



WallBox Smart

Charging Station for Electric Vehicles

Application

Designed to be installed in both public access environments (urban spaces, shopping centres, parking lots, airports...) and private ones (homes, communal blocks, companies fleets...) where their intelligence and communications capabilities offer a range of possibilities that improve the user and/or operator experience.

Concept Design

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

Installing a smart wallbox network in a carpark, allows performing an intelligent energy management of several charging station simultaneously where not enough power is available.



Product highlights

For Charge Point Operator / Owner

- The Embedded Load Management allows a lower TCO (Total Cost of Ownership) by charging two EVs simultaneously even when the charger is not supplied with its maximum output power.
- About the charger's Housing, ABS plastic has been selected 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 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.
- Ready for Dynamic Load Management network integration. Smart Wallbox series can be integrated with Circontrol Scada Software and make simultaneous EV charge easier, faster and cheaper.

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.
- Smart Wallbox 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.

WallBox Smart Series

General Specifications

Network connection	10/100BaseTX (TCP-IP)	
Interface protocol	OCPP1.2, 1.5	
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	LCD Multi-language	
Power limit control	Mode 3 PWM control according ISO/IEC 61851-1	
Dimensions (D x W x H)	Single 125x225x320 mm Dual 125x442x350 mm	
Weight	Single: 4Kg Dual: 6Kg	

RFID Reader	ISO / IEC14443A / B MIFARE Classic/DESFire EV1 ISO 18092 / ECMA-340 NFC 13.56MHz
Meter	Class 1 - EN50470-3
Type 2 Socket Protection	Locking system

Optional devices		
MID Meter	MID Class 1 - EN50470-3 -30°C to +45°C	
Low temperature kit		
Cable support	support Optional (included at WallBox with tethered cable)	
Pedestal	Single: for one plug WallBox Dual: for two plugs WallBox	
Type 2 Charging Socket	Shutter	
Wireless Communication	3G / GPRS / GSM	

Models Specifications

Mod	del	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%
Max	rimum input current	16 A	32 A	32 A
Max	Maximu input power 3,7 kW		7,4 kW	7,4 kW
Nun	nber of plugs	1	1	1
Max	rimum output power per outlet	3,7 kW	7,4 kW	7,4 kW
Max	Maximum output current per outlet 16 A		32 A	32 A
AC	AC output voltage 230 VAC (1P + N + PE)		230 VAC (1P + N + PE)	230 VAC (1P + N + PE)
Soc	ket Type	1 x Type 1 (5m cable)	1 x Type 1 (5m cable)	1 x Type 2 (5m cable)
Mod	del	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%
Max	rimum input current	32 A	32 A	32 A
Max	rimum input power	22 kW	7,4 kW	22 kW
Nun	nber of plugs	1	1	1
Max	rimum output power per outlet	22 kW	7,4 kW	22 kW
Max	rimum output current per outlet	32 A	32 A	32 A
AC output voltage		400 VAC (1P + N + PE)	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)
Soc	ket Type	1 x Type 2 (5m cable)	1 x Type 2 Socket (lock system)	1 x Type 2 Socket (lock system)
Mod	del	WB-MIX-SMART	WB2M- SMART	WB2M- SMART-TRI
AC	power supply	1P + N + PE	1P + N + PE	3P + N + PE
AC	Voltage	230VAC +/-10%	230 VAC +/-10%	400 VAC +/-10%
Max	rimum input current	48 A	64 A	64 A
Max	rimu input power	11 kW	14,7 kW	44 kW
	nber of plugs	2	2	2
Outlet A	Maximum output power	7,4 kW	7,4 kW	22 kW
	Maximum output current	32 A	32 A	32 A
Outlet B	Maximum output power	3,7 kW	7,4 kW	22 kW
Onl	Maximum output current	16 A	32 A	32 A
AC	output voltage	230 VAC (1P + N + PE)	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)
Soc	ket Type	1 x Type 2 Socket (lock system) + 1 x CEE/7	2 x Type 2 Socket (lock system)	2 x Type 2 Socket (lock system)