

## Introduction

The spring 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 flexibly disassembled 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 LiFePO<sub>4</sub> 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.



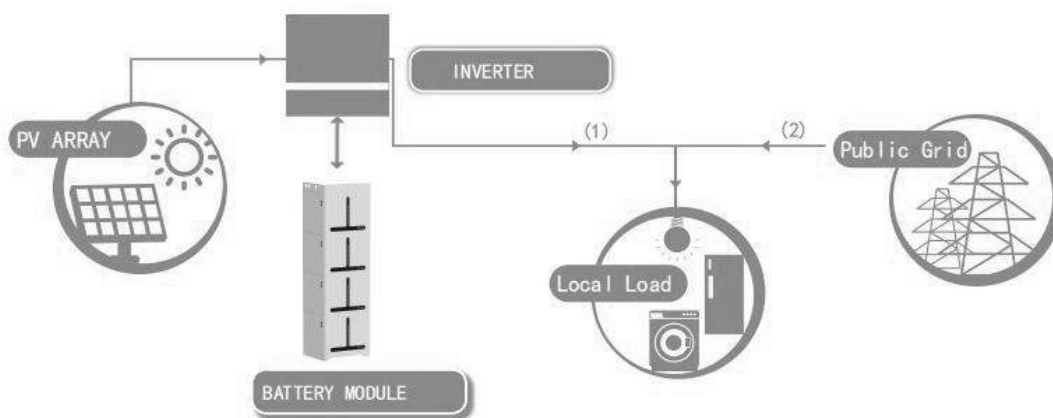
**Intelligent BMS:** It has protection functions including over-discharge, over-charge, over-current and over-high or low temperature. The system can automatically manage charge and discharge state and balance current and voltage of each cell.



**Flexible configuration:** Multiple battery modules can be in parallel for expanding capacity and power, support USB upgrade and remote firmware 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.

Main Parameter		SUNB-5.0-G01-48-PC			
Battery Chemistry		LiFePO <sub>4</sub>			
Battery Module Energy (kWh)		4.91			
Battery Module Voltage (V)		51.2			
Battery Module Capacity (Ah)		96			
Scalability(Max. in 1 battery group)		1	2	3	4
Nominal Voltage (V)		51.2			
Operating Voltage(V)		43.2~57.6			
Energy (kWh)		4.91	9.82	14.73	19.64
Usable Energy (kWh) <sup>[1]</sup>		4.42	8.84	13.26	17.68
Charge/Discharge Current (A)	Recommend <sup>[2]</sup>	48	96	192	192
	Max <sup>[2]</sup>	96	192	250	250
	Peak(2minutes,25℃)	150	300	300	300
Other Parameter					
Recommend Depth of Discharge		90%			
Dimension (W/H/D,mm)		430*440*339	430*760*339	430*1080*339	430*1400*339
Weight Approximate (kg)		50.7	98.7	146.7	194.7
Master LED Indicator		5LED(SOC:20%~SOC100%)			
		3LED(working, alarming, protecting)			
IP Rating of Enclosure		IP65			
Altitude		≤2000m			
Working Temperature		Charge:0℃~55℃ Discharge:-20℃~55℃			
Storage Temperature		0℃ ~ 35℃			
Humidity		5%~95%			
Cycle Life(@25±2℃,1C/1C,80%EOL)		≥6000			
Installation		Floor Mounted			
Communication Port		CAN2.0,RS485			
Warranty Period <sup>[3]</sup>		5 years			
Life Cycle Power During Warranty Period <sup>[3]</sup>		21MWh@80%EOL			
Certification		IEC62619, IEC61000, CE,UN38.3			

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

[2] The current is affected by temperature and SOC.

[3] The warranty is due whichever reached first of warranty period or life cycle power.