

# Deye

*Clean Power For You*

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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](mailto:market@deye.com.cn)

Ver: 3.1 2022



## *World-leading Energy Storage System Provider*

Stock Code: 605117.SH

*Choose Deye — Choose a Green and Healthy Life*

**Deye**  
2022







# About DEYE

**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 170000 square meter R&D center, battery pack, BMS, sheet metal processing, and spray factory. Deye ESS has 15000sets(100000sets before 2025) ess product capacity per month. Deye ESS product is certified by UL, CE etc.



# Deye ESS test platform





# Milestones

2021

Deye Group was successfully listed on SSE of China in 2021, Stock Code 605117.SH.

30,000 pcs +

By the end of 2019, with total shipments 30,000+, Deye hybrid inverter has become Top 3 in South Africa, Pakistan and Top 1 Chinese brand in USA.

2017

Deye has launched first generation hybrid inverter and attracted a lot of attention with many unique features such as V/f droop control technology and battery DC / DC topology etc...

2007

Founded in 2007 with registered capital of 46 million USD.



# Core Technology

**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 163.8 kWh. 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.



Capable | Intelligent | User-friendly | Safety  
Reduce your electricity bill and improve your energy independence  
Your ideal residential solar energy storage solution



# Battery Portfolio

Spring >>

# Summer

>>





# 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.

## Technical Data

Model		SE-G5.1 Pro
Main Parameter		
Battery Chemistry		LiFePO4
Capacity (Ah)		100
Scalability(Max. in 1 battery group)		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) <sup>[1]</sup>		4.61
Charg/Discharging Current(A)	Recommend <sup>[2]</sup>	50
	Max <sup>[2]</sup>	100
	Peak (2 minutes,25°C)	150
Other Parameter		
Depth of Discharge		90%
Dimension (W/H/D,mm)		445*133*430
Weight Approximate (kg)		45
Master LED indicator		5LED(SOC:20%~100%), 3LED(working,alarming,protecting)
IP Rating of Enclosure		IP20
Altitude		≤2000m
Working Temperature (°C)		Charge: 0~55/Discharge: -20~55
Storage Temperature		0°C ~ 35°C
Humidity		5%~95%
Cycle Life		25±2°C ,0.5C/0.5C,70%EOL≥6000
Installation Location		19-inch standard cabinet, cabinet depth ≥600mm / with rack
Communication Port		CAN2.0, RS485
Warranty		10 years
Life Cycle Power During Warranty Period <sup>[3]</sup>		16MWh@70%EOL
Certification		UL1973, IEC62619, IEC61000, 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.

# 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 195kWh.  
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:**  
High-power density:  
Flat design, wall-mounted, saving installation space.

## 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) <sup>[1]</sup>		5.5
Charge/Discharge Current (A)	Recommend <sup>[2]</sup>	60
	Max <sup>[2]</sup>	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		5LED(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
Warranty		10 years
Life Cycle Power During Warranty Period <sup>[3]</sup>		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.



# SUNB-5.0-G01-48-PC



- ◆ **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 157 kWh.  
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.
- ◆ **Stacking Design:**  
High-power density:  
Stacking design, floor standing installation, directly stacked, no drilling, easy wiring.

