

Residential On/Off-Grid ESS

1. Safety first:

Product safety can never be compromised. That is why JESS residential product is designed with the safer choice of LFP battery technology. System is designed with redundancy at each level of system from rack to system.

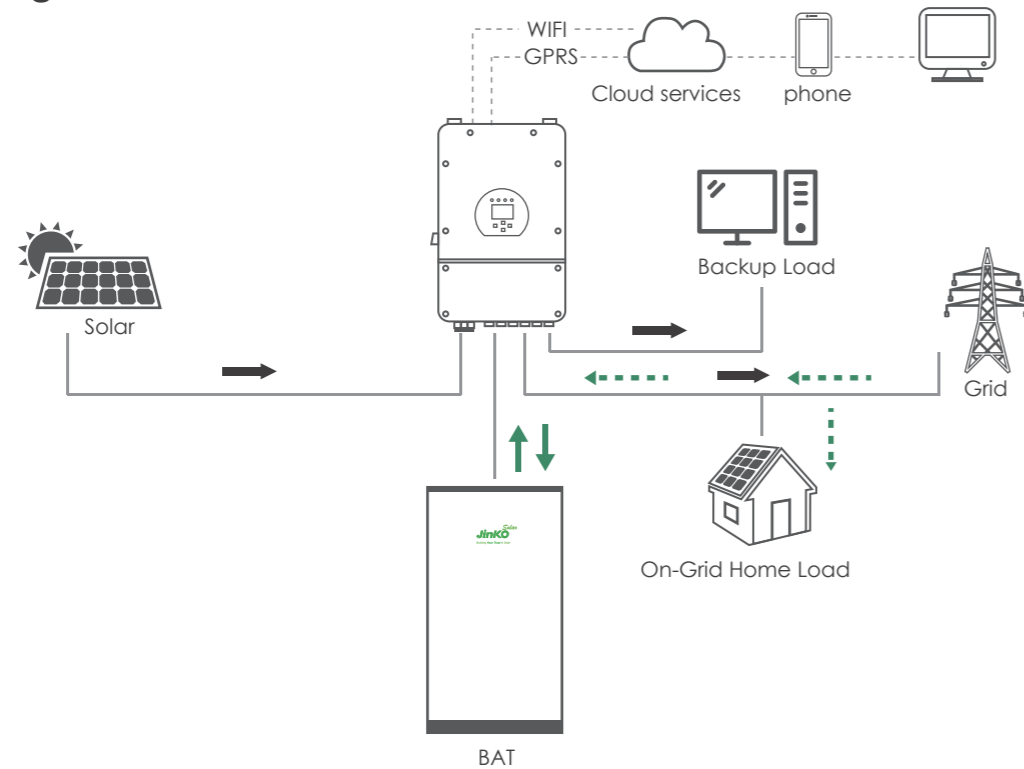
2. Maximum return, minimum cost:

High system efficiency ensures that minimum energy is lost in transition. Competitively sources components delivers maximum return with minimum cost.

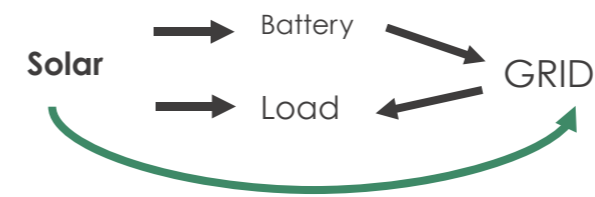
3. Easy home user platform:

We understand our home users want instant control and monitoring of their home systems. Hence, our APP delivers this capability regardless of whether your system is on Android or IOS.

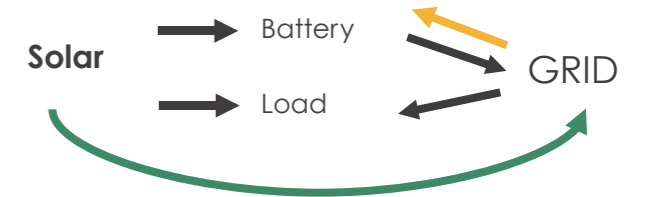
Circuit Diagram






Mode 1





Mode 2



Key Features

-  24 - hour clean energy supplying
-  Flexible design, easy to scale up
-  Real-time monitoring at anywhere via APP

