



Stock Code : 605117

Ningbo Deye Inverter Technology Co., Ltd

Hybrid Inverters & ESS



About Deye

Deye ESS R&D center and Manufacturing Base





China Stock Code:605117

- ◆ Ningbo Deye Technology Co., Ltd. is a large - scale manufacturing technology enterprise integrating R&D,design,production,sales and services.
- ◆ Deye has five core industrial chains:
 - The solar inverter system
 - The Li battery energy storage system
 - The frequency conversion control system
 - The environmental electrical appliance series
 - The heat exchanger series
- ◆ Deye ESS base in CiXi city of Ningbo. More than 170,000 square meter R&D center,battery pack,BMS, sheet metal processing, and spray factory. Deye ESS has15,000 sets(100,000 sets before 2025) ESS product capacity per month. Deye ESS product is certified by UL,CE etc.

Hybrid Inverter

SUN- 3 / 3.6 / 5 / 6 K-SG04LP1-EU



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system

16

Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel

140

Max. charging/discharging current of 140A

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Model	SUN-3K -SG04LP1-24-EU	SUN-3K -SG04LP1-EU	SUN-3.6K -SG04LP1-EU	SUN-5K -SG04LP1-EU	SUN-6K -SG04LP1-EU
Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	20~30	40~60	40~60	40~60	40~60
Max. Charging Current (A)	140	70	90	120	135
Max. Discharging Current (A)	140	70	90	120	135
Number of battery input	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)	3900	3900	4680	6500	7800
Rated PV Input Voltage (V)	370 (125~500)				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Full Load DC Voltage Range (V)	300-425				
PV Input Current (A)	13		13+13		
Max. PV I _{SC} (A)	17		17+17		
No. of MPP Trackers	1		2		
No. of Strings per MPP Tracker	1				
AC Output Data					
Rated AC Output and UPS Power (W)	3000		3600	5000	6000
Max. AC Output Power (W)	3300		3690	5500	6600
AC Output Rated Current (A)	13.6/13		16.4/15.7	22.7/21.7	27.3/26.1
Max. AC Current (A)	15/14.3		18/17.2	25/23.9	30/28.7
Max. Continuous AC Passthrough (A)	35				40
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; L/N/PE 220/230Vac (single phase)				
Grid Type	Single Phase				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	96.50%				
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	Natural cooling				
Noise (dB)	<30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	14			15.1	
Size (mm)	330W x 433H x 238D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				

Hybrid Inverter

SUN- 3.6 / 5 / 6 / 7.6 / 8 K-SG05LP1-EU



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system

16

Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel

190

Max. charging/discharging current of 190A

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

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Model	SUN-3.6K -SG05LP1-EU	SUN-5K -SG05LP1-EU	SUN-6K -SG05LP1-EU	SUN-7.6K -SG05LP1-EU	SUN-8K -SG05LP1-EU
Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	40~60				
Max. Charging Current (A)	90	120	135	190	190
Max. Discharging Current (A)	90	120	135	190	190
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)	4680	6500	7800	9880	10400
Rated PV Input Voltage (V)	370 (125~500)				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Full Load DC Voltage Range (V)	300-425		200-425		
PV Input Current (A)	13+13		26+26		
Max. PV I _{SC} (A)	17+17		34+34		
No. of MPP Trackers	2				
No. of Strings per MPP Tracker	1		2		
AC Output Data					
Rated AC Output and UPS Power (W)	3600	5000	6000	7600	8000
Max. AC Output Power (W)	3690	5500	6600	8360	8800
AC Output Rated Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	34.5/33	36.4/34.8
Max. AC Current (A)	18/17.2	25/23.9	30/28.7	38/36.3	40/38.3
Max. Continuous AC Passthrough (A)	35		40	50	
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; L/N/PE 220/230Vac (single phase)				
Grid Type	Single Phase				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	96.50%				
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	Natural cooling				
Noise (dB)	<30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	24				
Size (mm)	330W x 580H x 232D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				