## Technical Data

Model		SUNB-5.0-G01-48-PC			
Main Parameter					
Battery Chemistry		LiFePO4			
Battery Module Energy (kWh)		4.91			
Battery Module Voltage (V)		51.2			
Battery Module Capacity (Ah)		96			
Nominal Voltage (V)		51.2			
Operating Voltage (V)		43.2~57.6			
Scalability(Max. in 1 battery group)		1	2	3	4
Energy (kWh)		4.91	9.82	14.73	19.64
Usable Energy (kWh) <sup>[1]</sup>		4.42	8.84	13.26	17.68
Charg/Discharging Current(A)	Recommend <sup>[2]</sup>	48	96	192	192
	Max <sup>[2]</sup>	96	192	250	250
	Peak (2 minutes, 25°C)	150	300	300	300
Other Parameter					
Depth of Discharge		90%			
Dimension (W/D/H,mm) / Weight (kg)		430×440×339 / 50.7	430×760×339 / 98.7	430×1080×339 / 146.7	430×1400×339 / 194.7
Master LED Indicator		5LED(SOC:20%~100%), 3LED(working, alarming, protecting)			
IP Rating of Enclosure		IP65			
Altitude		≤2000m			
Working Temperature (°C)		Charge: 0~55/Discharge: -20~55			
Storage Temperature (°C)		0 ~ 35			
Humidity		5%~95%			
Cycle Life		@25±2°C, 1C/1C, 70%EOL≥6000			
Installation Location		Floor Mounted			
Communication Port		CAN2.0, RS485			
Warranty		10 years			
Life Cycle Power During Warranty Period <sup>[3]</sup>		16MWh@70%EOL			
Certification		IEC62619, IEC61000, 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 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 in parallel for larger capacity and longer power supporting duration requirements.



# SUN-5K-SG03LP1-ESS SUN-12K-SG04LP3-ESS

# SUN-8K-SG01LP1-ESS



## All-in-one Energy Storage System

- ◆ All-in-one design, integrated 5/8/12KW hybrid inverter and battery
- ◆ Comfortable and easy control via App, PC or Touch-Display
- ◆ Leading smart application: peak-shaving, smart load, AC couple etc
- ◆ Modular lithium iron phosphate battery, capacity of 5kWh~20kWh, scalable and safety
- ◆ Fast switching time of 4ms, ensuring your energy security

## Technical Data

Model	SUN-5K-SG03LP1-ESS	SUN-8K-SG01LP1-ESS	SUN-12K-SG04LP3-ESS
<b>System Specification</b>			
Nominal Output Power/UPS Power (W)	5000 / 5000	8000 / 8000	12000 / 12000
Energy Range	4.9 ~ 19.6 kWh		
Usable Energy Range	8.8kWh	13.2kWh	17.6kWh
Battery Chemistry	LFP (LiFePO4)		
IP Rating of Enclosure	IP65 (Outdoor)		
Warranty	10 Year Product Warranty		
<b>Inverter Technical Specification</b>			
Model	SUN-5K-SG03LP1-EU	SUN-8K-SG01LP1-EU	SUN-12K-SG04LP3-EU
Max. PV Input Power (W)	6500	10400	15600
Max. PV Input Current (A)	2 x 13	2 x 22	26+13
Max. PV Input Voltage (V)	500	500	800
Start Up DC Voltage (V)	125	125	160
MPPT Voltage Range (V)	150-425	150-425	200-650
Max. PV Short-circuit Current (A)	2 x 17	2 x 28	34+17
MPPT Number	2	2	2
Max. Charging/Discharging Current (A)	120	190	240
Max. Charging/Discharging Power (W)	5000	8000	12000
Rated Voltage (V)	230		230/400
Phase	Single Phase		Three Phase
Rated Frequency	50 / 60 Hz		
Peak Power (off grid)	2 time of rated power, 10 S		
DC injection current (mA)	THD<3% (Linear load<1.5%)		
Display	LCD		
Relative Humidity	15% ~ 85% (No Condensing)		
Dimension (W x D x H)	430W x 1466.5H x339D	430W x 1796.5H x339D	430W x 2126.5H x339D
Weight (kg)	118.5	178	227.6
Communication with BMS	RS485; CAN		
EMC	IEC/EN 61000-6-1/2/3/4		
Safety	IEC/EN 62109-1,IEC/EN 62109-2		
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		
<b>Efficiency</b>			
Max. Efficiency	97.6%		
Max. charging/discharging efficiency	95.5%		
<b>Battery Technical Specification</b>			
Total Capacity	192Ah	288Ah	384Ah
Nominal Voltage	51.2V		
Operating Temperature Range	Charge: 0~55°C / Discharge: -20~55°C		
Max. Modules in Parallel	8		
Max. Charging/Discharging Current (A)	192	250	250
Communication Port	CAN, RS485		
Cycle Life	>6000		
Certification	CIEC62619, IEC61000, CE, UN38.3		



