

GB-L



- ◆ **Safety**

Built in explosion relief device to dredge gas, and built in fire protection device to cut off the fire source for 3 seconds

- ◆ **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

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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)		166.4~700				
System Energy (kWh)		8.18	12.27	16.36	20.45	24.56
System Usable Energy (kWh) ¹		7.36	11.04	14.72	18.40	22.10
Charge/Discharge ² Current (A)	Recommend	20				
	Nominal	40				
	Peak Discharge (2 mins,25°C)	50				
Working Temperature(°C)		Charge: 0~55/Discharge: -20~60				
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*650	540*385*870	540*385*1090	540*385*1310	540*385*1530
Weight(kg)		97	136	175	214	253
Installation Location		Floor Mount				
Recommend Depth of Discharge		90%				
Cycle Life		25±2°C,0.5C/0.5C,EOL70%≥6000				
Warranty ³		10 years				
Certification		CE/IEC62619 /VDE2510-50/ UL1973/UL9540A/UN38.3				

1 DC Usable Energy, test conditions: 90% DOD, 0.2C 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.



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System Components

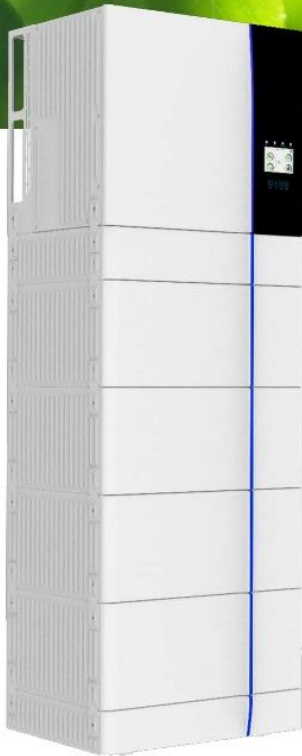
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Model	Description	
GB-LBS	High voltage battery cluster control box	
Operating Voltage Nominal Charge/Discharge Current Max Charge/Discharge Current Operating Temperature Range Ingress Protection Dimension (W/D/H) Weight Approximate	120 ~ 750Vdc 40A 50A -20~65°C IP65 540*385*110mm 12kg	
GB-LM4.0	4.09 kWh battery module	
Battery Type Nominal Voltage Rated Capacity Rated Energy Nominal Charge/Discharge Current Peak 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 0~55°C -20°C ~ 60°C 0°C ~ 35°C IP65 540*385*220mm 39kg	
GB-LBase	Battery module base	
Dimension (W/D/H) Weight Approximate	540*385*100mm 7kg	
ECOM Cable2.0	Standard 2-meter communication cable connected to the external device	
		
EPcable2.0	Standard 2-meter power cable connected to the positive pole of the external PCS	
1000V/6AWG Cable		
ENCable2.0	Standard 2-meter power cable connected to the negative pole of the external PCS	
1000V/6AWG Cable		



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GB-SL5K/6K/8K/10K/12K/15K/20K-EU



- ◆ **ALL IN ONE**

Integrated design, beautiful appearance and scene integration

- ◆ **Maximum output**

100% unbalanced output, each phase; Max. output up to 60% 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

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Technical Data

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Model	GB-S5K-EU	GB-S6K-EU	GB-S8K-EU	GB-S10K-EU	GB-S12K-EU	GB-S15K-EU	GB-S20K-EU
Battery Input Data							
Battery Type	LI-ION						
Battery Voltage Range (V)	160~700						
Max. Charging Current (A)	30		37				
Max. Discharging Current (A)	30		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)	6500	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	195-850	260-850	325-850	340-850	420-850	500-850
Rated DC Input Voltage (V)	600						
PV Input Current (A)	20+20				26+20		26+26
Max. PV I _{sc} (A)	30+30				39+30		39+39
No.of MPP Trackers	2						
No.of Strings per MPP Tracker	1+1				2+1		2+2
AC Output Data							
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000	15000	20000
Max. AC Output Power (W)	5500	6600	8800	11000	13200	16500	22000
AC Output Rated Current (A)	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4	22.8/21.8	30.4/29
Max.AC Output (Off-grid) Current(A)	8.4/8	10/9.6	13.4/12.8	16.7/16	20/19.2	25/24	33.4/31.9
Max. Three-phase Unbalanced Output Current(A)	13	13	18	22	25	30	35
Max. Continuous AC Pass through (A)	40				80		
Peak Power (off grid)	1.5 time of rated power, 10 S						
Generator input/Smart load/AC couple current (A)	7.6/40/7.6	9.1 / 40 / 9.1	12.2 / 40 / 12.2	15.2 / 40 / 15.2	18.2 / 80 / 18.2	22.8 / 80 / 22.8	30.4 / 80 / 30.4
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	97.6%						
Euro Efficiency	97%						
MPPT Efficiency	99.9%						
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, Arc Fault Circuit Interruption (AFCI optional)						
Output Over Voltage Protection	DC Type II/AC Type III						
Certifications and Standards	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98,						
Grid Regulation	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, >45°C derating						
Cooling	Free cooling		Smart cooling				
Communication with BMS	CAN						
Warranty	5 years						

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Technical Data

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Model		GB-LM4.0				
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)	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	24.54	
System Usable Energy (kWh) ¹	7.36	11.04	14.72	18.4	22.08	
Charge/ Discharge Current (A) ²	recommend	20				
	max	40				
	peak	50@2min				
Working Temperature(°C)	Charge: -20~55/Discharge:-20~60					
Communication Port	CAN2.0/RS485					
Thermal Management	Natural Cooling					
Recommend Depth of Discharge	90%					
Cycle Life	25±2°C, 0.5C/0.5C,70%EOL≥6000					
Warranty ³	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)	<55					
Storage Temperature (°C)	0~35					
Dimension (W/D/H,mm)	540*385*1100	540*385*1320	540*385*1540	540*385*1760	540*385*1980	
Weight Approximate (kg)	137	176	215	254	293	
Installation Location	Floor Mount					

1 DC Usable Energy, test conditions: 90% DOD, 0.2C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

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System Components

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Model	Description	
GB-S5K/6K/8K/10K/12K/15K/20K-EU Dimension (W/D/H) Weight Approximate	Hybrid inverter 540*385*450mm 39.8kg	
GB-LB Operating Voltage Nominal Charge/Discharge Current Max.Charge/Discharge Current Operating Temperature Range Ingress Protection Dimension (W/D/H) Weight Approximate	High voltage battery cluster control box 120 ~ 750Vdc 40A 50A -20~65°C IP65 540*385*110mm 12kg	
GB-LM4.0 Battery Type Nominal Voltage Rated Capacity Rated Energy Max. Charge/Discharge Current Peak Charge/Discharge Current Charge Temperature Discharge Temperature Storage Temperature Ingress Protection Dimension (W/D/H) Weight Approximate	4.09 kWh battery module LiFePO4(LFP) 102.4Vdc 40Ah 4.09kWh 40A 50A 0~55°C -20°C ~ 55°C 0°C ~ 35°C IP65 540*385*220mm 39kg	
GB-LBase Dimension (W/D/H) Weight Approximate	Battery module base 540*385*100mm 7kg	



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