



LR5-66HTH 520~540M

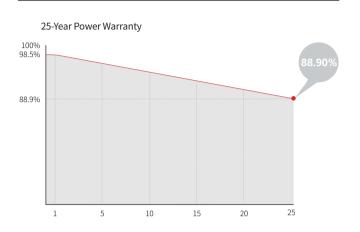
22.7%
MAX MODULE EFFICIENCY

0~3%
POWER
TOLERANCE

<1.5%
FIRST YEAR
POWER DEGRADATION

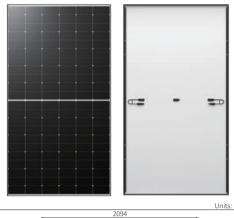
0.40% YEAR 2-25 POWER DEGRADATION

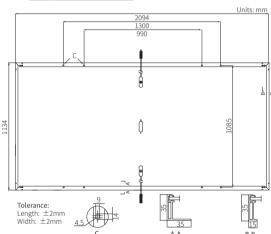
Additional Value



Mechanical Parameters

Cell Orientation	132 (6×22)
Junction Box	IP68
Output Cable	4mm 2 , +400, -200mm/ \pm 1400mm length can be customized
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	26.0kg
Dimension	2094×1134×35mm
Packaging	31 pcs per pallet / 155 pcs per 20' GP / 682 pcs per 40' HC





Electrical Characteristics	STC:	AM1.5 10	00W/m ² 25°C	NOC	T:AM1.5 800)W/m² 20°0	C 1m/s 1	est uncertainty fo	or Pmax: ±3%	
Module Type	LR5-66H	TH-520M	LR5-66H	ITH-525M	LR5-66H	TH-530M	LR5-66H	HTH-535M	LR5-66H	TH-540M
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	520	388.6	525	392.3	530	396.0	535	399.8	540	403.5
Open Circuit Voltage (Voc/V)	48.27	45.32	48.42	45.46	48.57	45.60	48.72	45.75	48.87	45.89
Short Circuit Current (Isc/A)	13.84	11.18	13.93	11.25	14.00	11.31	14.07	11.37	14.15	11.43
Voltage at Maximum Power (Vmp/V)	39.91	36.42	40.06	36.55	40.22	36.70	40.38	36.85	40.53	36.99
Current at Maximum Power (Imp/A)	13.03	10.68	13.11	10.74	13.18	10.80	13.25	10.86	13.33	10.92
Module Efficiency(%)	21	L.9	2:	2.1	2:	2.3	2	2.5	22	2.7

Operating Parameters

operating randineters			
Operational Temperature	-40°C ~ +85°C		
Power Output Tolerance	0 ~ 3%		
Maximum System Voltage	DC1500V (IEC/UL)		
Maximum Series Fuse Rating	25A		
Nominal Operating Cell Temperature	45±2°C		
Protection Class	Class II		
Fire Rating	UL type 1 or 2		
	IEC Class C		

Mechanical Loading

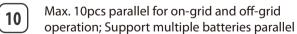
Front Side Maximum Static Loading	5400Pa				
Rear Side Maximum Static Loading	2400Pa				
Hailstone Test	25mm Hailstone at the speed of 23m/s				
Temperature Ratings (STC)					
Temperature Coefficient of Isc	+0.050%/°C				
Temperature Coefficient of Isc Temperature Coefficient of Voc	+0.050%/°C -0.230%/°C				



Three Phase Hybrid Inverter

SUN-6/8/10/12/15/20 K-SG01HP3-EU-AM2





- (37) Max. charging/discharging current of 37A
- High voltage battery, higher efficiency
- **6** 6 time periods for battery charging/discharging
 - Support storing energy from diesel generator