Hybrid Inverter

SUN- 5 / 6 / 8 / 10 / 12 K-SG04LP3-EU



100

100% unbalanced output, each phase; Max. output up to **50%** rated power



DC couple and AC couple to retrofit existing solar system

10

Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel

240

Max. charging/discharging current of 240A

48

48V low voltage battery, transformer isolation design

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117.SH



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Model	SUN-5K -SG04LP3-EU	SUN-6K -SG04LP3-EU	SUN-8K -SG04LP3-EU	SUN-10K -SG04LP3-EU	SUN-12K -SG04LP3-EU
Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	40~60				
Max. Charging Current (A)	120	150	190	210	240
Max. Discharging Current (A)	120	150	190	210	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)	6500	7800	10400	13000	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)	13+13			26+13	
Max. PV I _{SC} (A)	17+17			34+17	
No. of MPP Trackers	2				
No. of Strings per MPP Tracker	1		2+1		
AC Output Data					
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000
Max. AC Output Power (W)	5500	6600	8800	11000	13200
AC Output Rated Current (A)	7.6/7.2	9.1/8.7	12.1/11.6	15.2/14.5	18.2/17.4
Max. AC Current (A)	11.4/10.9	13.6/13	18.2/17.4	22.7/21.7	27.3/26.1
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				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
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 699.3H x 279D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				

Three Phase Hybrid Inverter

SUN- 25 / 30 / 40 / 50 K-SG01HP3-EU-BM2/3/4



- 100** 100% unbalanced output, each phase; Max. output up to **50%** rated power
-  DC couple and AC couple to retrofit existing solar system
- 10** Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 100** Max. charging/discharging current of 100A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

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Model	SUN-25K-SG01HP3 -EU-BM2	SUN-30K-SG01HP3 -EU-BM3	SUN-40K-SG01HP3 -EU-BM4	SUN-50K-SG01HP3 -EU-BM4
Battery Input Data				
Battery Type	Li-Ion			
Battery Voltage Range (V)	160~800			
Max. Charging Current (A)	50+50			
Max. Discharging Current (A)	50+50			
Number of battery input	2			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	32500	39000	52000	65000
Max. DC Input Voltage (V)	1000			
Start-up Voltage (V)	180			
MPPT Range (V)	150-850			
Full Load DC Voltage Range (V)	450-850	360-850	360-850	450-850
Rated DC Input Voltage (V)	600			
PV Input Current (A)	36+36	36+36+36	36+36+36+36	
Max. PV I _{sc} (A)	55+55	55+55+55	55+55+55+55	
No. of MPP Trackers	2	3	4	
No. of Strings per MPP Tracker	2			
AC Output Data				
Rated AC Output and UPS Power (W)	25000	30000	40000	50000
Max. AC Output Power (W)	27500	33000	44000	55000
AC Output Rated Current (A)	37.9/36.3	45.5/43.5	60.7/58	75.8/72.5
Max. AC Output Rated Current (A)	41.7/39.9	50/47.9	66.7/63.8	83.4/79.8
Max. Three-phase Unbalanced Output Current	50	60	70	83.3
Max. Continuous AC Passthrough (A)	150			
Peak Power (off grid)	1.5 time of rated power, 10 S			
Generator input/Smart load /AC couple current (A)	37.9 / 150 / 37.9	45.5 / 150 / 45.5	60.7 / 150 / 60.7	75.8 / 150 / 75.8
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			
DC injection current (mA)	<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)	75			
Size (mm)	527W×894H×294D			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 years			

SE-G5.1 Pro



◆ Safer

Cobalt Free Lithium Iron Phosphate (LFP) Battery: Safety and long Lifespan, high efficiency and high-Power density. Intelligent BMS, providing complete protection.

◆ Reliable

Support high discharge power. IP20, natural cooling, wide temperature range: -20°C to 55°C.

◆ Flexible

Modular design, easy to expand, Max. 64 units in parallel, Max. capacity of 327kWh. Suited to residential and commercial applications for increasing the self-consumption ratio.

◆ Convenient

Battery module auto networking, Automatic IP addressing, Easy maintenance, remotely monitoring and upgrade, Support USB drive upgrade the firmware.

◆ Eco-Friendly

Use environmental protection materials, the whole module non-toxic, pollution-free.



