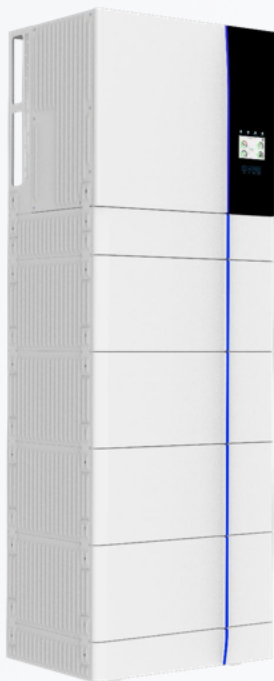


# Deye Residential ESS Solution

Deye GB-SL5K/6K/8K/10K/12K/15K/20K/25K-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. 10 pcs 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	GB-S5K-EU	GB-S6K-EU	GB-S8K-EU	GB-S10K-EU	GB-S12K-EU	GB-S15K-EU	GB-S20K-EU
<b>Battery Input Data</b>							
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						
<b>PV String Input Data</b>							
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 Isc (A)	30+30				39+30		39+39
No. of MPP Trackers	2						
No. of Strings per MPP Tracker	1+1					2+1	2+2
<b>AC Output Data</b>							
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%In						
<b>Efficiency</b>							
Max. Efficiency	97.6%						
Euro Efficiency	97%						
MPPT Efficiency	99.9%						
<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						
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						
<b>General Data</b>							
Operating Temperature Range (°C)	-40 ~ 60°C, >45°C derating						
Cooling	Free cooling			Smart cooling			
Communication with BMS	RS485; CAN						
Warranty	5 years						

# Technical Data



Deye GB-LM4.0

## Battery System Data

Cell Chemistry	LiFePO <sub>4</sub>				
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 ) <sup>1</sup>	7.36	11.04	14.72	18.4	22.08
Charge/Discharge Current ( A ) <sup>2</sup>	recommend				
	max				
	peak				
Working Temperature ( °C )	Charge : 0 ~ 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 <sup>3</sup>	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				

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




<sup>2</sup> The current is affected by temperature and SOC.

<sup>3</sup> The warranty is due whichever reached first of warranty period or life cycle power.

# System Components

Deye GB-SL5K/6K/8K/10K/12K/15K/20K/25K-EU

POWERS

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	