# 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 upgrade (Compatible with Deye inverter).

#### ◆ Wide temperature

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

## Technical Data

Model		BOS-G	
Main Parameter			
Cell Chemistry	LiFePO4		
Module Energy (kW)	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	537.6~691.2
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: 0~55/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	≤2000 m		
IP Rating of Enclosure	IP20		
Dimension (W/D/H,mm)	540*590*1650		540*590*2250
Weight Approximate (kg)	242	410	430
Installation Location	Rack Mounting		
Storage Temperature (°C)	0~35		
Recommend Depth of Discharge	90%		
Cycle Life (Charge/Discharge)	25±2°C, 0.5C/0.5C, EOL70%≥6000		
Warranty	10 years		
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.





◆ **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.

## Technical Data

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 In Series (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					
SystemEnergy (kWh)	8.18	12.27	16.36	20.45	24.56	
SystemUsable 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	$\leq$ 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)	98	134	170	206	242	
Installation Location	Floor Mount					
Recommend Depth of Discharge	90%					
Cycle Life	25 $\pm$ 2,0.5C/0.5C, EOL70% $\geq$ 6000					
Warranty Period	10 years					
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.



# GB-SL-EU



## ◆ ALL IN ONE

Integrated design, beautiful appearance and scene integration

## ◆ 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

## Technical Data

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
<b>Battery Input Data</b>						
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					
<b>PV String Input Data</b>						
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 <sub>SC</sub> (A)	23+23			32+23		32+32
No. of MPP Trackers	2					
No. of Strings per MPP Tracker	1		2+1		2	
<b>AC Output Data</b>						
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)	80					
Peak Power (off grid)	1.5 time of rated 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 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 <sub>n</sub>					
<b>Efficiency</b>						
Max. Efficiency	97.60%					
Euro Efficiency	97.00%					
MPPT Efficiency	99.90%					
<b>Protection</b>						
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					
<b>Certifications and Standards</b>						
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					
<b>General Data</b>						
Operating Temperature Range ( )	-40~60°C, >45°C derating					
Cooling	Smart cooling					
Communication with BMS	RS485; CAN					
Warranty	5 years					



