

RACK MOUNT LITHIUM BATTERY



< 5KWH/10KWH/15KWH/20KWH >

SP48100 is suitable for residential energy storage system use stored energy to power your home or commercial atmosphere during outage

PRODUCT FEATURES



15 Years Design Service Life, Cycle Up to 6000 Times



Maximum Support 15PCS in Parallel Connection



Compatible with Mainstream Inverters



RS485/RS232/CAN



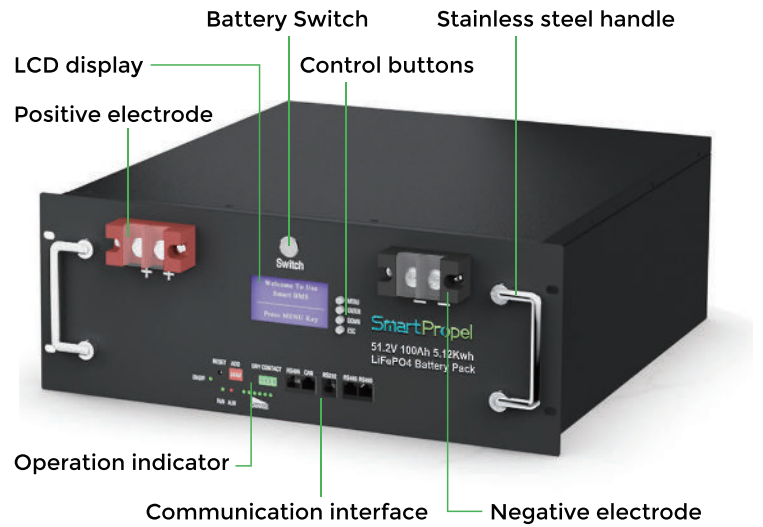
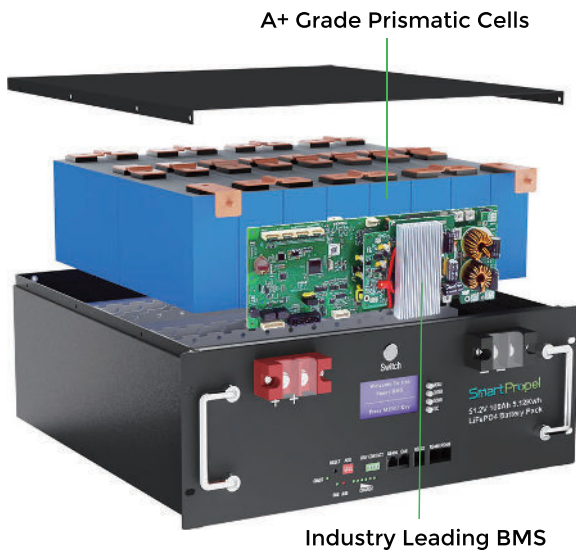
Easy Installation with Handles



