1	1	2	2	4	
Outlet A	Maximum output current	32 A	32 A	32 A	32 A	16 A
	Maximum output power	7,4 kW	22 kW	7,4 kW	22 kW	3,7 kW
	AC output voltage	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	400 VAC (3P + N + PE)
Outlet B	Maximum output current		32 A	32 A	32 A	16 A
	Maximum output power		7,4 kW	22 kW	22 kW	3,7 kW
	AC output voltage		230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	400 VAC (3P + N + PE)	230 VAC (1P + N + PE)
Protections	Small	No	No	No	No	Not Available
	Large	Yes	Yes	Yes	Yes	No
Connection	Type 2 Socket (lock system)	Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x CEE/7
	 A	 A	  A B	  A B	  A	  B