

EV charger integrated with ESS

Up to **210kW**



Product Overview

EV charger integrates Energy-storage-system (ESS), which uses Li-ion batteries as energy storage devices. ESS with its local or remote EMS management system enables optimized energy supply and demands among grid, batteries and EVs, which is significantly applied in peak and valley power consumption as well as lack of grid power capacity. The integration with ESS demonstrates its advantages in high-Power with less input. ESS compact charger is with thin-wall design and suitable for parking station, commercial center and EV experience center. Modular design provides high stability, easy and simple operation possibility so that it can achieve flexible deployment and uniformed service. Automatic recognition of connector plug-in and automatic charging scheduling function make it user-friendly and improve charging efficiency.

Product Features

GEN1



Compact Design:

Small footprint, thin-wall design, easy layout in parking area, high stability, easy and simple to operate, low noise.



Charging Experience Upgrade:

Automatic recognition of charger connector plug-in, automatic charging scheduling, integrated LED system indication battery capacity.



High Power Output With Less Input:

Can provide higher output than most of other superchargers on the market when input power is very limited.



Flexible Extension:

Support energy-storage module extension, achieve 2x233kWh battery capacity, intelligent power module distribution.

GEN2



B2G Function:

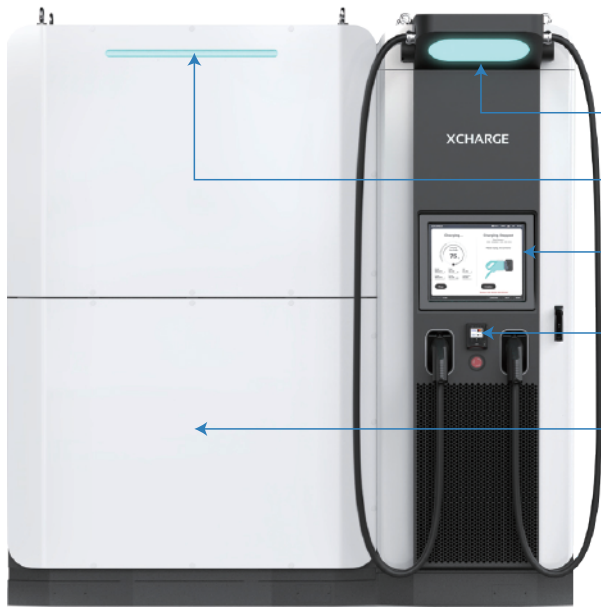
Using bidirectional ACDC power modules with 22kW/unit, Battery can realize to supply energy to Grid with bidirectional modules when Grid needs.



Photovoltaics Function:

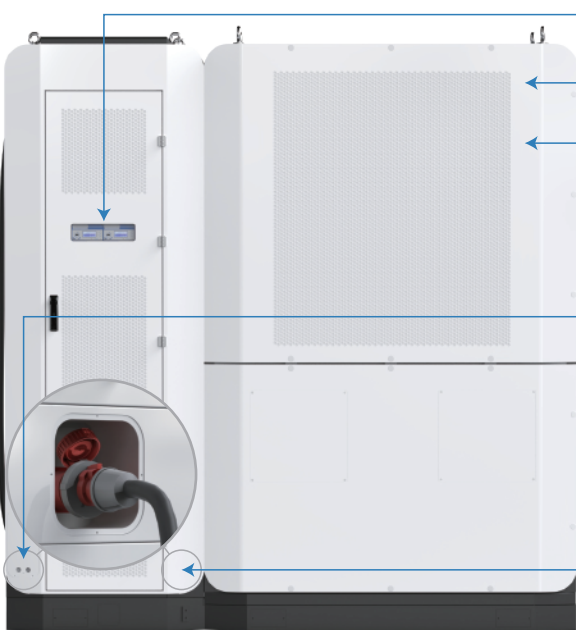
An external DCDC power module with MPPT function makes it available to use photovoltaics energy up to 30kW.

