



# COMMERCIAL ESS

## SME Commercial ESS | 64kWh

**A battery and PCS combined – unrivalled for power and price point.**

With the Commercial ESS, you can power your small to medium sized enterprise even the highest-demand loads with maximum efficiency, minimum energy costs. It's suitable for various industrial parks, malls, hotels, hospitals, etc.



### All-in-one Integration

The PCS, battery pack, BMS, EMS, intelligent air cooling systems are seamlessly integrated within a compact cabinet.



### Easy to Install & Operate

Factory pre-assembly enhances system integration, simplifying transportation and deployment on site.



### Modular Design

Allows for flexible system scale expansion through the parallel use of multiple machines.



### Online Monitoring

All data, including cell voltages, pack temperatures, power and energy values, are regularly reported to the cloud. Mode selection and timed control are available via the web or APP, enabling a full remote monitoring platform.

Model	Polar-SME-30/64-ID	Polar-SME-50/64-ID
Battery		
Battery Type	LFP 3.2V/100Ah	
Battery Pack Configuration	1P24S	
Battery Module Connection	1P216S	
Rated Voltage	691.2V	
Voltage Range	580-788.4V	
Battery Module Qty	9	
System Capacity	69.12kWh	
Usable Capacity	64kWh	
AC Output		
Rated Power	30kW	50kW
Max. Output Power	33kW	60kW
THDi	≤3% (rated power)	
Rated Voltage	230V/400V	
Voltage Range	360-440V	
AC Connection	3P4W+PE	
Rated Frequency	50Hz/60Hz	
Power Factor	1 Lagging... 1 Leading	
Protection		
DC Reverse Polarity Protection	Yes	
Output Over Current Protection	Yes	

Output Over Voltage Protection	Yes	
Short Circuit Protection	Yes	
Surge Protection	Level 2	
High and Low Voltage Ride-through	Yes	
Communication		
Communication Interfaces	RS485/CAN/Ethernet	
Human Machine Interface	Touchscreen	
General Data		
Charge/Discharge Rate	0.5C	1C
Depth of Discharge	90%	
Battery Cycle Life	≥6000	≥4000
Topology	Transformerless	
Max. Efficiency	≥90%	≥89%
Protection Class	IP20	
Cooling Method	Fan Cooling	
Communication Protocol	CAN/RS485/LAN	
Operating Temperature	0°C~55°C	
Humidity	0~95% (No Condensation)	
Size (W*D*H)	600mm*800mm*2000mm	600mm*800mm*2160mm
Weight	850kg	880kg