Stock Code: 605117.SH

Model		SE-G5.1 Pro
Main Parameter		
Battery Chemistry		LiFePO4
Capacity (Ah)		100
Scalability		Max. 64 pcs pack (327kWh) in parallel (Max. 32 pcs no external setup)
Nominal Voltage (V)		51.2
Operating Voltage(V)		43.2~57.6
Energy (kWh)		5.12
Usable Energy (kWh) ^[1]		4.61
Charge/Discharge Current (A)	Recommend ^[2]	50
	Max. ^[2]	100
	Peak(2mins,25°C)	150
Other Parameter		
Recommend Depth of Discharge		90%
Dimension (W/H/D, mm)		445*133*430
Weight Approximate(kg)		44
Master LED Indicator		5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting)
IP Rating of Enclosure		IP20
Operating Temperature		Charge:0~55°C / Discharge:-20°C~55°C
Storage Temperature		0°C~35°C
Humidity		5%~95%
Altitude		≤2000m
Cycle Life		≥6000(25°C±2°C,0.5C/0.5C,70%EOL)
Installation		19-inch standard cabinet, cabinet depth ≥600mm / with rack
Communication Port		CAN2.0, RS485
Warranty Period ^[3]		10 years
Energy Throughput ^[3]		16MWh@70%EOL
Certification		UN38.3, UL1973, IEC62619, CE, CEI 0-21

[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.

RW-M6.1



◆ **Safer**

Cobalt Free Lithium Iron Phosphate (LFP) Battery, safety and long lifespan, high efficiency and high-power density. Intelligent BMS, providing complete protection.

◆ **Reliable**

Support high discharge power. IP65, natural cooling, wide temperature range: -20°C to 55°C.

◆ **Flexible**

Modular design, easy to expand, Max. 32 units in parallel, Max. capacity of 196kWh. Suited to residential and commercial applications for increasing the self-consumption ratio.

◆ **Convenient**

Battery module auto networking, Automatic IP addressing, easy maintenance, remotely monitoring and upgrade, support USB drive upgrade the firmware.

◆ **Eco-Friendly**

Use environmental protection materials, the whole module non-toxic, pollution-free.

◆ **Wall-Mounted**

Flat design, wall-mounted, saving installation space.



Stock Code: 605117.SH

Model		RW-M6.1
Main Parameter		
Battery Chemistry	LiFePO4	
Capacity (Ah)	120	
Scalability	Max.32 pcs in Parallel(196kWh)	
Nominal Voltage (V)	51.2	
Operating Voltage(V)	43.2~57.6	
Energy (kWh)	6.14	
Usable Energy (kWh) ^[1]	5.53	
Charge/Discharge Current (A)	Recommend ^[2]	60
	Max. ^[2]	100
	Peak(2mins,25°C)	150
Other Parameter		
Recommend Depth of Discharge	90%	
Dimension (W/H/D, mm)	460*720*143(Depth of 160mm With Hanging Board)	
Weight Approximate(kg)	55	
Master LED Indicator	5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting)	
IP Rating of Enclosure	IP65	
Operating Temperature	Charge:0~55°C / Discharge:-20°C~55°C	
Storage Temperature	0°C~35°C	
Humidity	5%~95%	
Altitude	≤2000m	
Cycle Life	≥6000(25°C±2°C,0.5C/0.5C,70%EOL)	
Installation	Wall-Mounted, Floor-Mounted	
Communication Port	CAN2.0, RS485	
Warranty Period ^[3]	10 years	
Energy Throughput ^[3]	20MWh@70%EOL	
Certification	UN38.3, UL1973, FCC, IEC62619, CE, CEI 0-21	

[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.