System Overview



GEN1 Basic Features

- 1 LED Illumination
- 2 LED Indicator of SOC state
- 3 Featured 19-inch touchscreen
- 4 Credit card reader
- 5 Scalable to 2*233kWh
233kWh liquid-cooled lithium-ion battery



- 6 Electricity meter
- 7 Noise level: ≤ 75 dB
- 8 Operating temperature: -25°C - 55°C (derating over 45°C)
- 9 Industrial socket
Easy and cost-saving installation
Plug and charge
No need for extra grid capacity

GEN2 Newly Increased

- 10 Industrial socket (63A)
Send energy from battery to house load when blackout

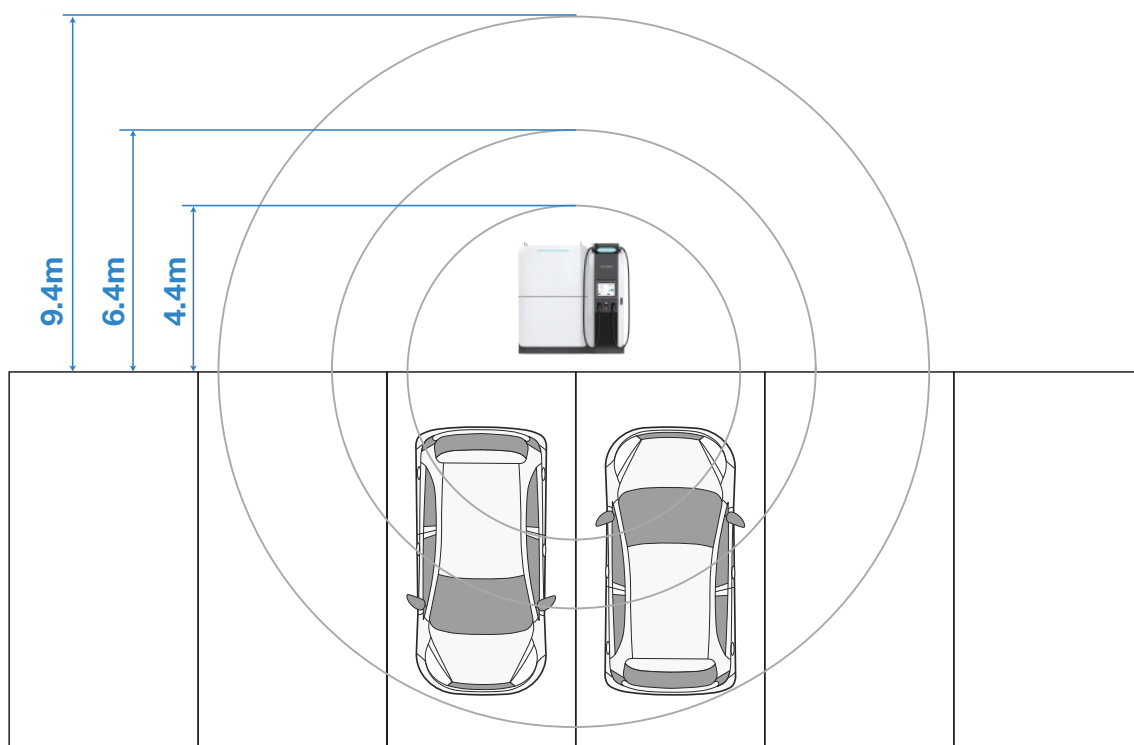
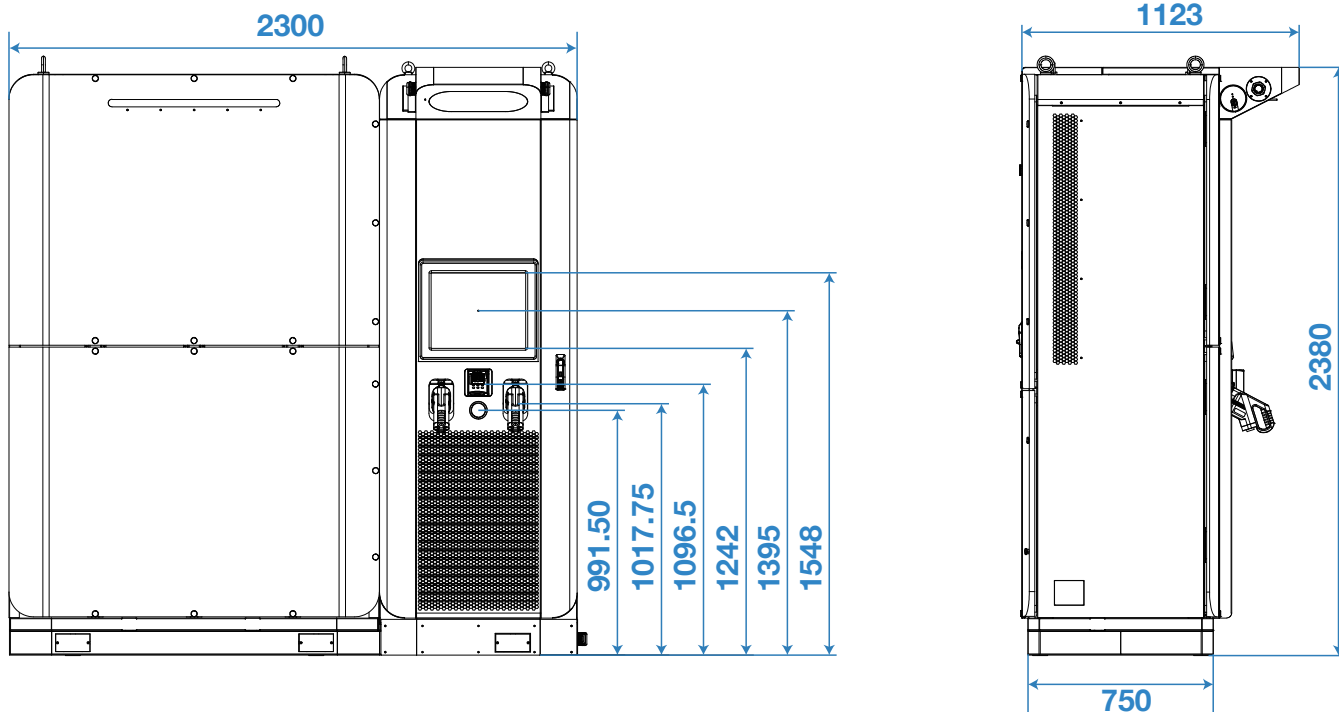
Power Range	DC Max.	Up To
GEN1	$150\text{kW} + 30\text{kW} / 60\text{kW} = 180\text{kW} / 210\text{kW}$	210kW
GEN2	$150\text{kW} + 22\text{kW} / 44\text{kW} = 172\text{kW} / 194\text{kW}$	194kW