## Technical Data

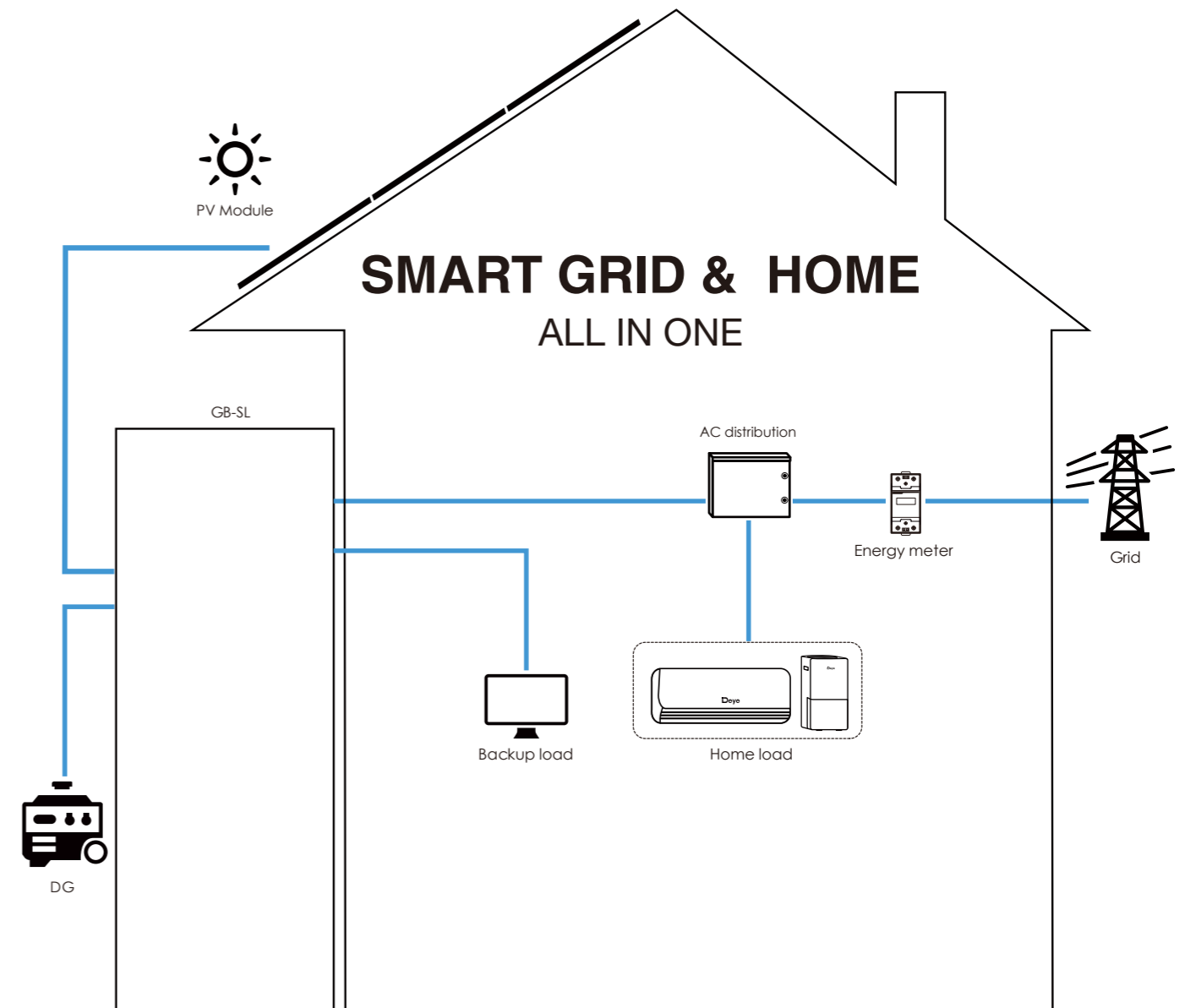
Model		GB-L				
<b>Battery System Data</b>						
Cell Chemistry	LiFePO4					
Module Energy (kWh)	4.09					
Module Nominal Voltage (V)	102.4					
Module Capacity (Ah)	40					
Battery Module Qty in series.(Optional)	2	3	4	5	6	
System Nominal Voltage (V)	204.8	307.2	409.6	512	614	
System Operating voltage (V)	179.2~691.2					
System Energy (kWh)	8.18	12.27	16.36	20.45	24.57	
System Usable Energy (kWh)	7.36	11.04	14.72	18.40	22.11	
Charge/Discharge Current (A)	Recommend	20				
	Max	40				
	peak (2minutes, 25 )	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 (Charge/Discharge)	25±2°C,0.5C/0.5C,70%EOL≥6000					
Warranty	10 years					
Certification	CE/IEC 62619/VDE 2510-50/UN38.3					
<b>Other Data</b>						
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*1090	540*385*1310	540*385*1530	540*385*1750	540*385*1970	
Weight Approximate (kg)	135	171	207	243	279	
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.

## Typical Application Diagram





# Summer 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

## Technical Data

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
<b>Battery Input Data</b>						
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					
<b>PV String Input Data</b>						
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 <sub>SC</sub> (A)	23+23			32+23		32+32
No. of MPP Trackers	2					
No. of Strings per MPP Tracker	1		2+1		2	
<b>AC Output Data</b>						
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)	80					
Peak Power (off grid)	1.5 time of rated 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 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 <sub>n</sub>					
<b>Efficiency</b>						
Max. Efficiency	97.60%					
Euro Efficiency	97.00%					
MPPT Efficiency	99.90%					
<b>Protection</b>						
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					
<b>Certifications and Standards</b>						
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					
<b>General Data</b>						
Operating Temperature Range ( )	-40~60°C, >45°C derating					
Cooling	Smart cooling					
Communication with BMS	RS485; CAN					
Warranty	5 years					



