BSLBATT®
Best Solution Lithium Battery

ESS-GRID C241-X120

Turnkey PV-BESS-EV Charging Station

125kW / 241kWh + 120kW DC

The ESS-GRID C241-X120 is a solar-powered charging facility for electric vehicles. It primarily uses solar panels to collect solar energy and convert it into electricity. This energy is then stored in an energy storage system, providing charging services for electric vehicles when needed. Its main components include a solar power generation system, an energy storage system, charging facilities, and a system integration and monitoring system. This solar-powered charging station can be used in a variety of scenarios, such as urban parking lots, highway service areas, and industrial parks.

Huge Energy Source

241kWh storage system for long-term backup

Highly Integrated

PV, energy storage, charging station all in one

Fast Charging

Fast and efficient energy replenishment

Space-saving Design

Dual-charger with a compact design saves installation space

Series Name	ESS-GRID C241-X120	
Battery Parameters		
Battery Type	Lithium Iron Phosphate Battery (LFP)	
Cell Capacity	3.2V/314Ah	
Combination Method	224S1P	240S1P
Rated Energy	225kWh	241kWh
Rated Charge/Discharge Power	0.5P(25±2℃)	
Maximum Charge/Discharge Current	200A(25℃，SOC50%，1min)	
Rated Voltage	716.8V	768V
Operating Voltage Range	627.2V~806.4V	672V~864V
Photovoltaic Parameters (optional)		
Rated Power	50kW / 100kW / 150kW	
Starting Voltage	200V	
Operating Voltage Range	250V~620V	
MPPT Full Load Voltage Range	345V~620V	
Maximum Input Current	(80+80)A*1 / (80+80)A*2 / (80+80)A*3	
Maximum Output Current	110A*1 / 110A*2 / 110A*3	
MPPT Roads	1 / 2 / 3	
PCS Parameters		
Power Rating	125kW	
Maximum DC Current	200A	
DC Side Operating Voltage Range	580~1000V (3W+PE)/ 680~1000V (3W+N+PE)	
DC Side Full Load Operating Voltage Range	625~950V (3W+PE)/ 680~950V (3W+N+PE)	
Rated AC Voltage	AC400V, 3W+PE/3W+N+PE	
Rated AC Current	180A	
Rated AC Frequency	50/60Hz (±5Hz)	
Power Factor	-1 ahead ~ +1 lagging	
Overload Capability	110%, normal operation; 120%, 1 minute	
Charging Post (optional)		
AC Charging Post	120kW	
General Parameters		
Operating Humidity	0~95%RH (no condensation)	
Operating Temperature	-20℃~55℃ (>45℃ derating)	
Storage Temperature	0℃~35℃	
Altitude	2000m (>2000m derating)	
Cooling Method	Intelligent air-cooled	
Noise	<75dB	
Fire Protection	Thermal aerosol fire extinguisher	
Communication	RS485 / CAN / Ethernet / DRY	
Isolation Method	Isolation transformer	
Protection Level	IP55	
Dimensions (W*D*H)	2563*1500*2350（±10mm）	
Weight	3587kg±3%	3700kg±3%

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ESS-GRID XDC120

Dual Guns, Double Efficiency. Power Your Business.

DC 120kW EV Charging Station

The ESS-GRID XDC120 is a DC fast charger that complies with international standards and is designed specifically for electric vehicles. It supports dual-charger output (CCS2 interface) with a maximum power of 120kW, enabling a high percentage of vehicle charge in just 30 minutes. It features a 10.1-inch touchscreen interface, supports OCPP 1.6 protocol cloud management, and accommodates multiple authentication methods (NFC, QR code scanning, and anonymous charging). With an IP55 rating and IK10 impact resistance, it is suitable for harsh environments ranging from -20°C to 55°C, making it an ideal choice for commercial charging stations and public facilities.

Ultra-fast Charging Capability

120kW output power, voltage range 200V-1000V, compatible with mainstream electric vehicles.

Dual-charger Dynamic Load Balancing

Serves two vehicles simultaneously and intelligently allocates power.

Flexible Billing

Billing by duration/energy/amount (customizable on demand), supporting NFC cards, QR code scanning, and anonymous payment.

Industrial-grade Durable Design

Wide operating temperature range, adaptable to high altitudes and high humidity, with IP55 dust and water resistance and IK10 mechanical protection.

	ESS-GRID XDC120
Power Input	
Input Ratings	400V 3-phase Max 200A
Number of Phases / Lines	3P / L1, L2, L3, PE
Power Factor	>0.98
Current Total Harmonic Distortion (THD)	<5%
Efficiency	>95%
Power Output	
Output Power	DC 120kW
Output Ratings	DC: 200V-1000V AC: 3-phase 400V
Protective Functions	
Conservation	Over-current, under-voltage, over-voltage, leakage current, surge protection, short-circuit, over-temperature, and ground faults
User Interface and Control	
Display	10.1-inch touchscreen
Supported Languages	English (other languages available on request)
Charging Options	The following options are available on request: hourly billing, power billing,and dollar billing
Charging Port	CCS2
User Authentication	PayPal or NFC card
Communication	
Network Interface	Ethernet (standard); Wi-Fi, 4G (optional)
Open Charge Point Protocol	OCPP1.6
Environment	
Operating temperature	-20°C to 55°C (derated for >55°C)
Humidity	< 95% relative humidity, non-condensing