Ultra-fast charging on power-limited grids

Nominated for the **Deutscher Zukunftspreis** (German Future Prize) **2022**

2 x ChargeBox Dispenser

ChargeBox

ChargeB

4 4

EV charging

Quickly implement ultra-fast charging solutions on power-limited grids.



Monitoring at the cell level

Sustainable use of the batteries for long-lasting operation.



Self-consumption optimisation*

Use renewable energy more efficiently. For the environment and cost-effective operation.



Peak shaving*

Significantly reduce energy costs through the compensation of extreme loads.

Up 320 kW charging power

6 X more power on power-limited grids

140 kWh battery capacity

16 m² installation area

(the smallest system of its class)

Up 300 m

between **grid connection** and **charging point**

Noiseless

charging dispenser for charging in residential areas



ChargeBox Booster

Power amplifier

Grid	Grid Configuration	TN-S with 3Ph + N + PE (stationary)
	Frequency	50 Hz
	Inlet power	39–110 kVA
	Inlet voltage	346-415 V (+/- 10%)
	Inlet current	Max. 186 A
Battery system	Warranty	Up to 10-year Cell Performance Warranty on battery cells (in combination with Advanced Service contract)
	Cell chemistry	Lithium NMC
	Battery capacity	140 kWh
	Cooling	Air- and liquid-cooled
ChargeBox Booster	Vehicle charging power	Up to 2 x 160 kW/1 x 320 kW
	Electrical efficiency	Up to 96%*
	Target markets	EU (USA and Canada on request)
	Noise emissions	Low-noise charging
	LxWxH	$1.3 \times 1.3 \times 1.4$ m plus foundation and underground cabling**
	Weight (total)	2.8 t (incl. cooling medium and batteries)
	Installation options	Up to 200 m from the mains connection
	Outlet voltage	150-920 V DC (on the outlet side to the vehicle)
Communication interfaces	Back-end connection	Fibre-optic cable, 4G, Ethernet
	Protocol	OCPP 1.6J
Ambient conditions	Temperature range	-30°C to 50°C
	Installation options	Outdoors***
Standards/safety	Safety	Battery safety according to IEC 62619 Power converter safety according to EN 62477-1
	Conformity	CE, UL
	EMC	EN 61000-6-2; EN 61000-6-4
	Transport	UN 38.3 test for lithium batteries

ChargeBox Dispenser

Charging station

Dimensions	LxWxH	0.4 x 0.4 m (floor area) x 2.7 m	Vý.
	Weight	170 kg	
System	Screen	Sunlight-optimised 10-inch HD touch screen	7
	Authentication	RFID	
	Energy measurement	Optionally using calibrated DC energy meter	
	Vandalism class	IK09	
	Noise emissions	Noiseless, no discharge of cooling air	
	Installation options	Indoors and outdoors, up to 100 m from ChargeBox Booster	
Charging cable	Cooling	Liquid-cooled	
	Plug type	CCS2 (USA and Canada on request)	
	Functionality	Flexible cable for conveniently reaching the chargir on the vehicle	ng sockets
	Cable length	3.8 m without ground contact when plugged in	

^{*} Depending on the grid connection power/vehicle voltage/charging curve of the vehicle