## Technical Data

Model	EVG
<b>Charger Module Data</b>	
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

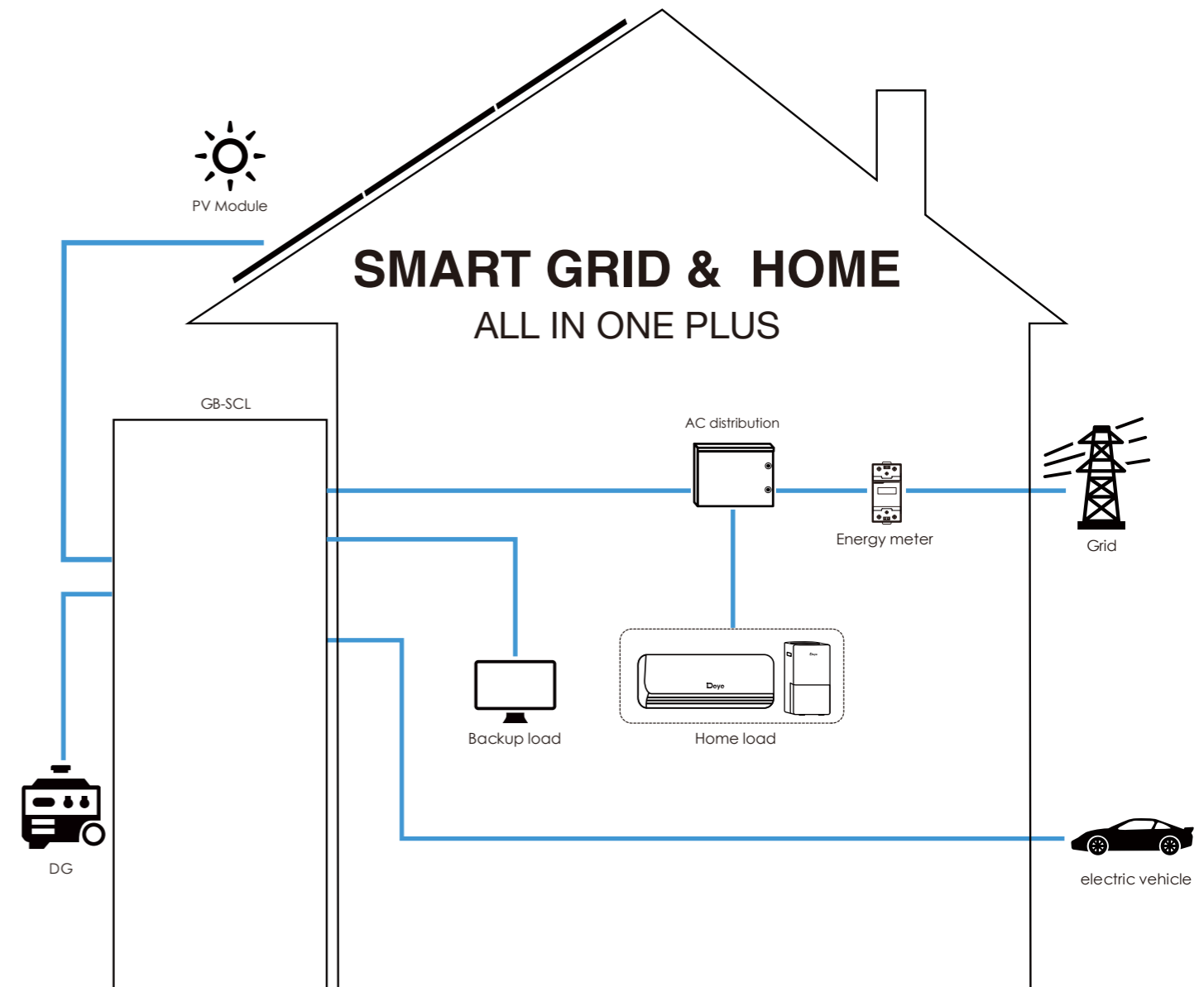
Model	GB-L			
<b>Battery System Data</b>				
Cell Chemistry	LiFePO4			
Module Energy (kWh)	4.09			
Module Nominal Voltage (V)	102.4			
Module Capacity (Ah)	40			
Battery Module Qty in series.(Optional)	3	4	5	6
System Nominal Voltage (V)	307.2	409.6	512	614
System Operating voltage (V)	268.8~691.2			
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 (2minuters, 25 )	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 (Charge/Discharge)	25±2°C,0.5C/0.5C,70%EOL≥6000			
Warranty	10 years			
Certification	CE/IEC 62619/VDE 2510-50/UN38.3			
<b>Other Data</b>				
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)	171	207	243	279
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.

