5kW Home PV Energy Storage Hybrid System (stacked)

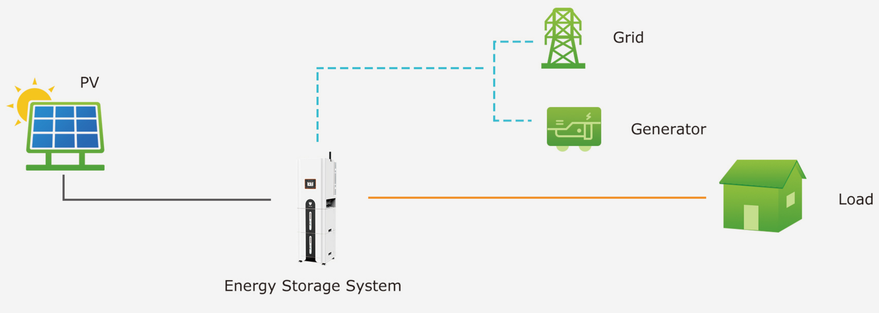
Battery capacity 10kWh, switch to off-grid mode without interruption, stable operation.

Home Appliance Style Modular Design Stacked Installation

Product Model

- KYS5kW-10kWh-S

- **Modular design**
  Modular design, stacked installation, simple appearance design, integration of modern home;
- **Safe and reliable**
  Smart air cooling, low temperature rise, long life time, multiple protection functions;
- **Smart switch**
  Off-grid operation, supporting emergency power supply, and seamless switching;
- **Smart and simple**
  Supporting GPRS / WIFI / RS485 / USB, LCD design, supporting remote monitoring;
- **Wide voltage input range**
  Ultra-wide PV voltage range 120V-500V, battery Ultra-widevoltage range 85V-450V;
- **High Power efficiency**
  Less output power reduction under high temperature, with efficiency improved, max PV input power up to 1.4 X rated power.



Model	KYS5kW-10kWh-S
Efficiency	
MPPT Efficiency(%)	99.90
Max. Efficiency(%)	>97.80
Battery Efficiency(%)	>98.10
Battery Pack	
Model	KY-51V105AH-S
Serial Number	2
Cell Type	Li-ion (LFP)
Battery Capacity(AH)	105
Storage Capacity(kWh)	10
Available Capacity(kWh)	9
Cycle Life	7000
PV Input Data	
Max. Input Power(W)	7500
Max. Input Voltage(V)	590
MPPT Operating Voltage Range(V)	80~500
Number of MPPT Trackers	2
Number of Strings per MPPT	1/1
Max. Input Current(A)	16/16
Max. Short Circuit Current(A)	20/20
Battery Port	
Operating Voltage Range(V)	85~450
Max. Charge/Discharge Current(A)	25/25
Communication With BMS	CAN
AC Output Data(On-grid)	
Nominal Output Power(W)	5000
Max. Apparent Power(VA)	5000
Nominal Output Voltage(V)	230,1φ(L/N/PE)
Nominal Output Frequency(Hz)	50/60
Max. Output Current(A)	21.7
Power Factor	~1 (0.8 lead~0.8 lag can be set)
Total Harmonic Distortion(%)	<3
AC Output Data(Back-up)	
Nominal Output Power (ONLY BAT) (W)	5000
Max. Apparent Power (VA)	5000
Nominal Output Voltage	230,1φ(L/N/PE)(N not connect to PE inside)
Nominal Output Frequency(Hz)	50/60
Max. Output Current(A)	21.7
General Data	
Operating Temperature Range (℃)	-20~+60(>45 derating)
Altitude(m)	<4000
Noise Emission (dB)	<40
Topology	Transformerless
Cooling Method	Natural
Ingress Protection Rating	IP54
Relative Humidity(%)	0~90, without condensation
Display	LCD
Communication	RS485 (WiFi/GPRS Optinal)
Communication With Meter	RS485
Dimension (W*H*D)	390*1295*380
Certification	
Safety Standards	IEC62109-1/-2
EMC Standards	EN IEC61000-6-1/-3
On-grid Standard	CEI 0-21,G98,G99,NRS097-2-1:2017,UNE 217001/UNE 217002/NTS631