

SWARCO

# POST eVOLVE SMART

THE MOST SUITABLE CHARGER FOR URBAN ENVIRONMENTS

## 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 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 (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**.

### *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 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** not only to minimise the human safety risk of electrical shock, but also to ensure the maximum uptime thanks to independent protections per connector.

# POST 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)	290x450x1550 mm
Weight	55 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 protections	MCB (Curve C)
Safety protection	RCD Type A (30mA) Autorecovery function optional*
Type 2 Socket Protection	Locking System

### OPTIONAL DEVICES

Low Temperature Kit	-30 °C to +45 °C
Safety Protection	RCD Type A (30mA) + 6mA DC RCD Type B (30mA) with autorecovery function optional*
Surge Protection	Four pole transient surge protector IEC 61643-1 (class II)
Type 2 Charging socket	Shutter
Wireless communication	4G / 3G / GPRS / GSM
Anti Vandal Key	
Anti Vandal door	Not available for TM4
Tethered cable (spring) (cable length: 4m)	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	Frontal Labelling

\*As per regulations 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	C63 ONE	S	T
AC power supply		1P + N + PE	3P + N + PE	3P + N + PE	1P + N + PE	3P + N + PE
AC input voltage		230 VAC +/-10%	400 VAC +/-10%	400 VAC +/-10%	230 VAC +/-10%	400 VAC +/-10%
Maximum input current		32 A	32 A	63 A	64 A	64 A
Maximum input power		7.4 kW	22 kW	43 kW	14.7 kW	44 kW
Number of plugs		1	1	1	2	2
Outlet A	Maximum output current	32 A	32 A	63 A	32 A	32 A
	Maximum output power	7.4 kW	22 kW	43 kW	7.4 kW	22 kW
	AC output voltage	230 VAC (1P + N + PE)	400 VAC (3P + 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)
Connection	Controller	1 x Type 2 Socket (lock system)  A	1 x Type 2 Socket (lock system)  A	Type 2 Cable (4m)  A	2 x Type 2 Socket (lock system)   A B	2 x Type 2 Socket (lock system)   A B

\* Exclusive use type 2 or CEE/7 per outlet