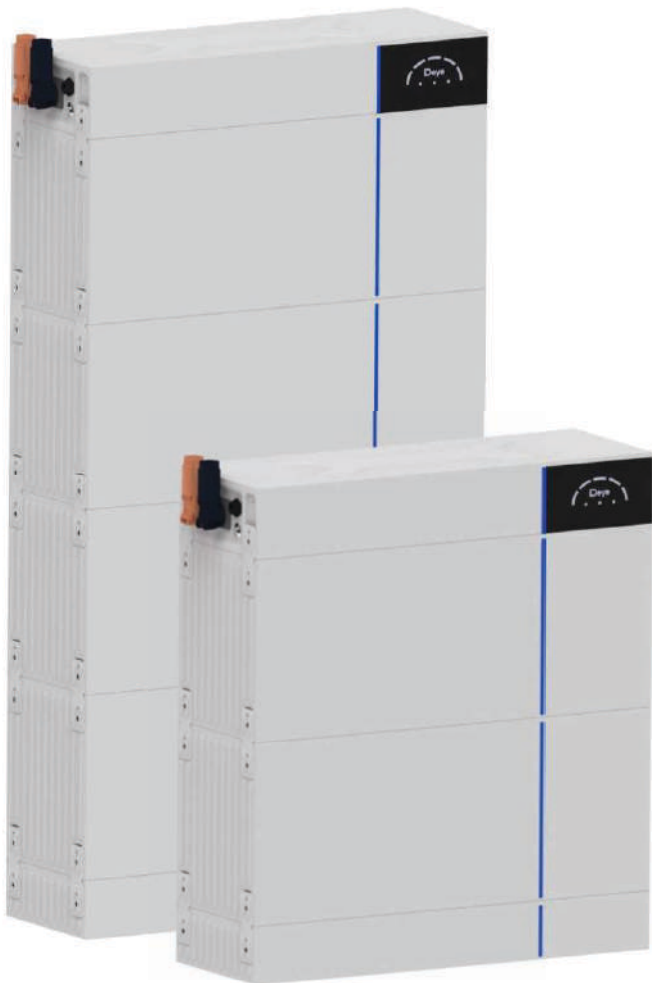
Introduction

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.

A1-W5.1



- ◆ **Safer**

Cobalt Free Lithium Iron Phosphate (LFP) Battery, safety and long lifespan, high efficiency and high-power density. Intelligent BMS, providing complete protection.

- ◆ **Reliable**

Support high discharge power. IP65, natural cooling, wide temperature range: -20°C to 55°C.

- ◆ **Flexible**

Modular design, easy to expand, Max. 6 clusters in parallel(36 pcs), Max. capacity of 184kWh. Suited to residential and commercial applications for increasing the self-consumption ratio.

- ◆ **Convenient**

Battery module auto networking, automatic IP addressing, easy maintenance, remotely monitoring and upgrade, support USB drive upgrade the firmware.

- ◆ **Eco-Friendly**

Use environmental protection materials, the whole module non-toxic, pollution-free.

- ◆ **Quick Installation**

Flat and stackable design, floor-mounted or wall-mounted, no wiring and extra fixing screws, rapid and easy installation.



Stock Code: 605117.SH

Model		AI-W5.1				
Main Parameter						
Battery Chemistry		LiFePO4				
Battery Module Energy (kWh)		5.12				
Battery Module Voltage (V)		51.2				
Battery Module Capacity (Ah)		100				
Scalability		2	3	4	5	6
Nominal Voltage (V)		51.2				
Operating Voltage(V)		43.2~57.6				
Energy (kWh)		10.24	15.36	20.48	25.6	30.72
Usable Energy (kWh) ^[1]		9.2	13.8	18.4	23.0	27.6
Charge/Discharge Current (A)	Recommend ^[2]	100	150	200	250	250
	Max. ^[2]	180	210	240	300	300
	Peak(30s,25°C)	270	315	360	360	360
Other Parameter						
Recommend Depth of Discharge		90%				
Dimension (W/D/H, mm, ref)		720*255*770	720*255*1055	720*255*1340	720*255*1625	720*255*1910
Weight Approximate (kg)		117	163	209	255	301
Master LED Indicator		5LED(SOC:20%~100%), 3LED (working, alarming, protecting)				
IP Rating of Enclosure		IP65				
Operating Temperature		Charge: 0~55°C/ Discharge: -20°C~55°C				
Storage Temperature		0 ~ 35°C				
Humidity		5%~95%				
Altitude		≤2000m				
Cycle Life ^[3]		≥6000(25°C±2°C,0.5C/0.5C,70%EOL)				
Installation		Floor-Mounted, Wall-Mounted				
Communication Port		CAN2.0, RS485				
Warranty Period ^[3]		10 years				
Energy Throughput ^[3]		16MWh(Battery Module @70%EOL)				
Certification		IEC62619, CE,VDE2510-10, CEI 0-21, UL1973, UL9540A, FCC, 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 energy throughput.

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 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.

BOS-G



◆ Convenient

Quick installation standard of 19-inch embedded designed module is comfortable for installation and maintenance.

◆ 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.

◆ Eco-friendly

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

◆ Flexible configuration

Multiple battery modules can be in parallel for expanding capacity and power. Support USB upgrade, wifi upgrade(optional), remote up grade(Compatible with Deye inverter).

