

Introduction

This series lithium iron phosphate battery is one of new energy storage products developed and produced by Deye, it can be used to support reliable power for various types of equipment and systems.

This series is especially suitable for application scene of high power, limited installation space, restricted load bearing and long cycle life.

This series has built-in BMS battery management system, which can manage and monitor cells information including voltage, current and temperature. What's more, BMS can balance cells charging and discharging to extend cycle life.

Multiple batteries can connect in parallel to expand capacity and power for larger capacity and longer power supporting duration requirements.



Features



Convenient: The batteries can be save space and assembled to meet more personalized needs, high energy density, high efficiency.



Eco-friendly: The whole module is non-toxic, non-polluting and environmentally friendly.



Safe and reliable: Cathode material is made from LiFePO₄ with safety performance and long cycle life, The module has less self-discharge, up to 6 months without charging it on shelf, no memory effect, excellent performance of shallow charge and discharge.



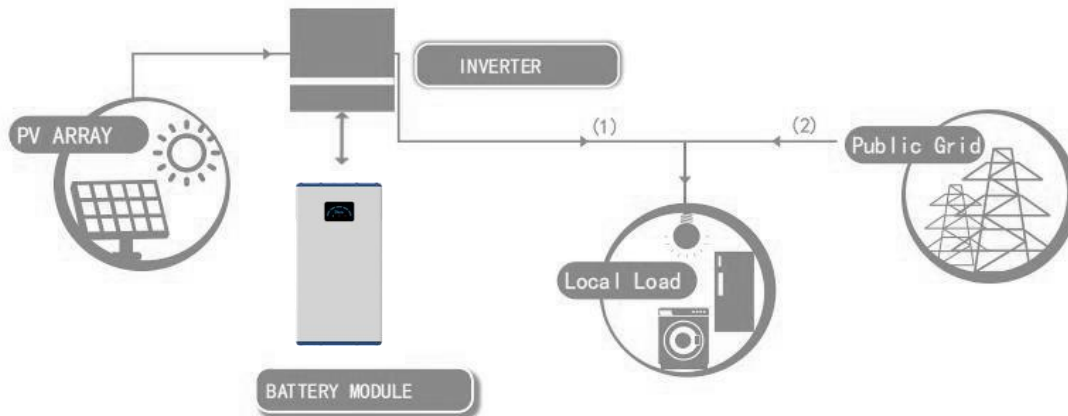
Intelligent BMS: It has protection functions including over-discharge, over-charge, over-current and over-high or low temperature. The system can automatically manage charge and discharge state and balance current and voltage of each cell.



Flexible configuration: Multiple battery modules can be in parallel for expanding capacity and power, Support USB upgrade.



Wide temperature: Working temperature range is from -20°C to 55°C, with excellent discharge performance and cycle life.



The picture is only an effect picture, please refer to the actual product the final interpretation right belong to Deye ESS

Product Type		SUNB-5.0-E01-51-UWM	SUNB-5.0-E01-51-WM
Main Parameter			
Battery Chemistry		LiFePO4	
Capacity (Ah)		100	100
Scalability(max. in 1 battery group)		50	50
Nominal Voltage (V)		51.2	51.2
Operating Voltage(V)		43.2~57.6	43.2~57.6
Energy (kWh)		5.12	5.12
Usable Energy (kWh) ^[1]		4.61	4.61
Charge/Discharge Current (A)	Recommend ^[2]	50	50
	max ^[2]	100	100
	peak (2minuters,25℃)	150	150
Other Parameter			
Recommend Depth of Discharge		90%	90%
Dimension (W/H/D,mm)		351*667*162	351*667*162
Weight(kg)		48.5	48.5
Master LED Indicator		5LED (SOC20%~SOC100%) 3LED (working, alarming, protecting)	5LED (SOC20%~SOC100%) 3LED (working, alarming, protecting)
IP Rating of Enclosure		IP65	IP65
Working Temperature		Charge:0~55℃/Discharge:-20℃~55℃	Charge:0~55℃/Discharge:-20℃~55℃
StorageTemperature		0℃~35℃	0℃~35℃
Humidity		5%~95%	5%~95%
Altitude		≤2000m	≤2000m
Cycle Life		>6000@25℃±2℃, 1C/1C,80%EOL	>6000@25℃±2℃, 1C/1C,80%EOL
Installation		Wall-Mount	Wall-Mount
Communication Port		CAN2.0,RS485	CAN2.0,RS485
Warranty		10 years	10 years
Certification		UL1973, FCC, UN38.3,UL9540	IEC62619, CE,UN38.3

[1] DC Usable Energy, test conditions: 90% DOD, 0.5C charge & discharge at + 25 °C. System usable energy may vary due to system configuration parameters.

[2] Charge derating will occur between 0 °C and +5 °C