

# Specification

<b>Model</b>	<b>ESS-SAH5B10-A-EU</b>		
<b>Battery Parameters</b>			
Battery type	LFP	Voltage Range	44.8V~57.6V
Configuration	2P16S	Rated Charging Current	100A
Rated Voltage	51.2V	Max. Charging Current	120A
Rated Capacity	200Ah	Rated Discharging Current	100A
Rated Energy	10.24kWh	Max. Discharging Current	120A
<b>PV Parameters</b>			
Max. PV Generation Power	9000 W	Max. Short Circuit Current	23/23 A
Max. DC Voltage	600 V	MPPT Voltage Range	60~550 V
Rated DC Operating Voltage	360 V	MPPT Number	2
Max. PV Input Current	16/16 A		
<b>On-Grid Parameters</b>			
On-Grid Rated Power	6000 VA	On-Grid Rated Current	26.1 A
On-Grid Rated Voltage	230V	Max. AC Current	27.3 A
On-Grid Rated Frequency	50/60Hz	Power Factor	0.8 lead~0.8 lag
Electrical Connection	L/N/PE	THD	<3%
<b>Off-Grid Parameters</b>			
Off-Grid Rated Power	6000 VA		
Off-Grid Rated Voltage	230 V		
Off-Grid Rated Frequency	50/60 Hz		
Electrical Connection	L/N/PE		
Max. Output Current	27.3 A		
THD	< 3%		
UPS Switching Time	0.01S		
<b>Operating Conditions</b>			
Ambient Temperature	Charge : 0~55°C ; Discharge : -20~55°C		
Humidity	5~95%, no condensing		
Altitude	≤2000m		
Mounting	Floor standing		
<b>General Parameters</b>			
Weight	141 kg		
Dimensions (W*D*H)	700*212*1320 mm		
Protection Rating	IP65		
Cooling	Natural cooling		
Cycle Life	≥6000 cycles (@25±2°C, 0.5C/0.5C, 90%DOD, 70%EOL)		
Certifications	CE-LVD, CE-EMC, CE-RED, UN38.3, MSDS, CEI 0-21		

\* All data reported by Uniview laboratory.



ALL IN ONE RESIDENTIAL ENERGY STORAGE SYSTEM

ESS-SAH5B10-A-EU



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**HOPETREK**

**A RELIABLE  
RESIDENTIAL ESS  
TO LIVE A MORE  
COMFORTABLE LIFESTYLE**

## As Long as 15-years Lifespan

6000+ cycles over 70%SOH  
3500+ cycles over 80%SOH



## On-Grid & Off-Grid Hybrid ESS System



Minimize the modifications of home circuitry

## Smart Control and Monitor



With APP, you can control and monitor ESS just by fingertips



### Good Components, Good Quality

Provide up to 10 years warranty  
Good components bring good quality



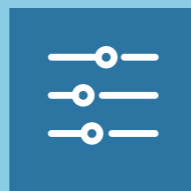
### UPS supported

On-grid and off-grid switch in 10ms



### 7% Increase in Usable Capacity

First 5 years usable capacity keep almost the same as original ones thanks to 7% extra capacity

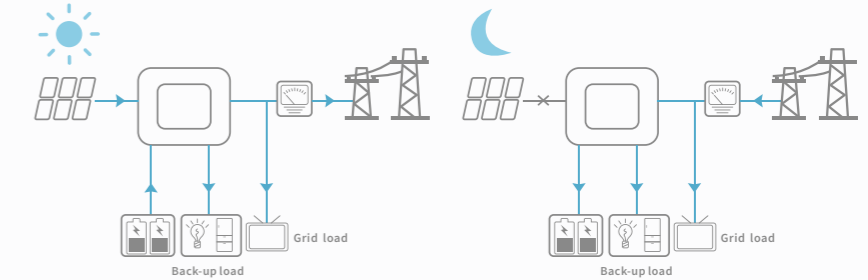


### Easy Installation

With just 3-step cable connection you can set up a residential ESS

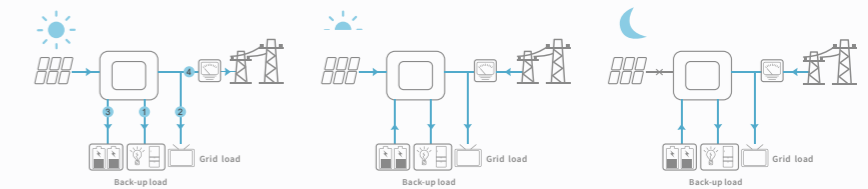
## Operation Mode

**Economic mode:**  
Suitable for places where peak electricity price is much higher than valley electricity price.



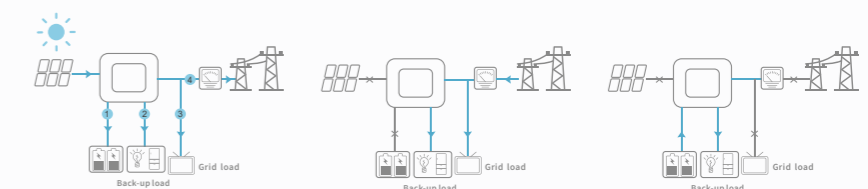
- At day time, system prioritizes the use of solar energy and battery to power load. Extra solar energy is given to grid.
- At night time, grid charges battery and give energy to load.

**Self consumption mode:** Suitable for areas with high electricity prices.



- At day time, solar energy is given priority to power load. If there is extra energy, solar energy charges the battery and is given to grid.
- If solar energy is not enough to power load, battery power load at the same time. Grid powers load if battery runs out.
- At night time, battery energy is given priority to power load. If battery cannot provide enough energy, grid power load.

**Back up mode:**  
If grid is not stable and you have important load to power when black-out, back up mode is suitable.



- At day time, solar energy is given priority to charge battery. If there is extra energy, solar energy powers load and is given to grid.
- If no solar energy is generated, grid power load.
- If black-out occurs, battery power back-up load.