◆ Wide temperature

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





Stock Code: 605117.SH

Model		B0S-G		
Main Parameter				
Cell Chemistry		LiFePO4		
Module Energy(kWh)		5.12		
Module Nominal Voltage (V)		51.2		
Module Capacity(Ah)		100		
Battery Module Qty in series. (Optional)		4 (Min)	8 (Standard US Cluster)	12 (Standard EU Cluster)
System Nominal Voltage (V)		204.8	409.6	614.4
System Operating Voltage (V)		180~230	359~460	538~691
System Energy (kWh)		20.48	40.96	61.44
System Usable Energy(kWh)		18.5	36.86	55.29
Charge/Discharge Current (A)	Recommend	50		
	Max	100		
	Peak (2 mins, 25°C)	125		
Working Temperature(°C)		Charge: 0~50/Discharge: -20~55		
Status Indicator		Yellow: Battery High Voltage Power On Red: Battery System Alarm		
Communication Port		CAN2.0/RS485		
Humidity		5~85%RH		
Altitude		≤2000m		
IP Rating of Enclosure		IP20		
Dimension (W/D/H,mm)		580*590*1615		580*590*2200
Weight Approximate(kg)		258	434	628
Installation Location		Rack Mounting		
Storage Temperature(°C)		0~35		
Recommend Depth of Discharge		90%		
Cycle Life		25±2°C, 0.5C/0.5C, EOL70%≥6000		
Warranty		10years		
Certification		CE/IEC62619/UL1973/UL9540A/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.

Model	Description
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HVB750V/100A-EU Operating Voltage Nomina Charge/Discharge Current Max.Charge/Discharge Current DC Input Rating Operating Temperature Range Ingress Protection Dimension (W/D/H) Weight Approximate	120 ~ 750Vdc 100A 125A 12±2%V/4.15A -20~55°C IP20 440*565*150mm 15.5kg	
HVB750V/100A-US Operating Voltage Nominal Charge/Discharge Current Max.Charge/Discharge Current DC Input Rating Operating Temperature Range Ingress Protection Dimension (W/D/H) Weight Approximate	120 ~ 750Vdc 100A 125A 12±2%V/4.15A -20~55°C IP20 440*565*150mm 17kg	

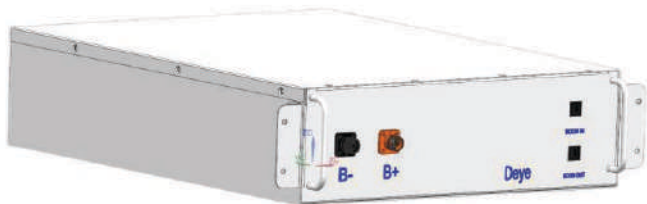
High voltage box Standard configuration:

- ① 120 ohm terminal resistance
- ② 140mm communication cable
- ③ 220mm power cable
- ④ 1.5m power cable (US Version)
2.1m power cable (EU Version)



BOS-GM5.1	5.12 kwh battery module	
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Battery Type Nominal Voltage Nominal Capacity Nominal Energy Nominal Charge/Discharge Current Max.Charge/Discharge Current Charge Temperature Discharge Temperature Storage Temperature Ingress Protection Dimension (W/D/H) Weight Approximate	LiFePO4(LFP) 51.2Vdc 100Ah 5.12kWh 100A 125A 0~50°C -20°C ~ 55°C 0°C ~ 35°C IP20 440*570*133mm 44kg
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Battery module Standard configuration:

- ① 110mm communication cable
- ② 200mm power cable



EPCable5.0(Optional)	Standard 5-meter power cable connected to the positive pole of the external PCS	
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1000V/4AWG cable



ENCable5.0(Optional)	Standard 5-meter power cable connected to the negative pole of the external PCS	
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1000V/4AWG cable



Model	Description
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EPWR Cable5.0(Optional)

Standard 5-meter cable connected to external 12VDC power supply



ECOM Cable5.0(Optional)

Standard 5-meter communication cable connected to the external device

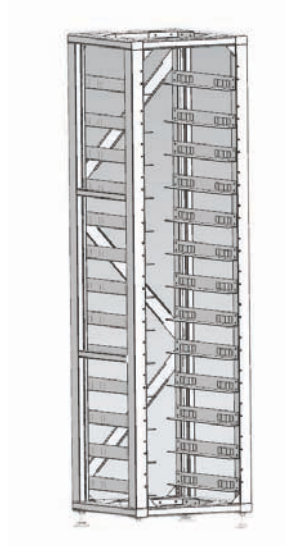


3U-HRACK(Optional)

Standard 19inch rack, caninstall 12 pcs batteries and 1 pcs High Voltage Battery cluster control box

Dimension (W/D/H)
Weight Approximate

580*590*2200mm
85kg

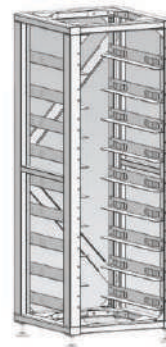


3U-LRACK(Optional)

Standard 19inch rack, caninstall 8 pcs batteries and 1 pcs High Voltage Battery cluster control box

Dimension (W/D/H)
Weight Approximate

580*590*1615mm
65kg



GB-L



- ◆ **Structural safety**

Meet high seismic grade zone 4.