## Typical Application Diagram





# GB-SL-US



◆ **ALL IN ONE**

Integrated design, beautiful appearance and scene integration

◆ **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

## Technical Data

Model	SUN-5K-SG01HP3 -US-AM2	SUN-8K-SG01HP3 -US-AM2	SUN-10K-SG01HP3 -US-AM2	SUN-15K-SG01HP3 -US-AM2
<b>Battery Input Data</b>				
Battery Type	Li-Ion			
Battery Voltage Range (V)	160~500			
Max. Charging Current (A)	50			
Max. Discharging Current (A)	50			
Number of battery input	1			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
<b>PV String Input Data</b>				
Max. DC Input Power (W)	6500	10400	13000	19500
Max. DC Input Voltage (V)	550			
Start-up Voltage (V)	180			
MPPT Range (V)	150-500			
Full Load DC Voltage Range (V)	163-500	227-500	250-500	317-500
Rated DC Input Voltage (V)	380			
PV Input Current (A)	20+20	26+20	26+26	
Max. PV I <sub>SC</sub> (A)	23+23	32+23	32+32	
Number of MPPT / Strings per MPPT	2/1+1	2/2+1	2/2+2	
<b>AC Output Data</b>				
Rated AC Output and UPS Power (W)	5000	8000	10000	15000
Max. AC Output Power (W)	5500	8800	11000	16500
AC Output Rated Current (A)	13.9	22.2	27.8	41.6
Max. AC Current (A)	20	33	37	45
Max. Continuous AC Passthrough (A)	80			
Peak Power (off grid)	1.5 time of rated power, 10 S			
Generator input/Smart load /AC couple current (A)	13.9 / *80 / 13.9	22.2 / *80 / 22.2	27.8 / *80 / 27.8	41.6 / *80 / 41.6
Power Factor	0.8 leading to 0.8 lagging			
Output Frequency and Voltage	50/60Hz; L1/L2/L3/N(PE) 120/208Vac			
Grid Type	Three Phase			
DC injection current (mA)	<0.5%I <sub>n</sub>			
<b>Efficiency</b>				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
<b>Protection</b>				
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			
<b>Certifications and Standards</b>				
Grid Regulation	UL 1547-2018, UL 1547-2020, UL 1998, UL 1699B, CEC, PCS			
Safety EMC / Standard	UL 1741-2021, FCC			
<b>General Data</b>				
Operating Temperature Range (°C)	-40~60°C, >45°C derating			
Cooling	Smart cooling			
Communication with BMS	RS485; CAN			
Warranty	5 years			