Support Parallel Operation



PANEL PORT DETAILS



PRODUCT DIMENSION

5KWH



10KWH



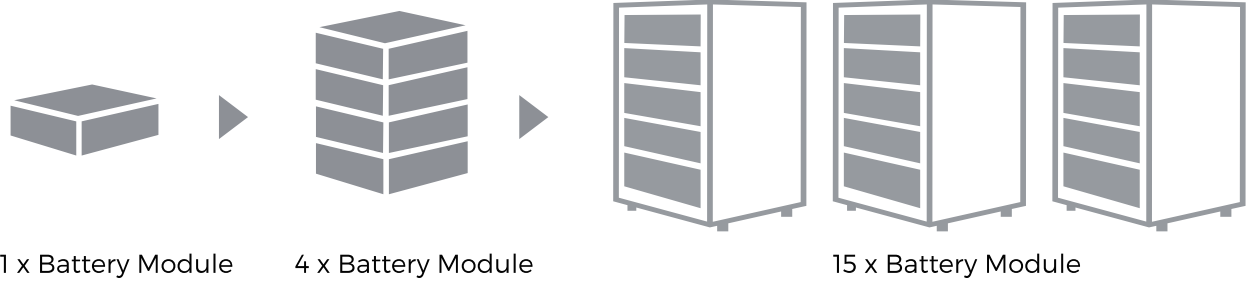
15KWH



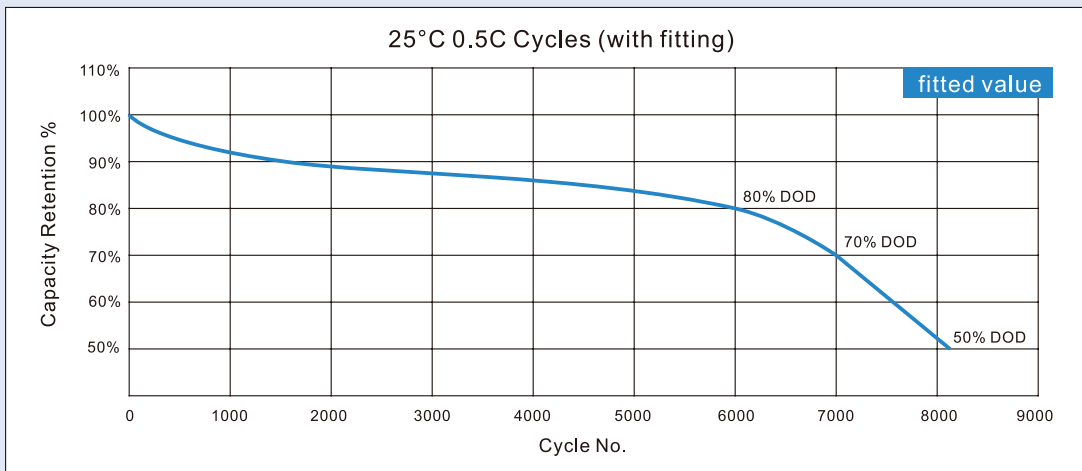
20KWH



PARALLEL INTRODUCTION



SmartPropel Rack Mount Battery Module is a lithium iron phosphate(LFP) battery pack for use with an external inverter. The communication with the inverter is established through the low voltage BMU (Battery Management Unit). Connect up to 15PCS Battery Modules in parallel on one BMU to reach individual capacities between 5 and 75 kWh. SmartPropel Rack Mount Battery can adapt to off-the-shelf racking systems. And with the possibility of stacking up to 4 units or installing them vertically, provides a variety of options for bespoke housing designs.



48V 100AH Battery Cycle Life VS Capacity Graph

Recycling system:
charge: 0.5C CCCV to 3.65V/0.05C:
discharge: 0.5C CC to 2.6V

CELL INFORMATION

PARAMETERS	NORM	CONDITIONAL
Chemical System	lithium iron phosphate	
Sizes	160*49.9*118.5 (mm)	altitude difference≤0.1mm
Weights	1990±50g	
Capacity	≥102Ah	0.2C@25℃, 2.7-3.56V/0.05C 102-108Ah
Nominal Voltage	3.2 V	
Operating Voltage Range	2.0-3.65V 2.5-3.65V	20℃≤T≤0℃ 0℃<T≤65℃
Operating Temperature Range (Charging)	charge: 0-65℃ discharge: -20-65℃	
Maximum Continuous Charging Current	0℃≤T<10℃, 0.1C; 10℃≤T<15℃, 0.2C; 15℃≤T<20℃, 0.3C; 20℃≤T<25℃, 0.6C; 5℃≤T<65℃, 1.0C;	
Maximum Continuous Discharge Current	1C, -20℃≤T<0℃; 2.5C, 0℃≤T<65℃	
Maximum Pulse Discharge Current	400A/30s	
Self-Discharge	≤3%, 28 days; ≤5%, 90 days	25±2℃, 25%-50%SOC
Delivery State Voltage	3.25-3.29V	25±3%SOC
Internal Resistance	ACIR 0.15-0.35mΩ; DCIR 0.8~1.8mΩ	25±3%SOC
Cycle	25℃, 100%DOD, 6000cycle @70%SOH; 45℃, 100%DOD, 4000cycle @70%SOH	0.5C/0.5C

RACK MOUNT SPECIFICATION

Model	SP-R1-5Kwh	SP-R1-10Kwh	SP-R1-15Kwh	SP-R1-20Kwh
Nominal Voltage	51.2V	51.2V	51.2V	51.2V
Nominal Capacity	100Ah	200Ah	300Ah	400Ah
Nominal Energy	5.12Kwh	10.24Kwh	15.36Kwh	20.48Kwh
Battery Cell	3.2V Grade A LFP Prismatic Cell	3.2V Grade A LFP Prismatic Cell	3.2V Grade A LFP Prismatic Cell	3.2V Grade A LFP Prismatic Cell
Parallel Capacity	Yes,15 Units Maximum	Yes,15 Units Maximum	Yes,15 Units Maximum	Yes,15 Units Maximum
Max. Charging Current	100A	100A	100A	100A
Max. Discharging Current	100A	200A	200A	200A
Charge Cut-off Voltage	58.4V	58.4V	58.4V	58.4V
Discharge Cut-off Voltage	43.2V	43.2V	43.2V	43.2V
Design life	15+ Years (25℃/77F°)	15+ Years (25℃/77F°)	15+ Years (25℃/77F°)	15+ Years (25℃/77F°)
Cycle life	> 6000 Cycles,25℃°	> 6000 Cycles,25℃°	> 6000 Cycles,25℃°	> 6000 Cycles,25℃°
Communication Port	CAN/RS485/RS232	CAN/RS485/RS232	CAN/RS485/RS232	CAN/RS485/RS232
Size(L*W*H)	440*431*177mm	440*560*231mm	440*731*231mm	440*1020*231mm
Weight	44Kg	81Kg	130Kg	160Kg
Operation Temperature Range	Charge 0℃-45℃/Discharge -20℃-55℃			
Self Temperature	-10℃-45℃(Every 1~2 months charge/discharge one time)			

PACKING LIST



MATCHING INVERTER BRAND



Made by Ginkong Technologies



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