- ◆ **High-voltage stack**

Modules are connected in series without cable connection, and high-voltage platform improves system efficiency.

- ◆ **Thermal management**

Temperature detection of key parts, cell, power plug-in, etc.

- ◆ **Wide temperature operation**

The heating function is optional to meet the application scenarios with low temperature and no sense.

- ◆ **Environmental friendliness**

IP protection grade 65, anti-corrosion grade \geq C2, environmental protection battery.

- ◆ **Intelligent and visual**




Support remote upgrade, real-time battery warning information push, LCD data display.



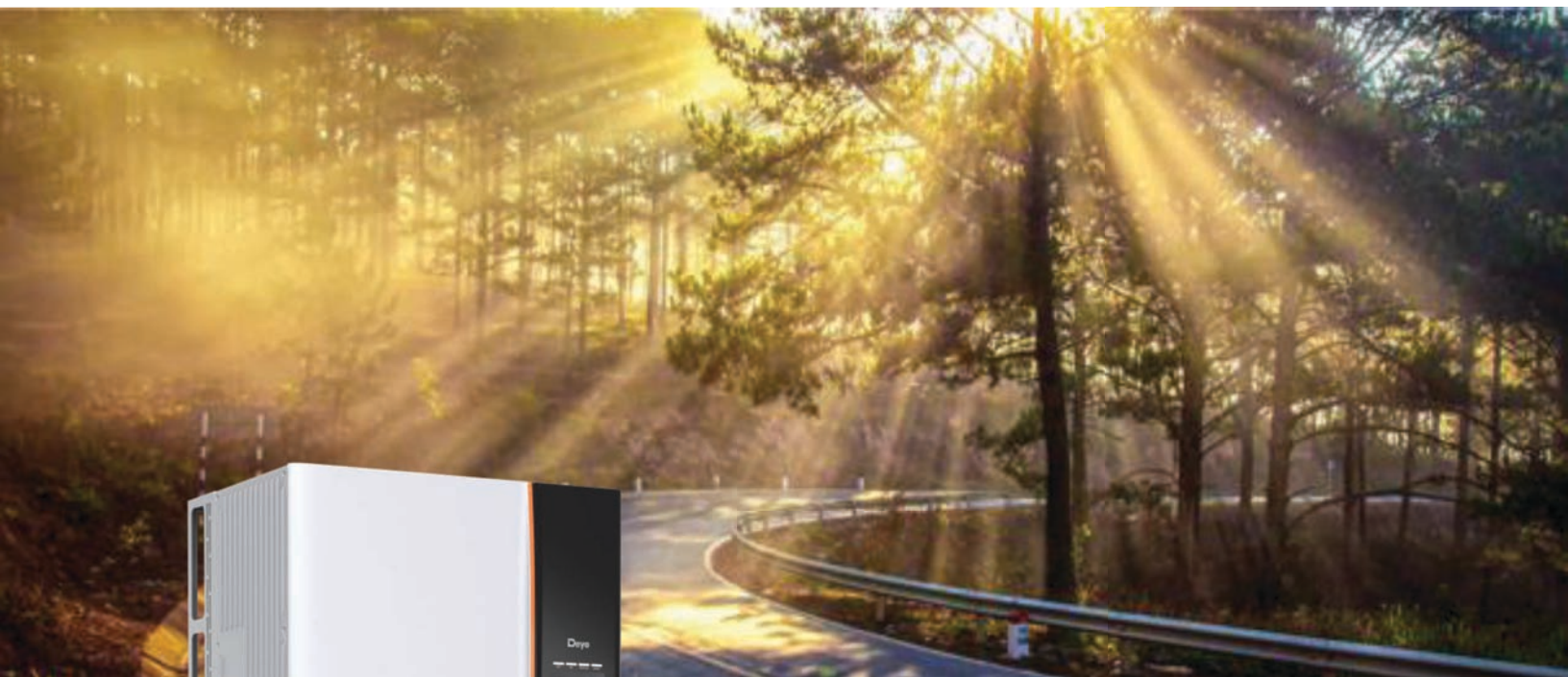
Stock Code: 605117.SH

Model		GB-L				
Main Parameter						
Cell Chemistry	LiFePO4					
Module Energy(kWh)	4.09					
Module Nominal Voltage (V)	102.4					
Module Capacity(Ah)	40					
Battery Module Qty InSeries (Optional)	2	3	4	5	6	
System Nominal Voltage (V)	204.8	307.2	409.6	512	614.4	
System Operating Voltage (V)	179.2~691.2					
System Energy (kWh)	8.18	12.27	16.36	20.45	24.56	
System Usable Energy (kWh)	7.36	11.04	14.72	18.40	22.10	
Charge/Discharge Current (A)	Recommend	20				
	Max	40				
	Peak (2 mins,25°C)	50				
Working Temperature(°C)	Charge/Discharge:-20~55					
LCD Display	SOC%,Power,Total Voltage					
Communication Port	CAN2.0,RS485					
Humidity	5%~90%					
Altitude	≤2000m					
IP Rating of Enclosure	IP65					
Storage Temperature(°C)	0~35					
Dimension (W/D/H,mm)	540*385*640	540*385*860	540*385*1080	540*385*1300	540*385*1520	
Weight(kg)	76	108	140	172	204	
Installation Location	Floor Mount					
Recommend Depth of Discharge	90%					
Cycle Life	25±2°C,0.5C/0.5C,EOL70%≥6000					
Warranty	10years					
Certification	CE/IEC62619 /VDE2510-50/ UL1973/UL9540A/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.

Model	Description	
GB-LBS	High voltage battery cluster control box	
Operating Voltage Nominal Charge/Discharge Current Max. Charge/Discharge Current Operating Temperature Range Ingress Protection Dimension (W/D/H) Weight Approximate	120 ~ 750Vdc 40A 50A -40~85°C IP65 540*385*110mm 7kg	
GB-LM4.0	4.09 kWh battery module	
Battery Type Nominal Voltage Nominal Capacity Nominal Energy Nominal Charge/Discharge Current Max. Charge/Discharge Current Charge Temperature Discharge Temperature Storage Temperature Ingress Protection Dimension (W/D/H) Weight Approximate	LiFePO4(LFP) 102.4Vdc 40Ah 4.09kWh 40A 50A 0~50°C -20°C ~ 55°C 0°C ~ 35°C IP65 540*385*220mm 32kg	
