

Datasheet of SLA ESS Battery Module

No.	Mode	SLA-ESS-S1-5kWh	SLA-ESS-S1-10kWh	SLA-ESS-S1-15kWh	SLA-ESS-S1-20kWh	SLA-ESS-S1-30kWh
1	Component	Base+BMS+ 1*Module	Base+BMS+ 2*Module	Base+BMS+ 3*Module	2*(Base+BMS+ 2*Module)	2*(Base+BMS+ 3*Module)
2	Nominal Voltage	102.4V	204. 8V	307. 2V	204. 8V	307. 2V
3	Maximum protection voltage [V]	116.8V	233.6V	350.4V	233.6V	350.4V
4	Minimum protection voltage [V]	89.6V	179.2V	268.8V	179.2V	268.8V
5	Number of Battery Modules	1	2	3	4	6
6	Rated Capacity	50Ah	50Ah	50Ah	100Ah	100Ah
7	Total Energy ^①	5.1 kWh	10.2 kWh	15.3 kWh	20.4 kWh	30.6 kWh
8	Usable Energy	4.6 kWh	9.2 kWh	13.77 kWh	18.36 kWh	27.54 kWh
9	Depth of discharge	90%	90%	90%	90%	90%
10	Nominal Power	2.56 kW	5.12 kW	7.68 kW	10.24 kW	15.36 kW
11	Maximum Charge/Discharge Current	30A d.c.	30A d.c.	30A d.c.	50A d.c.	
12	Cycle Life	6000 Cycles (at 25°C, 0.5C/0.5C, 70% EOL)				
13	Performance Warranty	10 Years				
14	Operating temperature	0°C to 55°C / -20°C to 55°C				
		-20°C to 55°C (Build-in heating function) / -20°C to 55°C				

15	Storage Temperature	-20°C to 45°C (3 months)				
16		-20°C to 35°C (1 year)				
17	Humidity	0% - 95%				
18	Altitude	Below 2000m				
19	Ingress Protection	IP65				
20	Communication	RS485 / CAN2.0				
21	Status Indicator	LED Lights				
22	SOC Indicator	5 LED (20%, 40%, 60%, 80%,100%)				
23	Switch on/off	Button*1 + Breaker*1			Button*2 + Breaker*2	
24	Standard Certificate	CE, IEC 62619, IEC 62040, IEC 60529, IEC 61000, UN 38.3				
25	Country of manufacture	China				
26	Weight	69±3kg	124±6kg	179±8kg	248±12kg	358±12kg
27	Dimension(W*H*D)	800*840*160±20mm	800*840*160±20mm	800*840*160±20mm	800*840*160±20mm	800*840*160±20mm
28	Remark	1 Series			2 Series in Parallel	

① Capacity measurement under following conditions:

- i. Ambient temperature: 25 ~ 30°C (77 ~ 86°F)
- ii. Initial battery temperature from BMS: 25 ~ 30°C (77 ~ 86°F)
- iii. Current and voltage measurement at battery DC side

Product Warranty Details

1. Standard warranty for battery

The Standard Warranty for the Products is valid for a period of 120 months (10 years) from the date of installation, but no more than 125 months from the date of manufacture of the Product (whichever comes first).

2. Performance of battery

Smart Lifestyle Australia warrants and represents that the Product retains at least 60% of Nominal Energy through 6000 cycles or a minimum energy throughput as per the table below (whichever comes first) for 10 years after the date of the initial installation while the battery system is operated under a normal use according to the specifications outlined in the product manual. The term “Nominal Energy” herein means the initially rated capacity of the Products as printed on the label of the Products. The precondition of the valid 10-year Performance warranty shall be as follows:

- The ambient temperature during the operation of the Products shall not fall below -10°C (14°F) or exceed 50°C (122°F)
- The energy throughput is less than values in table below:

Product	Nominal Energy	Energy Throughput
SLA-ESS-S1-5kWh	5.12 kWh	12,288 kWh
SLA-ESS-S1-10kWh	10.24 kWh	24,576 kWh
SLA-ESS-S1-15kWh	15.356 kWh	36,864 kWh
SLA-ESS-S1-20kWh	20.48 kWh	49,152 kWh
SLA-ESS-S1-30kWh	30.72 kWh	73,728 kWh

- Capacity measurement under following conditions:
 - i. Ambient temperature: 25°C ~ 30°C (77°F ~ 86°F)
 - ii. Initial battery temperature from BMS: 25°C ~ 30°C (77°F ~ 86°F)
 - iii. Current and voltage measurement at battery DC side

Reference for measuring capacity:

1. Set the battery priority mode through the APP to make the battery charge reach 100% and record the battery discharge value of the day.
2. Set only battery discharge (PV does not participate) and discharge the battery to 10% (Avoid battery damage from a very low voltage). And record the day's discharge of the battery at this moment.
3. Subtract the discharge in Step 1 from the discharge value in Step 2. Divide the result by 90% to get the current battery capacity.

Note: Smart Lifestyle Australia provides the **Standard Warranty** or the **Performance Warranty** only (whichever comes first).