

Residential BESS Solutions

Challenges

Rising energy prices are driving up residential electricity costs.



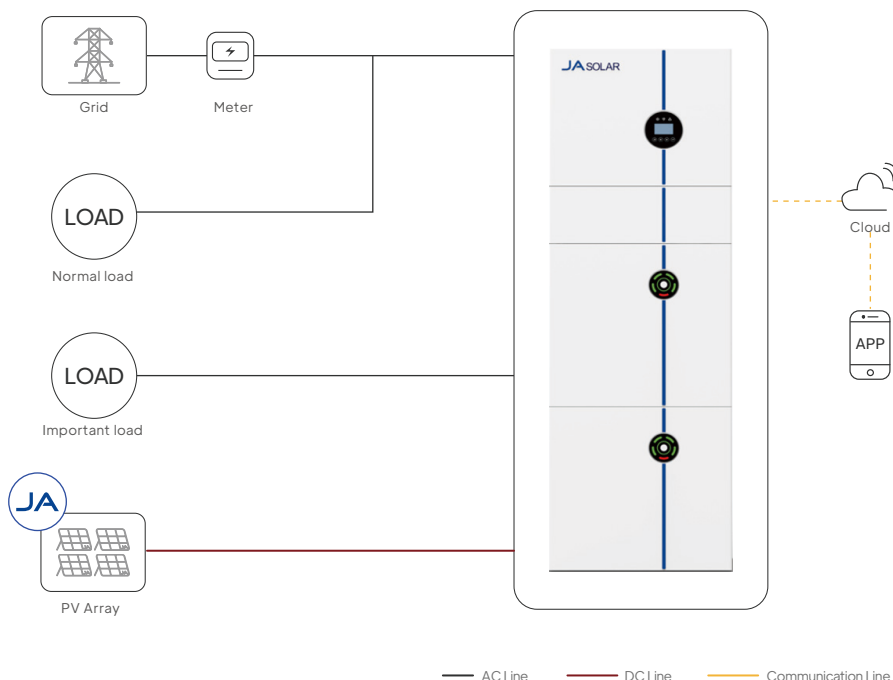
Power outages caused by grid failures or extreme weather disrupt residential power reliability.



The intermittency of residential PV generation results in curtailed output and underutilized energy.



Solutions



Functions



Dynamic charge-discharge optimization guided by electricity price signals to maximize economic returns.



On/off-grid adaptability design to guarantee continuous power for mission-critical residential demand.



App-based connectivity that provides full visibility and control of household energy from any location.

Benefits

Leveraging electricity price arbitrage and ancillary service participation to lower residential energy expenses.

Emergency backup functionality ensures households remain resilient against power outages.

Enhanced utilization of residential PV that lowers emissions and enables households to pursue a low-carbon lifestyle.

Advantages



Safety

Comprehensive safety mechanisms and rigorous quality assurance that ensure secure and stable system operation.



Cost Efficiency

AI-driven household consumption patterns learning that autonomously optimizes control strategies to maximize returns.



Reliability

IP65-rated waterproof and dustproof design with intelligent heating for superior environmental adaptability.

BATTERY MODEL	JAS-PACK
Battery Type	LFP (LiFePO ₄)
Nominal Energy	5.12kWh
Weight	54kg
Depth of Discharge (DOD)	90%
Protection level	IP65
Nominal Voltage	51.2V
Dimensions (W×H×D)	540 × 490 × 240mm
Max. charging/discharging power	2.825kW/4.096kW
Cycle Life	10,000 cycles
Certifications	Pack: IEC/EN 62619, UN38.3 Cell: IEC/EN 62619, UL1973
Max. Parallel quantity	8

INVERTER MODEL		JAS-INVERTER-1P-05K-EU	JAS-INVERTER-3P-10K-EU
Input Parameters (DC)	Max. PV Input Capacity	6.5kW	20kW
	MPPT Voltage Range	80~560V	140~1000V
	MPPT Trackers / Strings per Tracker	2/2	2/2
Grid-side Parameters	Nominal Voltage	230V	230/400V
	Operating Frequency	50/60Hz	50/60Hz
	Max. Continuous Input Current	22A	25A
	Max. Continuous Output Power	5kW	17.8kW
Battery Input	Voltage Range	40~60V	44~58V
	Nominal Voltage	48V	51.2V
	Max. Charging/Discharging Current	100A/100A	160A/200A
	Max. Charging/Discharging Power	4.6kW/5kW	8kW/10kW
Backup Load Parameters	Nominal Voltage	230V	230/400V
	Nominal Frequency	50/60Hz	50/60Hz
	Nominal Continuous Output Power	4.6kW	9.2kW
General Parameters	Operating Temperature Range	-25°C to + 60°C	
	Operating Altitude	≤2000m	
	Dimensions (W×H×D)	540 × 590 × 240mm	
	Weight	33kg	
	Operating Humidity	0~95%	
Certifications & Standards	Grid Standards	EN50549-1, VDE-AR-N4105, VDE 0124, CEI 0-21, G98, G99, VDE 0126, NC RfG, UNE217001, UNE217002, NTS V2.1 Type A	
	Certifications	IEC/EN 62109-1&2, IEC62040-1,IEC62619	
	EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN61000-3-2, EN61000-3-3, EN61000-3-11,EN61000-3-12	



JA SOLAR TECHNOLOGY CO., LTD.

✉ ess@jasolar.com

🌐 www.jasolar.com/energystorage