GB-LBase	Battery module base	
Dimension (W/D/H) Weight Approximate	540*385*90mm 5kg	
ECOM Cable5.0(Optional)	Standard 5-meter communication cable connected to the external device	
EPCable5.0(Optional)	Standard 5-meter power cable connected to the positive pole of the external PCS	
1000V/4AWG cable		
ENCable5.0(Optional)	Standard 5-meter power cable connected to the negative pole of the external PCS	
1000V/4AWG cable		

GB-SCL-EU



◆ **ALL IN ONE PLUS**

Optical storage and charging integrated solution, one-stop service

◆ **Maximum output**

100% unbalanced output, each phase; Max. output up to 50% rated power

◆ **Maximum connection**

Max. 10pcs parallel for on-grid and off-grid operation

◆ **More support**

Support storing energy from diesel generator

◆ **High-voltage stack**

Modules are connected in series without cable connection, and high-voltage platform improves system efficiency

◆ **Thermal management**

Temperature detection of key parts, cell, power plug-in, etc.

◆ **Wide temperature operation**

The heating function is optional to meet the application scenarios with low temperature and no sense



Stock Code: 605117.SH

Model	GB-S6K-EU	GB-S8K-EU	GB-S10K-EU	GB-S12K-EU	GB-S15K-EU	GB-S20K-EU
Battery Type	Li-Ion					
Battery Voltage Range (V)	150~700					
Max. Charging Current(A)	37					
Max. Discharging Current(A)	37					
Number of battery input	1					
Charging Strategy for Li-Ion Battery	Self-adaption 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)	150					
MPPT Range (V)	150-850					
Full Load DC Voltage Range (V)	195-850	260-850	325-850	340-850	423-850	500-850
Rated DC Input Voltage (V)	600					
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					
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. ACCurrent (A)	13	18	22	25	30	35
Max. Continuous AC Pass through (A)	80					
Peak Power (off grid)	1.5 time of rated power, 10S					
Generator input/Smart load /ACcouple 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 0.8 lagging					
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac					
Grid Type	Three Phase					
DC injection current (mA)	<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	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					
Genera Data						
Operating Temperature Range (°C)	-40~60°C, >45°C derating					
Cooling	Smart cooling					
Communication with BMS	RS485; CAN					
Warranty	5 years					

