

SLA RESS - Battery Specification

Model	SLA-ESS-S1-5kWh	SLA-ESS-S1-10kWh	SLA-ESS-S1-15kWh	SLA-ESS-S1-20kWh	SLA-ESS-S1-30kWh
Component	Base+BMS+1 Module	Base+BMS+2 Modules	Base+BMS+3 Modules	2*(Base+BMS+2 Modules)	2*(Base+BMS+3 Modules)
Battery Type	Lithium-iron-phosphate (LiFePO4) - Lithium-ion Type (LFP)				
Nominal Voltage	102.4V	204. 8V	307. 2V	204. 8V	307. 2V
Maximum protection voltage (V)	116.8V	233.6V	350.4V	233.6V	350.4V
Minimum protection voltage (V)	89.6V	179.2V	268.8V	179.2V	268.8V
Number of battery modules	1	2	3	4	6
Rated Capacity	50Ah	50Ah	50Ah	100Ah	100Ah
Total Energy	5.1 kWh	10.2 kWh	15.3 kWh	20.4 kWh	30.6 kWh
Usable Energy	4.6 kWh	9.2 kWh	13.77 kWh	18.36 kWh	27.54 kWh
Depth of discharge	90%	90%	90%	90%	90%
Nominal Power	2.56 kW	5.12 kW	7.68 kW	10.24 kW	15.36 kW
Maximum Charge/Discharge Current	30A DC	30A DC	30A DC	50A DC	
Cycle Life	6000 Cycles (at 25°C, 0.5C, 90% DoD, 70% SoH)				
Performance Warranty	10 Years (70% SoH) - Expected Lifetime				
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				

Storage Temperature	-20°C to 45°C (3 months)				
	-20°C to 35°C (1 year)				
Humidity	0% - 95%				
Altitude	Below 2000m				
Ingress Protection	IP65				
Communication	RS485 / CAN2.0				
Status Indicator	LED Lights				
SoC Indicator	5 LED (20%, 40%, 60%, 80%,100%)				
Switch ON/OFF	Button*1 + Breaker*1			Button*2 + Breaker*2	
Standard Certificate	CE, IEC 62619, IEC 62040, IEC 60529, IEC 61000, UN 38.3				
Weight (excluding Inverter)	Module 50kg, BMS 10kg, Base 5kg				
	65kg	115kg	165kg	230kg	330kg
Dimension (mm), WxHxD (excluding Inverter)	Module 800 x 310 x 160, BMS 800 x 150 x 160, Base 800 x 65 x 160				
	800 x 525 x 160	800 x 835 x 160	800 x 1145 x 160	2 * (800 x 835 x 160)	2 * (800 x 1145 x 160)
Remark	1 Series			2 Series in Parallel	

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 70% 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	18,615 kWh
SLA-ESS-S1-10kWh	10.24 kWh	37,230 kWh
SLA-ESS-S1-15kWh	15.356 kWh	55,845 kWh
SLA-ESS-S1-20kWh	20.48 kWh	74,460 kWh
SLA-ESS-S1-30kWh	30.72 kWh	111,690 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).