## Technical Data

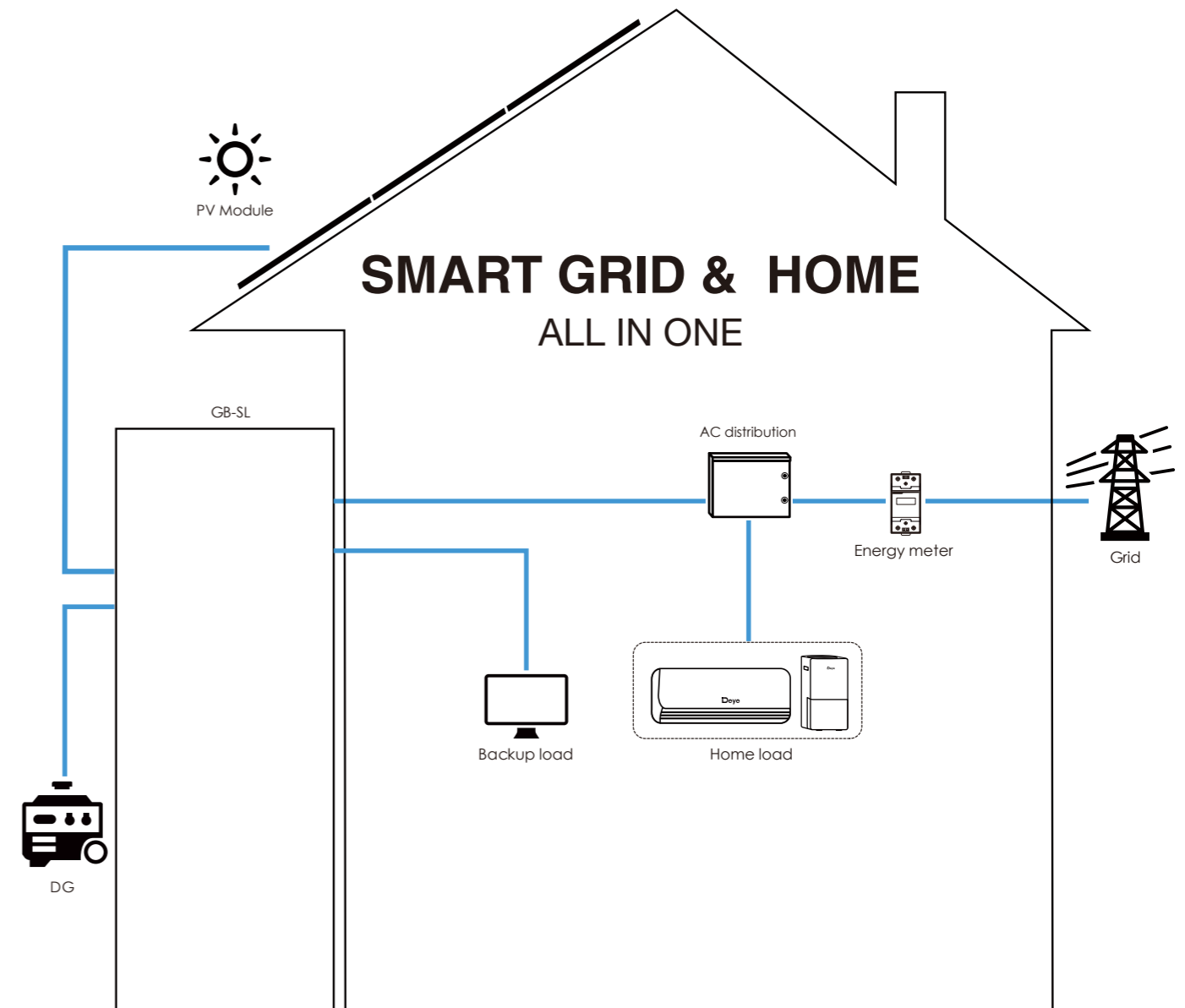
Model		GB-L		
<b>Battery System Data</b>				
Cell Chemistry	LiFePO4			
Module Energy (kWh)	4.09			
Module Nominal Voltage (V)	102.4			
Module Capacity (Ah)	40			
Battery Module Qty in series.(Optional)	2	3	4	
System Nominal Voltage (V)	204.8	307.2	409.6	
System Operating voltage (V)	179.2~460.8			
System Energy (kWh)	8.18	12.27	16.36	
System Usable Energy (kWh)	7.36	11.04	14.72	
Charge/Discharge Current (A)	Recommend	20		
	Max	40		
	peak (2minutes, 25 )	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 (Charge/Discharge)	25±2°C,0.5C/0.5C,70%EOL≥6000			
Warranty	10 years			
Certification	UL9540/UL1973 /UL9540A/UN38.3			
<b>Other Data</b>				
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*1090	540*385*1310	540*385*1530	
Weight Approximate (kg)	135	171	207	
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.