-  Fast, easy installation
-  Automatically on/off-grid switch





Pack Configuration



Type	Low Voltage	High Voltage
Battery type	LFP	LFP
Cell capacity	50Ah	25Ah
Rated capacity	2.4kWh	2.56kWh
Rated voltage	48V	102.4V
Max. ~Min.voltage	42~52V	86.4~112V
Rated charge/discharge C rate	0.4C	0.5C/0.8C
W*D*H Dimensions	482 x 91 x 433mm	440× 86× 520mm
Weight	24kg ± 1kg	27kg ± 1kg

Low Voltage

System Specifications



INVERTER



Battery

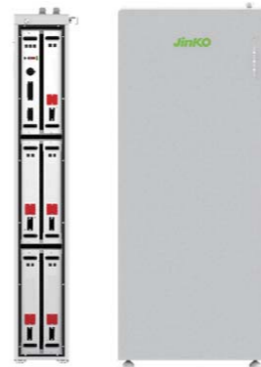
Item	3.6kW-7.2kWh	5kW-9.6kWh	8kW-19.2kWh
Max. PV Input power	4.68kW	6.5kW	10.4kW
MPPT range	125-425V, Max. 500V		
AC rated power	3.6kW	5kW	8kW
Output voltage	230Vac (Single phase), 50/60 Hz		
Battery capacity	7.2kWh	9.6kWh	19.2kWh
Battery voltage	48V, (Inverter:40-60V; BMS:42-51.5V)		
IP level	IP65 (inverter), IP55(Battery)		
Cycle life	≥6000 cycles, 80%DOD, @25°C, 0.5C, 70%EoL		
Operating mode	On grid/off grid, switch time <20ms		
Dimension (W*H*D, mm)	680*233*420mm (Inverter); 570*1150*285mm (Battery)		
Weight	24kg(5kW inverter) 32kg(8kW inverter), 133kg (9.6kWh/Battery cabinet)		
Monitoring	APP/Web		
BMS Communication	RS485 /CAN		
Certification	inverter: VDE0126, IEC62109 1/2, IEC61683 Battery module: IEC62619, UN38.3		



High Voltage



10kW INVERTER



12.5kWh Battery cabinet

- allows up to 10% overloading to maximize power output and features.
- Uninterruptible Power Supply function (UPS) to inductive loads such as air conditioners or refrigerators with an automatic switchover time of less than 10 milliseconds.

System Specifications

Item	10kW/12.5kWh	10kW/25kWh
Max. PV Input power	13kW	
MPPT range	200-850V,Max. 1000V	
AC rated power	10kW	
Output voltage	400Vac(3 phase),50/60 Hz,	
Battery capacity	12.5kWh	25kWh
Battery voltage	512V,(Inverter:180-600V;BMS:448V~584V)	
IP level	IP65(inverter),IP55(Battery)	
Cycle life	≥6000 cycles,80%DOD,@25°C , 0.5C , 70%EoL	
Operating mode	On grid/off grid, switch time <20ms	
Dimension (W*H*D, mm)	415*516*180mm(Inverter); 660*1650*260mm(Single Battery Cabinet)	
Weight	24kg(inverter),197±2kg(Single Battery Cabinet)	
Monitoring	APP/Web	
BMS Communication protocol	CAN2.0	
Certification	Inverter: VDE-AR-N 4105, VDE 0126-1-1, EN 50549-1, G98, G99, G100, CEI 0-21 Battery module:IEC62619,UN38.3	



For single phase version Parameters

Self consumption
Off-grid & AC Bypass



Item description	3kW-7.2kWh	5kW-9.6kWh
Max. PV Input power	4kW	4kW
MPPT range	30-115V,Max. 145V	
AC rated power	4kW	5kW
Output voltage	Single phase 230Vac 50/60 Hz,	
Battery capacity	7.2kWh	9.6kWh
Max. capacity	4 cabinet in parallel, Max. 38.4kWh	
Battery voltage	48V,(Inverter:40-60V;BMS:42-51.5V)	
IP level	IP20(inverter),IP55(Battery)	
Cycle life	≥6000 cycles,80%DOD,@25°C, 0.5C,70%EoL	
Operating mode	Off grid	
Dimension (W*H*D, mm)	295*468*120mm(Inverter);570*1150*285mm(Battery cabinet) 140*303*525mm(Inverter)	
Weight	12.5&13.5kg(inverter),133Kg(Battery cabinet)	
Monitoring	PC	
BMS Communication	RS485 /USB	