



JUICE ULTRA 2 battery

The JUICE ULTRA 2 battery consists of a DC fast charging station with integrated energy storage system (ESS) equipped with Lithium iron phosphate batteries (cobalt free). With its energy management system (EMS), which can be controlled locally or via remote access, the ESS enables the provision of an optimised energy supply based on the grid, battery and electric vehicles. The intelligent JUICE ULTRA 2 battery helps to prevent power peaks on the grid while also compensating for low or unavailable grid capacity. In the field, the JUICE ULTRA 2 battery impresses with its user-friendliness and high charging capacity, as well as its cost-optimised operation. In addition, the modular design ensures utmost flexibility and high stability.

A battery capacity of **max. 466 kWh** enables rapid, simultaneous charging with up to **210 kW** distributed at **2 charging points**.

Special features

- **Compact, space-saving design**
The unique design ensures minimal space requirements and easy positioning in the parking area, with noise development also kept to a minimum.
- **High charging capacity with low grid output**
With a maximum charging capacity of $150\text{kW} + 60\text{kW} = 210\text{kW}$, the JUICE ULTRA 2 battery offers a significantly higher power output than most other fast charging stations with integrated storage when supplied with limited input power. The output capacity can be intelligently distributed across the two charging connections based on the actual requirements of the charged vehicles.
- **Maximum ease of use**
A 19" touchscreen and integrated LED indicators for the charging and battery status improve the charging experience and boost efficiency.
- **Flexible use and expandability**
The modular expandability of the battery capacity up to $2 \times 233\text{kWh}$, intelligent load distribution across the two charging points and optimum energy utilisation ensure utmost flexibility in a wide range of applications.

Application example



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Technical specifications

Technical parameters

Product specifications	Type	DC fast charging station	
	Dimensions	W 2.3m, D 0.8m, H 2.25m (for 466kWh: W 3,85 m)	
	Installation	Floor installation	
	Material	High-strength steel alloy	
	Colour	White, weather-resistant coating	
	Weight	3000kg (for 466kWh: 5900kg)	
	Energy storage system	Battery capacity	233kWh / 2x233kWh
		Usable battery capacity	CEE32: 22kW / CEE63: 44kW / CEE125: 60kW
		Max. charging capacity into the battery	30kW / 60kW
		Battery charge coefficient	≤ 0.5 C
		Battery discharge coefficient	≤ 1 C
		Battery efficiency	≥ 94.5% at rated capacity
		IP protection rating	IP65
	Fast charging station	Charging points	2
		Power distribution	Intelligent load distribution across 2 charging points
		Charging capacity	DC max. 150kW + 22kW/44kW/60kW ≈ 170kW/190kW/210kW
		Cable	CCS2, 5 m, 200A (250A optional)
		Output voltage	300V – 1000V
		Efficiency	≥ 96.5%
	Power meters	AC side	1 AC meter
		DC side	2 DC meters (with window for external readings)
	Cooling system	Battery	Liquid-cooled
Power modules		Air-cooled	
Cable		Air-cooled	
Screen	Display size	19"	
Payment system	RFID, credit card terminal		
Network connections	GSM, LTE, LAN, WLAN		
Communication	OCPP 1.6J		

Environmental conditions

Usage location	Outdoors
Temperature range	-25°C to 55°C (power reduction over 45°C)
Air humidity	≤ 95% non-condensing
max. operating altitude	≤ 2000 above sea level
Noise development	≤ 75 dB at rated capacity
EMC	Class B
Medium	No explosive, hazardous, toxic or harmful gases
Noise interference	No strong vibrations or electromagnetic disturbances

Input and output

Input voltage range	3-phase 400VAC ± 15%
Residual current device	250A, 4p, Type A
Input frequency	50Hz ±1Hz
Output frequency range (reduced)	150VDC to 300VDC
Output frequency range (constant)	300VDC to 1000VDC
Charging capacity	150kW/170kW/190kW/210kW
Charging current	200A / 250A CCS2 continuous

Safety

IP protection class	IP54
Safety/protection functions	Undervoltage/overvoltage protection, overload protection, short-circuit protection, earthing protection, lightning protection, overheating protection, fire protection device, flood protection sensor

Standards

Battery	IEC 62619
System	IEC 62619, IEC61851, IEC62477, ISO15118