

Technical Data

Model		SUN-12K-SG04LP3-EU
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40~60	
Max. Charging Current (A)	240	
Max. Discharging Current (A)	240	
External Temperature Sensor	Yes	
Charging Curve	3 Stages / Equalization	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
PV String Input Data		
Max. DC Input Power (W)	15600	
Rated PV Input Voltage (V)	550 (160~800)	
Start-up Voltage (V)	160	
MPPT Voltage Range (V)	200-650	
Full Load DC Voltage Range (V)	350-650	
PV Input Current (A)	26+13	
Max. PV I _{sc} (A)	34+17	
No. of MPP Trackers	2	
No. of Strings per MPP Tracker	2+1	
AC Output Data		
Rated AC Output Active Power (W)	12000	
Max AC Output Active Power (W)	13200	
AC Output Rated Current (A)	18.2/17.4	
Max AC Output Current (A)	20/19.1	
Max. Three-phase Unbalanced Output Current (A)	27.3/26.1	
Max Output short circuit current (A)	75	
Max. Continuous AC Passthrough (A)	45	
Peak Power (off grid)	2 time of rated power, 10 S	
Power Factor	0.8 leading to 0.8 lagging	
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac	
Grid Type	Three Phase	
Total Harmonic Distortion (THD)	<3% (of nominal power)	
DC current injection	<0.5% I _n	
Efficiency		
Max. Efficiency	97.60%	
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	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150	
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, >45°C derating	
Cooling	Smart cooling	
Noise (dB)	≤45 dB	
Communication with BMS	RS485; CAN	
Weight (kg)	33.6	
Size (mm)	422W x 702H x 281D	
Protection Degree	IP65	
Installation Style	Wall-mounted	

Technical Data

Model		RW-M6.1
Main Parameter		
Battery Chemistry		LiFePO4
Capacity (Ah)		120
Scalability (max. in 1 battery group)		Max.32 in Parallel(195kWh)
Nominal Voltage (V)		51.2
Operating Voltage(V)		43.2~57.6
Energy (kWh)		6.1
Usable Energy (kWh) ^[1]		5.5
Charge/Discharge Current (A)	Recommend ^[2]	60
	Max ^[2]	100
	Peak (2 minutes,25°C)	150
Other Parameter		
Recommend Depth of Discharge		90%
Dimension (W/H/D,mm)		485x790x160
Weight Approximate (kg)		55
Master LED Indicator		SLED(SOC:20%~100%), 3LED (working, alarming, protecting)
IP Rating of Enclosure		IP65
Working Temperature (°C)		Charge:0 ~ 55/Discharge:-20 ~ 55
Storage Temperature		0°C ~ 35°C
Humidity		5%~95%
Altitude		≤2000m
Cycle Life		25°C±2°C, 0.5C/0.5C,70%EOL≥6000
Installation		Wall-Mounted, Floor-Mounted
Communication Port		CAN2.0, RS485
Life Cycle Power During Warranty Period ^[3]		20MWh@70%EOL
Certification		UL1973, FCC, 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] The current is affected by temperature and SOC.

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

Introduction

This series lithium iron phosphate battery is one of new energystorage products developed and produced by Deye , it can be used to support reliable power forvarious 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 in parallel for larger capacity and longer power supporting duration requirements.