Technical Specification

Net Zero Series		(GEN1)	(GEN2)	
Basic Parameter	Product Specification	Type	DC charging station	
		Dimension	2.3*0.75*2.38m (w*d*h)	
		Installation	On ground	
		Material	Industrial Grade Alloy	
		Color	White weather-resistant coating	
		Weight	3600kg	
	Energy-Storage-System	Battery Capacity	233kWh / 2*233kWh	
		Usable Energy (SAT)	208 kWh/2*208 kWh	
		Max. recharge Power	30kW/60kW	
		Battery Charging Rate	≤0.5C	
		Battery Discharge Rate	≤1C	
		Battery Efficiency	≥94.5% under nominal situation	
		IP Ranking	IP65	
	Charging System	Connectors	2	
		Power Distribution	2 connectors intelligent distribution	
		Charging Power	DC Max.150kW+30kW /60kW=180kW/210kW	DC Max.150kW+22kW /44kW=172kW/194kW
		Cable	200A, 5m, CCS2 (250A optional)	
		Charging Voltage	300V~1000V	
		Efficiency	≥96.5%	
	Meter	AC Side	AC meter	
DC Side		2-access DC meter		
Cooling System	Battery Cooling	Liquid-cooled		
	Power Modules	Air-cooled		
	Cable Cooling	Air-cooled		
User Interface	Display Size	19 Inch		
Payment System		RFID, credit card		
Connectivity		GSM & LTE & LAN		
Communication		OCPP 1.6J		
Photovoltaics Input		/	300-825 VDC, Max 30kW	
Output to Gride		/	22kVA/44kVA rated power	
Environment Parameter	Applicable Site	Outdoors		
	Ambient Temperature	-25°C-50°C (over 45°C derating)		
	Humidity	≤95%, No condensation		
	Altitude	≤2000m		
	EMC Emission	Type A		
	Medium	No explosive hazardous, No toxic & harmful gases.		
	Interference	Without strong vibration and shock, no strong electromagnetic interference		
Input & Output	Input Voltage	3Phase 400VAC ± 15%		
	Circuit Breaker	125A, 4P		
	Input Frequency	50Hz±1Hz		
	Output Voltage Range	150VDC-1000VDC		
	Constant-Power Voltage Output Range	300VDC-1000VDC		
	Nominal Power Output	150kW + 30kW/60kW (22kW/44kW if needs B2G)		
	Current Output	200A/250A CCS2 continuously		
	Output to Grid (Indevelopment)	22kVA/44kVA rated power (including auxiliary consumption)		
Safety	Input Protection	Under voltage protection, over voltage protection, over current protection, over temperature protection, leakage protection, lightning protection, short circuit protection		
	Output Protection	Short circuit protection, over-temperature protection, communication fault protection, leakage protection, over-current protection		
	Emergency Protection	Set emergency stop button, leakage protection function, high-precision output insulation monitoring function		
	Special Protection	IP54 protection level, anti-salt dew, moisture-proof, anti-toxic and anti-ultraviolet		
Standard	Battery	IEC 62619, IEC61000		
	System Level	IEC 62619, IEC61851, IEC62477, IEC61000, ISO15118		