## Typical Application Diagram



# Summer GB-SCL-US



- ◆ **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

## Technical Data

Model	SUN-5K-SG01HP3 -US-AM2	SUN-8K-SG01HP3 -US-AM2	SUN-10K-SG01HP3 -US-AM2	SUN-15K-SG01HP3 -US-AM2
<b>Battery Input Data</b>				
Battery Type	Li-Ion			
Battery Voltage Range (V)	160~500			
Max. Charging Current (A)	50			
Max. Discharging Current (A)	50			
Number of battery input	1			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
<b>PV String Input Data</b>				
Max. DC Input Power (W)	6500	10400	13000	19500
Max. DC Input Voltage (V)	550			
Start-up Voltage (V)	180			
MPPT Range (V)	150-500			
Full Load DC Voltage Range (V)	163-500	227-500	250-500	317-500
Rated DC Input Voltage (V)	380			
PV Input Current (A)	20+20	26+20	26+26	
Max. PV I <sub>SC</sub> (A)	23+23	32+23	32+32	
Number of MPPT / Strings per MPPT	2/1+1	2/2+1	2/2+2	
<b>AC Output Data</b>				
Rated AC Output and UPS Power (W)	5000	8000	10000	15000
Max. AC Output Power (W)	5500	8800	11000	16500
AC Output Rated Current (A)	13.9	22.2	27.8	41.6
Max. AC Current (A)	20	33	37	45
Max. Continuous AC Passthrough (A)	80			
Peak Power (off grid)	1.5 time of rated power, 10 S			
Generator input/Smart load /AC couple current (A)	13.9 / *80 / 13.9	22.2 / *80 / 22.2	27.8 / *80 / 27.8	41.6 / *80 / 41.6
Power Factor	0.8 leading to 0.8 lagging			
Output Frequency and Voltage	50/60Hz; L1/L2/L3/N(PE) 120/208Vac			
Grid Type	Three Phase			
DC injection current (mA)	<0.5%I <sub>n</sub>			
<b>Efficiency</b>				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
<b>Protection</b>				
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			
<b>Certifications and Standards</b>				
Grid Regulation	UL 1547-2018, UL 1547-2020, UL 1998, UL 1699B, CEC, PCS			
Safety EMC / Standard	UL 1741-2021, FCC			
<b>General Data</b>				
Operating Temperature Range (°C)	-40~60°C, >45°C derating			
Cooling	Smart cooling			
Communication with BMS	RS485; CAN			
Warranty	5 years			



## Technical Data

Model	EVG
<b>Charger Module Data</b>	
Rate Power (kw)	20
Output Voltage Range (V)	50~750
Output Current Range (A)	0~50
Communication Port	CAN2.0
Charging standard	CCS1 Type
Standards/regulations	SAE J1772
Operating Temperature Range (°C)	40~60
Cooling	Smart cooling
Warranty	5 years
Certification	UL2202/UL2231

Model	GB-L	
<b>Battery System Data</b>		
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
System Nominal Voltage (V)	307.2	409.6
System Operating voltage (V)	268.8~460.8	
System Energy (kWh)	12.27	16.36
System Usable Energy (kWh)	11.04	14.72
Charge/Discharge Current (A)	Recommend	20
	Max	40
	peak (2minuters, 25 )	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 (Charge/Discharge)	25±2°C,0.5C/0.5C,70%EOL≥6000	
Warranty	10 years	
Certification	UL9540/UL1973 /UL9540A/UN38.3	
<b>Other Data</b>		
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
Weight Approximate (kg)	171	207
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.

## Typical Application Diagram

