



POSETRON BESS SOLUTIONS

POSEDRIVE

Outdoor Cabinet ESS

125 kW | 235 kWh



125 kW | 235 kWh battery system for reliable energy storage



2 × 60 kW EV chargers integrated in the cabinet



PV + storage + charging combined in one compact unit



Front-access design for simple maintenance



Fast deployment with minimal footprint



Safe, efficient and modular, built for expansion



Product Introduction

The PoseDrive Outdoor Cabinet ESS combines energy storage, PV integration and EV charging in one compact system. With a 125 kW | 235 kWh battery and two 60 kW charging points, it ensures a reliable supply of power while supporting smart charging infrastructure.

Its modular PCS architecture allows flexible scaling and easy servicing. Thanks to front-access design, maintenance is straightforward and space requirements are minimized. The cabinet is engineered for rapid deployment, high energy efficiency and operational safety, making it a practical solution for businesses and sites that require uninterrupted, intelligent energy management.

By combining storage, PV and charging in a single unit, the PoseDrive Outdoor Cabinet ESS helps optimize self-consumption, reduce peak demand costs, and enable 24/7 availability of clean power for both facilities and electric vehicles.

Operation strategies

- **Peak shaving & valley filling**

When tariffs are low, the system charges automatically and stores energy. During peak tariff hours, it discharges to supply power, reducing grid demand and lowering energy costs. This strategy improves economic efficiency and supports a stable energy supply.

- **Combined PV, storage & charging**

During the day, PV power is used directly for EV charging, with surplus energy stored in the battery. At night or during low solar generation, the stored energy provides continuous supply. This ensures 24/7 reliable charging and maximizes the use of renewable energy.



Electrical Wiring Diagram

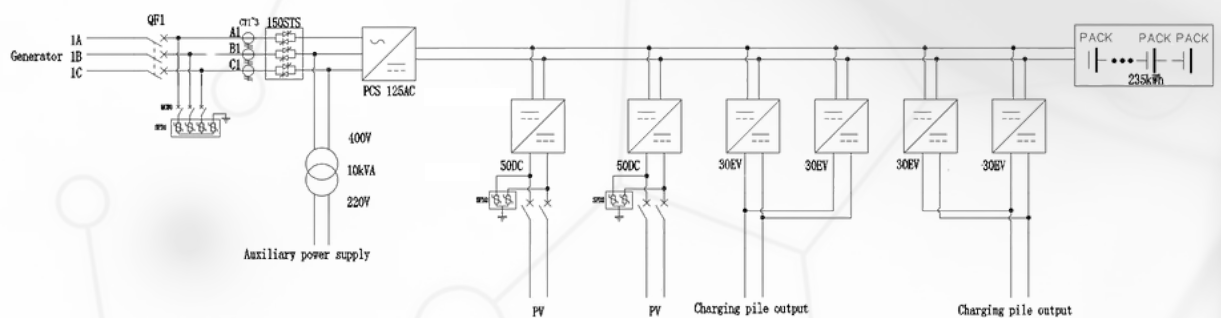


Figure 1.1: Electrical Primary Diagram



The pure grid-connected system scheme can vary, depending on the project, and the circuit can be slightly different. The actual scheme should be subject to the attached drawing included with the shipment of that system.

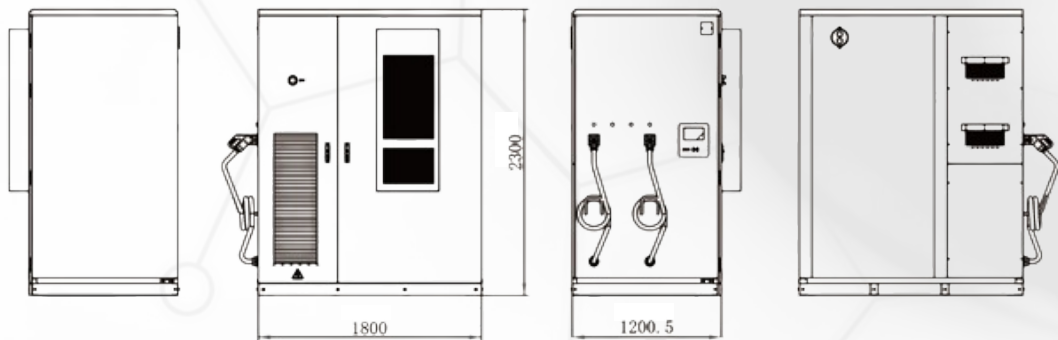


Product Features

- Highly integrated design**
 Battery, modular PCS, DC charging module and energy management system combined in one cabinet. Compact footprint, efficient operation.
- PV-powered charging**
 Optimizes self-consumption by using available solar energy for charging and storage, reducing reliance on the grid.
- Wide EV compatibility**
 Supports charging for a broad range of electric vehicles, ensuring reliable operation across fleets and individual users.
- Dual charging points**
 Two independent charging circuits allow simultaneous charging of two vehicles, increasing system utilization and flexibility.
- Multiple charging modes**
 Flexible operation modes such as time-based, power-based, cost-based or automatic full-charge to meet diverse user needs.
- Intelligent control**
 Advanced energy management system for smart scheduling, optimized energy use and improved operational efficiency.



Product Dimensions





Product Parameters

The following are typical configuration parameters for the PoseDrive Outdoor Cabinet ESS. Actual delivery shall be subject to the technical agreement.

DC Side Parameters	
Rated AC Power	125 kW
Max. AC Power	137.5 kW
Rated Current	180A
Max. Current	198A
Rated Voltage	400Vac, 3W+PE
Rated Frequency	50 60 Hz (± 5 Hz)
PV Side	
PV Input Power	100 kW
PV Open-Circuit Voltage Range	250V ~ 635V
PV Maximum Current	160A * 2
MPPT Channels	2
Battery Side	
Battery Rated Capacity	235 kWh
Battery Rated Voltage	748.8V
Battery Voltage Range	655.2V ~ 842.4V
Battery Type	Lithium Iron Phosphate (LFP)
Battery Cell Type	314Ah (Air Cooled)
Series of Batteries	1P * 18S * 13S
Max. Charge Discharge current	0.5P
Charging Port	
Rated Input Power	60 kW * 2
Rated Input Current	120A * 2 (500Vdc)
Measurement Accuracy	< ±0.1%
Number of Charging Points	Dual Charging Points
Charging Cable Length	5m
Activation Method	QR Code Scanning Card Swiping Mobile App
Charging Method	Auto-full charge Pay-as-you-go Pay-per-kWh time-based charging
Display Mode	LED Indicator Lights
General Parameters	
Cooling Method	Intelligent Air Cooling
Degree of Protection	IP55
Shutdown Self-discharge	< 0.1% Rated power (excluding transformer)
Relative Humidity	0 ~ 95% (no condensation)
Noise	< 75 dB
Ambient Temperature	-25° C to + 60°C (with derating at temperatures above 45°C)
Altitude	3000m (>2000m reduction)
BMS Communication	CAN
EMS Communication	Ethernet 485
Emergency Stop Protection	Equipped with emergency stop button & emergency stop protection function.
Protection Features	Input over-under-voltage, input over-current, anti-surge, output short-circuit, over-temperature, anti-backflooding, battery active, emergency shutdown and other protection functions
Size (WxDxH)	1800 x 1200 x 2300 mm
Weight (approx.)	2650 kg