Solar Generator & Energy Storage System

AKSGE Series

1.2kW+2kWh/0.5kW+1kWh



PRODUCT FEATURES

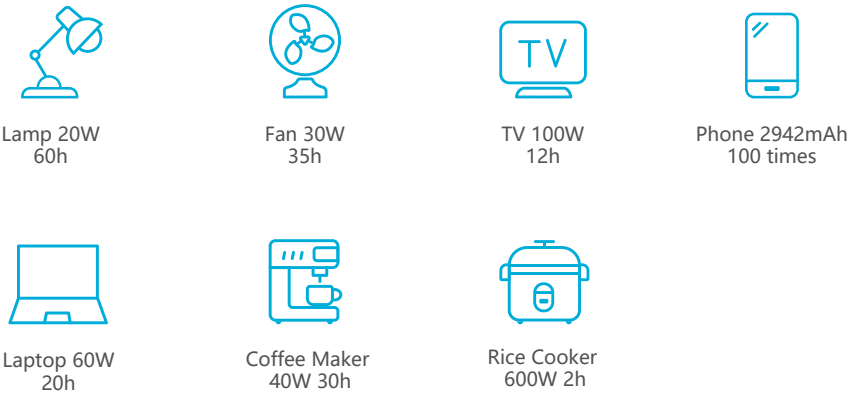
- Ultra-Long 8000+ Cycle Life & Active Balancing: Powered by high-capacity single-cell LiFePO4 batteries to minimize inconsistency risk, reduce overall weight, and maximize energy density. Built-in active cell balancing ensures consistent performance and extended battery lifespan.
- 3rd-Gen Semiconductor & High-Efficiency Circuit: Engineered with 3rd-generation semiconductors (SiC/GaN) and high-temperature solid capacitors, achieving higher conversion efficiency, lower thermal loss, and enhanced long-term reliability.
- Superior Load & Motor-Driving Capability: Delivers robust inductive load driving with constant power output up to 125% rated load. Features millisecond short-circuit protection (output cutoff within 15ms) with over-power protection and automatic recovery.
- Isolated PV Solar Charging & +20% Efficiency: Built with isolated PV charging topology to guarantee absolute safety against battery failure. Advanced MPPT/PV technology boosts solar conversion efficiency by over 20%.
- Industry-Leading Ultra-Low Standby Power: Consumes only 11W under no-load conditions (nearly 50% lower than the 20W industry benchmark) and <5mA in shutdown mode, allowing for reliable standby storage exceeding 1 year.

PRODUCT OVERVIEW



Common Power Supply Equipment Reference

*The following reference applies only to the 1.2kW/2kWh model. Refer to official specifications for details.



Lamp 20W
60h

Fan 30W
35h

TV 100W
12h

Phone 2942mAh
100 times

Laptop 60W
20h

Coffee Maker
40W 30h

Rice Cooker
600W 2h

Model	AKSGE 1.2kW+2kWh	AKSGE 0.5kW+1kWh
Rated Capacity	**1.2kW / 2kWh**	**0.5kW / 1kWh**
Inverter Output		
Rated AC Output Power	1200W	500W
Output Voltage	180~230VAC 50Hz	
Output Form	L+N+PE	
Output Voltage Waveform	Pure Sine Wave	
AC Input/ Charge		
Nominal Input Voltage	220/230V	
Protection of Low Voltage(LV)	150V	
LV Recovery Voltage	160V	
Protection of High Voltage(HV)	277V	
HV Recovery Voltage	267V	
Nominal Input Frequency	45 ~ 65Hz(Adaptive)	
AC Charging Power	1100W MAX.	500W MAX.
Peak Efficiency	91%Max.	
Solar Input		
PV Max.Input Power	800W Max.	350W Max.
Max.PV Allowed Input Voltage	72V	
Max.PV Input Voltage	63V	
MPPT Tracking Voltage Range	13- 60Vdc	
Max.PV Input Current	16A	
Solar Tracking Efficiency	98.7% Max.	
Lithium Iron Battery		
Capacity	2009.6Wh	1004.8Wh
Nominal Battery Voltage	6.4Vdc	3.2Vdc
Typical Capacity	314Ah	
Battery Voltage Range	5~7.3Vdc	2.5~3.65Vdc
Charging Current Range	1~157Adc	1~140Adc
Max.Discharge Power	2000W	1000W
DC Output		
DC Output Power	60W	30W
DC Outpur Socket	4PCs 5521 Ports 12V5A/2PCs Type- C(PD 30W) 2PCs Type- A(QC 3.0)	2PCs USB- A 5V3A,1PC Type- C 5V3A
Display Function		
LED Indicator	Indicators:4- 5PCs SOC,1PC work status	
Protection		
Protection	Protection of Overcharge/Overdischarge/overcurrent/shortcircuit/Overtemperature	
Ambient		
Noise(dB)	50dB	
Working Temperature	-10~50	
Humidity	5- 95%RH	
Sea Level(m)	300	
IP Level	IP21	
Dimension		
L*W*H(Products size)	260x295x309mm	260x185x309mm
L*W*H(Package size)	360x310x355mm	360x310x355mm
Weight(NW Kg)	19	12.5
Weight(GW Kg)	20	13.5

Product specifications are subject to change without notice.