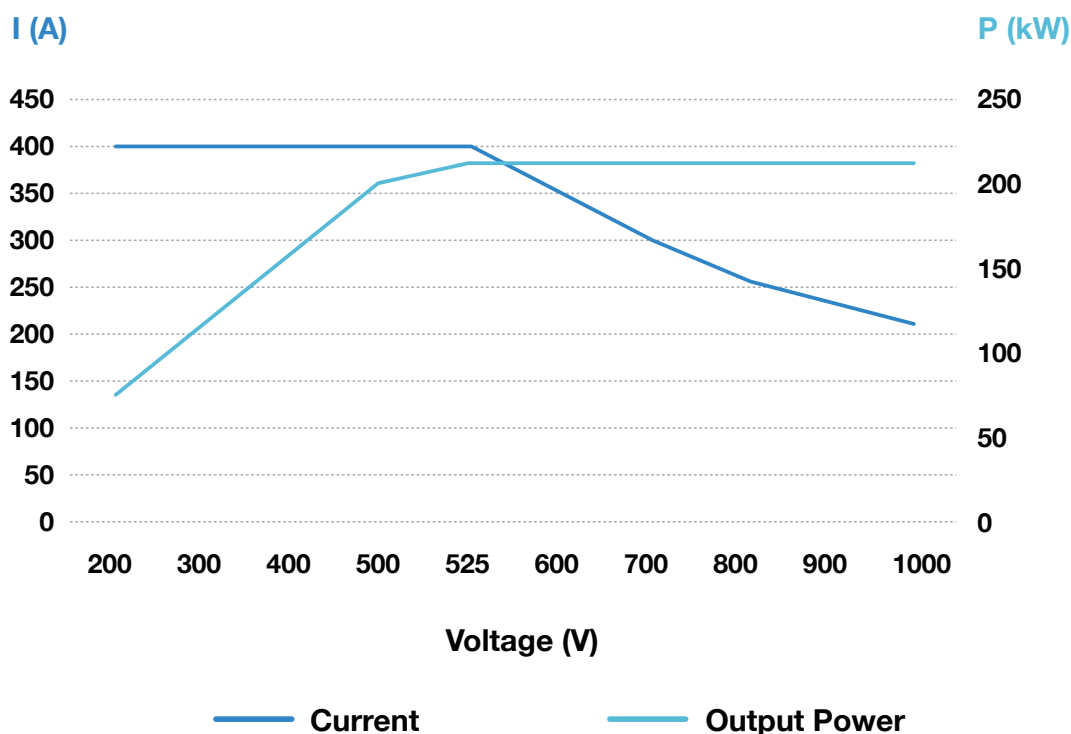
Mechanical Dimensions

Unit: mm

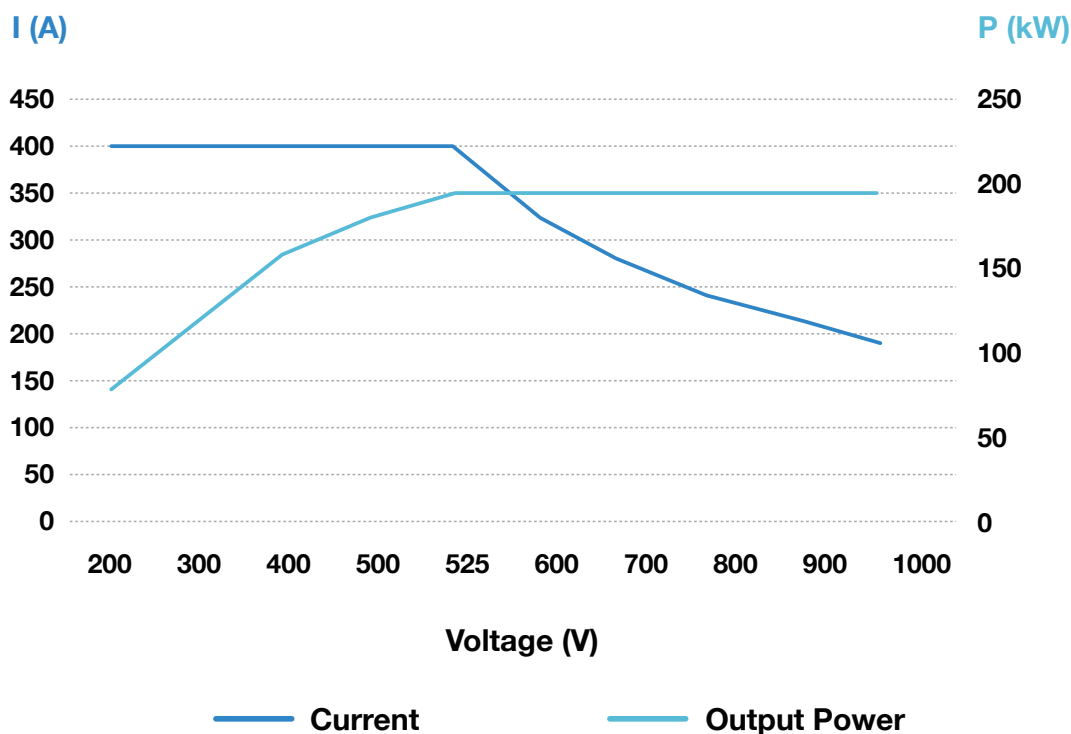


Output Power Curve

GEN1



GEN2



MORE INFORMATION:

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