Technical Data _ www.deyeinverter.com

Model	SUN-6K-SG01HP3 -EU-AM2	SUN-8K-SG01HP3 -EU-AM2	SUN-10K-SG01HP3 -EU-AM2	SUN-12K-SG01HP3 -EU-AM2	SUN-15K-SG01HP3 -EU-AM2	SUN-20K-SG01HP3 -EU-AM2		
Battery Input Data								
Battery Type	Li-lon							
Battery Voltage Range (V)	150~800							
Max. Charging Current (A)	37							
Max. Discharging Current (A)	37							
Number of battery input	1							
Charging Strategy for Li-Ion Battery			Self-adapt	ion to BMS				
PV String Input Data								
Max. DC Input Power (W)	7800	10400	13000	15600	19500	26000		
Max. DC Input Voltage (V)	1000							
Start-up Voltage (V)			15	50				
MPPT Range (V)			200-	-850				
Full Load DC Voltage Range (V)	195-850	260-850	325-850	340-850	423-850	500-850		
Rated DC Input Voltage (V)			60	00				
PV Input Current (A)		20+20		26	+20	26+26		
Max. PV I _{SC} (A)		23+23		32	+23	32+32		
No.of MPP Trackers			2	2				
No.of Strings per MPP Tracker		1		2	+1	2		
AC Output Data								
Rated AC Output and UPS Power (W)	6000	8000	10000	12000	15000	20000		
Max. AC Output Power (W)	6600	8800	11000	13200	16500	22000		
AC Output Rated Current (A)	9.1	12.2	15.2	18.2	22.8	30.3		
Max. AC Current (A)	13	18	22	25	30	35		
Max. Continuous AC Passthrough (A)			8	0				
Peak Power (off grid)			1.5 time of rate	ed power, 10 S				
Generator input/Smart load /AC couple current (A)	9.1 / *80 / 9.1	12.2 / *80 / 12.2	15.2 / *80 / 15.2	18.2 / *80 / 18.2	22.8 / *80 / 22.8	30.3 / *80 / 30.3		
Power Factor			0.8 leading to	o 0.8 lagging				
Output Frequency and Voltage		5	0/60Hz; 3L/N/PE 2	20/380, 230/400V	ac			
Grid Type			Three	Phase				
DC injection current (mA)			<0.5	%1n				
Efficiency								
Max. Efficiency			97.6	50%				
Euro Efficiency	97.00%							
MPPT Efficiency	99.90%							
Protection								
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection							
Output Over Voltage Protection			DC Type II/	AC Type III				
Certifications and Standards								
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11							
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2							
General Data			, , , , , ,					
Operating Temperature Range (°C)			-40~60°C, >4	5°C derating				
Cooling			Smart					
Noise (dB)				i dB				
Communication with BMS	_		RS485					
Maight (kg)	26							
Weight (kg)								
Size (mm)	_		434W×64	5H×245D				
	_		434W×64					
Size (mm)				65				





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

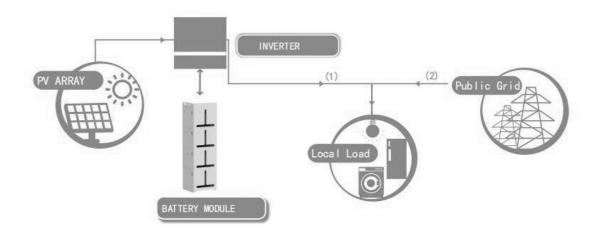
Safe and reliable: Cathode material is made from LiFePO4 with safety performance and long cycle life, The module has less self-discharge, up to 6 months without charging it on shelf, no memory effect, excellent performance of shallow charge and discharge



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 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 belongs to Deye ESS.



	SUNB-5.0-G01-48-PC							
Battery Chemistry		LiFePO4						
Battery Module Energy (kWh)		4.9	11					
Battery Module Voltage (V)		51.	2					
Battery Module Capacity (Ah)		96	3					
Scalability (Max. in 1 battery group)		2	3	4				
Nominal Voltage (V)		51.2						
	43.2~57.6							
	4.91	9.82	14.73	19.64				
y[1]	4.42	8.84	13.26	17.68				
Recommend [2]	48	96	192	192				
Max. [2]	96	192	250	250				
Peak(2mins,25℃)	150	300	300	300				
of Discharge	90%							
m)	430*440*339	430*760*339	430*1080*339	430*1400*339				
(kg)	50.7	98.7	146.7	194.7				
	5LED(SOC:20%~SOC100%)							
	3LED (working, alarming, protecting)							
е	IP65							
	≤2000m							
е	Charge:0℃~55℃ Discharge:-20℃~55℃							
;	0° ~ 35°C							
	5%~95%							
1C/1C,80%EOL)	≥6000							
Installation		Floor Mounted						
Communication Port		CAN2.0, RS485						
Warranty Period [3]		10 years						
uring Warranty Period [3]	21MWh@80%EOL							
	IEC62619, IEC61000, CE, UN38.3							
	ge (V) city (Ah) battery group) Recommend [2] Max. [2] Peak(2mins,25°C) f Discharge m) (kg) e	ge (V) city (Ah) battery group) 1 4.91 4.42 Recommend [2] 48 Max. [2] 96 Peak(2mins,25°C) 150 f Discharge m) 430*440*339 (kg) 50.7	LiFef	LiFePO4				

^[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.

 $[\]cline{2}$ The current is affected by temperature and SOC.

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