

Wallbox Smart

A suitable solution for improving user and operator experience

Application

Designed to be installed in both public access environments (urban spaces, shopping centres, car parks, airports...) and private areas (company fleets) where its intelligence and communications capabilities offer a range of possibilities that improve the user and/or operator experience.

Concept Design

Nowadays, the concept of an intelligent car park combined with sophisticated users demands intelligent EV chargers with the possibility of having connection to a cloud-based software or backend system.

Installing a Smart Wallbox network in a car park allows for intelligent energy management of several charging stations simultaneously when there is not enough power available for all of them.



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.
- In terms of the charger's housing, ABS plastic
 has been selected. Its robust structural design
 provides protection against both mechanical
 stress and severe environmental conditions,
 increasing the charger's lifespan and meaning
 it does not need to replaced after just a few
 years.
- In terms of communication, either through the Ethernet port (by default) or 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.
- Ready for Dynamic Load Management network integration. The Wallbox Smart series can be integrated with Circontrol's SCADA software, making simultaneous EV charging easier, faster and cheaper.

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.
- The Wallbox Smart series offers a **flexible authentication**, meaning that the user can authenticate either before or after connecting the cable to the EV. Additionally, the authentication process can also be disabled for a Plug 'n' Charge mode.

Wallbox Smart Series

General Specifications

Network connection	10/100BaseTX (TCP-IP)		
Interface protocol	OCPP 1.5 / 1.6J		
Enclosure rating	IP54 / IK10		
Enclosure material	ABS		
Operating temperature	-5°C to 45°C		
Ambient temperature storage	-40°C to +60C°		
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)	Single: 125x225x320 mm Dual: 125x442x350 mm		
Weight	Single: 4 kg Dual: 6 kg		

RFID Reader	ISO / IEC14443A / B MIFARE Classic/DESFire EV1 ISO 18092 / ECMA-340 NFC 13.56MHz
MID Meter	MID Class 1 - EN50470-3
Type 2 socket protection	Locking system
Compatible with DLM	
Optional devices	
Low temperature kit	-30°C to +45°C
Cable support	Optional (included at Wallbox with tethered cable)
Pedestal	Single: for single-plug Wallbox Dual: for dual-plugs Wallbox
Type 2 socket protection	Shutter
Wireless Communication	4G / 3G / GPRS / GSM

Model Specifications

Model	WBC-SMART	WBC32-SMART	WBMC-SMART
AC power supply	1P + N + PE	1P + N + PE	1P + N + PE
AC Voltage	230 VAC +/-10%	230 VAC +/-10%	230 VAC +/-10%
Maximum input current	16 A	32 A	32 A
Maximum input power	3.7 kW	7.4 kW	7.4 kW
Number of plugs	1	1	1
Maximum output power per outlet	3.7 kW	7.4 kW	7.4 kW
Maximum output current per outlet	16 A	32 A	32 A
AC output voltage	230 VAC (1P + N + PE)	230 VAC (1P + N + PE)	230 VAC (1P + N + PE)
Connection	1 x Type 1 Cable (5m)	1 x Type 1 Cable (5m)	1 x Type 2 Cable (5m)

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Model	WBMC-SMART-TRI	WBM-SMART		WBM-SMART-TRI	
AC power supply	3P + N + PE	1P + N + PE		3P + N + PE	
AC Voltage	400 VAC +/-10%	230 VAC +/-10%		400 VAC +/-10%	
Maximum input current	32 A	32 A		32 A	
Maximum input power	22 kW	7.4 kW		22 kW	
Number of plugs	1	1		1	
Maximum output power per outlet	22 kW	7.4 kW		22 kW	
Maximum output current per outlet	32 A	32 A		32 A	
AC output voltage	400 VAC (3P+N+PE)	230 VAC (1P + N + PE))	400 VAC (3P + N + PE)	
Connection	1 x Type 2 Cable (5m)	1 x Type 2 Socket (lock system)		1 x Type 2 Socket (lock system)	

Mod	del	WB2M-SMART	WB2M-SMART-TRI	WB-MIX-SMART
AC	power supply	1P + N + PE	3P + N + PE	1P + N + PE
AC	Voltage	230 VAC +/-10%	400 VAC +/-10%	230VAC +/-10%
Max	kimum input current	64 A	64 A	48 A
Max	kimum input power	14.7 kW	44 kW	11 kW
Nur	mber of plugs	2	2	2
Outlet A	Maximum output power	7.4 kW	22 kW	7.4 kW
	Maximum output current	32 A	32 A	32 A
Outlet B	Maximum output power	7.4 kW	22 kW	3.7 kW
	Maximum output current	32 A	32 A	16 A
AC	output voltage	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	230 VAC (1P + N + PE)
Cor	nnection	2 x Type 2 Socket	2 x Type 2 Socket	1 x Type 2 Socket (lock system) + 1 x CFF/7