

# Master - Slave Wallbox

*The most cost-effective multiple charging solution*

## Application

Designed to minimise the initial investment (CAPEX) and the operating expenses (OPEX) when several chargers are required, this solution is a combination of a Master charger and a set of Slaves controlled by this Master. The whole system works as if all the chargers had smart capabilities.

Suitable for private installations such as company fleets or communities with a single administrator, and also for public access environment such as shopping centers, car parks, airports and others.

## Concept Design

It has the same exterior design concept as the acclaimed eVolve series, and in addition to featuring modern lines and robust housing, harsh weather conditions and user-friendly operation have also been considered.



## Product highlights

- The Master charger is **capable of balancing the available power** based on the number of charge points in use, thus the total power required to provide the total load becomes substantially reduced. This makes it possible to reduce costs in the electrical installation setup and a cost saving on the contracted energy.
- Also, by centralising the smart capabilities into the Master, the hardware of the Slaves is reduced, so combining Master-Slave is the **best choice to minimise the hardware cost**.
- A **single modem** in the Master unit can be used for remote connection and back-office system integration (by means of OCPP 1.5 or 1.6J), so communication fees are also reduced avoiding extra OPEX cost.
- **The Master can operate up to 8 Slaves** (max. 18 charging points including the Master) managing the load and user authentication.
- For car parks without OCPP backend system, standalone configuration offers a **load balancing feature and user control through RFID**.
- 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 quicker installation and service (preventive/corrective). Moreover, it allows the charger to be installed next to a wall optimising the available space.
- Its **8" daylight readable touchscreen** not only provides clear charging instructions (e.g. incorrect EV shift position to start the charge) and operating status (e.g. reserved charge point) but also allows the user to select from several languages.
- To comply with the most demanding requirements regarding billing, the eVolve series includes **MID certified metres**.
- The eVolve series include the necessary **electrical protections** not only to minimise the human safety risk of electric shocks, but also to ensure the maximum uptime thanks to independent protections per connector.

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## General Specifications

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	-20 °C to + 60 °C
Operating humidity	5% to 95% Non-condensing
Meter	MID Class 1 - EN50470-3
Light beacon	RGB colour indicator
Power limit control	Mode 3 PWM control according to ISO/IEC 61851-1
Dimensions	Small: 222 x 382 x 628 mm <i>(only available on Master Zero and on Slave S)</i> Large: 222 x 382 x 928 mm
Weight	Small: 25 kg Large: 30 Kg
Power Output Management	Integrated Load Management
Type 2 socket protection	Locking System

### Master

Network connection	10/100TX (TCP-IP)
Interface protocol	OCPP 1.5 or OCPP 1.6J
Display HMI	8" anti-vandal touchscreen
RFID Reader	ISO/IEC 14443 A/B MIFARE Classic/DESFire EV1 ISO 18092 ECMA-340 NFC 16.53MHz

### Slave

Master Communication	Ethernet UTP
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## Model Specifications

Models	Master Zero	Master S One	Master T One	Master or Slave S	Master or Slave T	
AC power supply	1P + N + PE	1P + N + PE	3P + N + PE	1P + N + PE	3P + N + PE	
AC input voltage	230 VAC +/-10%	230 VAC +/-10%	400 VAC +/-10%	230 VAC +/-10%	400 VAC +/-10%	
Maximum input current	0.15 mA	32 A	32 A	64 A	64 A	
Maximum input power	35 W	7.4 kW	22 kW	14.8 kW	44 kW	
Number of plugs	0	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)	
Connection	Master	Not available	1x Type 2 Socket (lock system)	1x Type 2 Socket (lock system)	Check availability	Check availability
	Slave	Not available	Not available	Not available	2x Type 2 Socket (lock system)	2x Type 2 Socket (lock 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)
Type 2 charging socket	Shutter
Wireless communication <i>(only in Master)</i>	4G LTE/WiFi Hotspot/GPRS/GSM/ 3G LATAM
Anti-vandal key	
Tethered cable <i>(spring)</i> <i>Cable length: 4m</i> <i>(only available in Slave)</i>	Type 1 + Type 1
	Type 2 + Type 2
Network hub <i>(only available in Master)</i>	Switch TCP ethernet 8 ports
	Switch TCP ethernet 12 ports
RFID Extension	Legic Advant / Legic Prime ISO 15693 / ISO 18092, Sony FeliCa
Customisation	Frontal Labelling