Model		GB-C20K-EU
Charger Module Data		
Rate Power (kw)	20	
Output Voltage Range (V)	50~750	
Output Current Range (A)	0~50	
Communication Port	CAN2.0	
Charging standard	CCS2 Type	
Standards/regulations	IEC61851-1	
Operating Temperature Range (°C)	40~60	
Cooling	Smart cooling	
Warranty	5 years	
Certification	EN61851-1/EN61851-23	

Model		GB-L			
Battery System Data					
Cell Chemistry	LiFePO4				
Module Energy (kWh)	4.09				
Module Nominal Voltage (V)	102.4				
Module Capacity (Ah)	40				
Battery Module Qty in series.(Optional)	3	4	5	6	
System Nominal Voltage (V)	307.2	409.6	512	614	
System Operating Voltage (V)	268.8~691.2				
System Energy (kWh)	12.27	16.36	20.45	24.57	
System Usable Energy (kWh)	11.04	14.72	18.40	22.11	
Charge/Discharge Current (A)	Recommend	20			
	Max	40			
	peak (2mins, 25°C)	50			
Working Temperature(°C)	Charge/Discharge:-20~55				
Communication Port	CAN2.0/RS485				
Thermal Management	Natural Cooling/Smart Heating				
Recommend Depth of Discharge	90%				
Cycle Life	25±2°C,0.5C/0.5C,70%EOL≥6000				
Warranty	10 years				
Certification	CE/IEC 62619/VDE 2510-50/UN38.3				
Other Data					
Humidity	5~85%RH				
Altitude (m)	≤2000				
IP Rating of Enclosure	IP65				
Noise (dB)	<45				
Storage Temperature(°C)	0~35				
Dimension (W/D/H,mm)	540*385*1420	540*385*1530	540*385*1640	540*385*2080	
Weight Approximate (kg)	173	205	237	269	
Installation Location	Floor Mount				

- 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.

Model	Description	
GB-S6K/8K/10K/12K/15K/20K-EU	Hybrid inverter	
Dimension (W/D/H) Weight Approximate	540*385*450mm 45kg	
GB-C20K-EU	20KW Charge module	
Dimension (W/D/H) Weight Approximate	540*385*110mm 20kg	
GB-LB	High voltage battery cluster control box	
Operating Voltage Nominal Charge/Discharge Current Max.Charge/Discharge Current Operating Temperature Range Ingress Protection Dimension (W/D/H) Weight Approximate	120 ~ 750Vdc 40A 50A -40~85°C IP65 540*385*110mm 7kg	
GB-LM4.0	4.09 kWh battery module	
Battery Type Nominal Voltage Nominal Capacity Nominal Energy Nominal Charge/DischargeCurrent Max.Charge/Discharge Current Charge Temperature Discharge Temperature Storage Temperature Ingress Protection Dimension (W/D/H) Weight Approximate	LiFePO4(LFP) 102.4Vdc 40Ah 4.09kWh 40A 50A 0~50°C -20°C ~ 55°C 0°C ~ 35°C IP65 540*385*220mm 32kg	
GB-LBase	Battery module base	
Dimension (W/D/H) Weight Approximate	540*385*90mm 5kg	

Model	Description
EVC50-EU	Standard 4-meter charge power cable & CC2 DC connector cable



ECOM Cable5.0(Optional)	Standard 5-meter communication cable connected to the external device
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- ▶ **48KW**
- ▶ **Lebanon**
- ▶ **SUN-12K-SG**



- ▶ **72KW**
- ▶ **Lebanon**
- ▶ **SUN-12K-SG**

Project cases



- ▶ **24KW**
- ▶ **Philippines**
- ▶ **SUN-8K-SG**



- ▶ **48KW**
- ▶ **Lebanon**
- ▶ **SUN-12K-SG**

Deye

To Make ESS Better

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Note: The technical data above mentioned may be updated or revised due to product development. The data in this brochure is subject to change without notice. The latest datasheet and catalogue can be acquired via market@deye.com.cn