

SWARCO

WALL BOX eVOLVE SMART

THE PERFECT COMBINATION OF ROBUSTNESS, DESIGN AND COMMUNICATIONS

APPLICATION

Suitable for both public and private environments such as shopping centres, car parks, airports, petrol stations, urban spaces and business premises, to name but a few. The inbuilt intelligent capabilities offer a range of possibilities, which improve the end user and operator experience.



CONCEPT DESIGN

The smart cities concept demands an innovative design for urban equipment, especially for EVSE (EV Supply Equipment). With its stylised shape and modern lines, the eVolve series meets this criteria. In addition to the aesthetic design, consideration has also been given to the operational and environmental conditions that the units have to withstand.

PRODUCT HIGHLIGHTS

For Charge Point Operator / Owner

- The **Embedded Load Management** allows for a lower TCO (Total Cost of Ownership) by charging two EVs simultaneously.
- The door at the front with **key access** provides easy access to the interior of the charger which results in a lower OPEX (operating expense) 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, remote error diagnostics, etc.
- To comply with the most demanding requirements regarding billing, the eVolve series includes **MID certified metres**.
- Available in **two sizes**, a small one with no protections and a large one with protections.

For Charge Point User

- 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 Plug '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** (optional) not only to minimise the human safety risk of electrical shocks but also to ensure the maximum uptime thanks to independent protections per connector.

WALL BOX eVOLVE SMART

GENERAL SPECIFICATIONS

Network connection	10/100TX (TCP-IP)
Interface protocol	OCPP 1.5 or OCPP 1.6J
Enclosure rating	IP54 / IK10
Enclosure material	Aluminium & ABS
Enclosure door lock	Key lock
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)	Small: 222x382x628 mm (Model S & T without protections) Large: 222x382x928 mm
Weight	Small: 25 kg Large: 30 kg
RFID Reader	ISO / IEC14443A / B MIFARE Classic/DESFire EV1 ISO 18092 / ECMA-340 NFC 13.56MHz

Meter	MID Class 1 - EN50470-3
Type 2 socket protection	Locking system







OPTIONAL DEVICES

Low Temperature Kit	-30 °C to +45 °C
Overcurrent protection*	MCB (curve C)
Electrical protection*	RCD Type A (30mA) RCD Type A (30mA) + 6mA DC RCD Type B (30mA) Autorecovery function optional**
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 Type 2 + Type 2 Socket
RFID Extension	Legic Advant / Legic Prime ISO 15693 / ISO 18092, Sony FeliCa
Compatible with DLM	
Customisation	Front Labelling
Anti-vandal key	

*Not available in the TM4 model

**As per directive this function is not available for cable. It is also not compatible with the "RCD Type A + 6mA DC" option.

MODEL SPECIFICATIONS

MODELS		S One	T One	S	T
AC power supply		1P + N + PE	3P + N + PE	1P + N + PE	3P + N + PE
AC input voltage		230 VAC +/-10%	400 VAC +/-10%	230 VAC +/-10%	400 VAC +/-10%
Maximum input current		32 A	32 A	64 A	64 A
Maximum input power		7.4 kW	22 kW	14.7 kW	44 kW
Number of plugs		1	1	2	2
Outlet A	Maximum output current	32 A	32 A	32 A	32 A
	Maximum output power	7.4 kW	22 kW	7.4 kW	22 kW
	AC output voltage	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)
Outlet B	Maximum output current	-	-	32 A	32 A
	Maximum output power	-	-	7.4 kW	22 kW
	AC output voltage	-	-	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)
Protections	Small	No	No	No	No
	Large	Yes	Yes	Yes	Yes
Socket Type		Type 2 Socket (lock system)  A	Type 2 Socket (lock system)  A	2x Type 2 Socket (lock system)   A B	2x Type 2 Socket (lock system)   A B