

# 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.

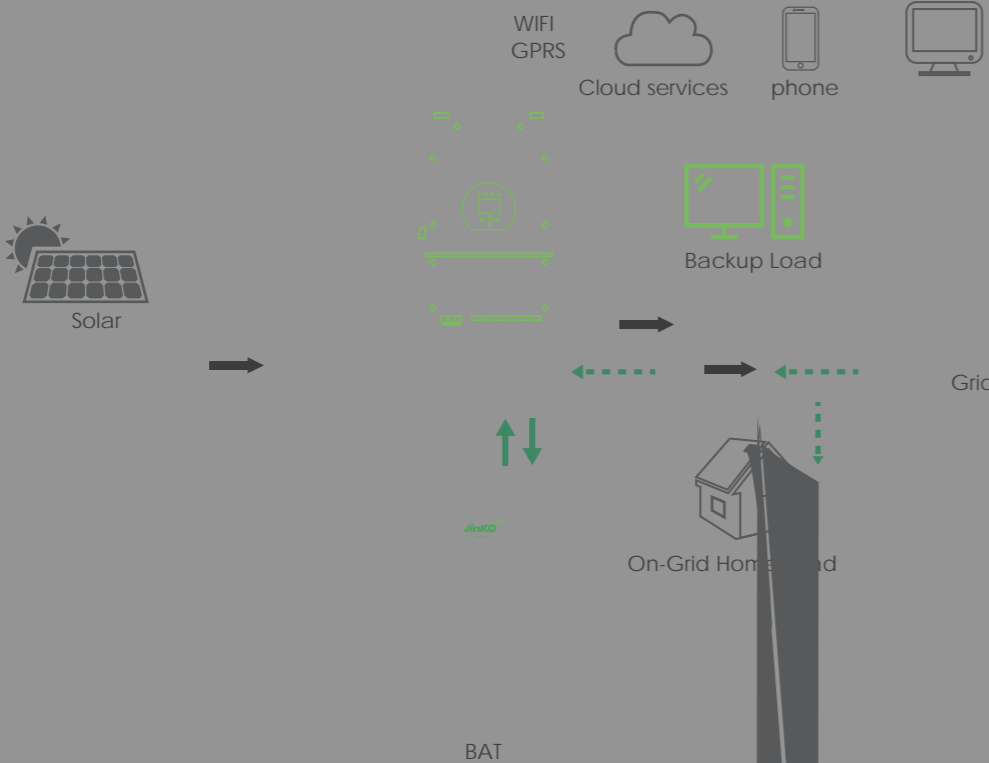
### 2. Maximum return, minimum cost:

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

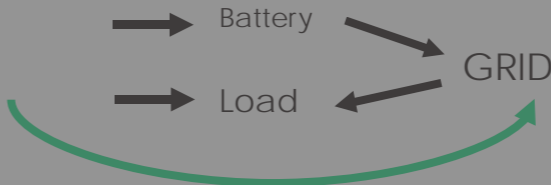
### 3. Easy home user platform:

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.

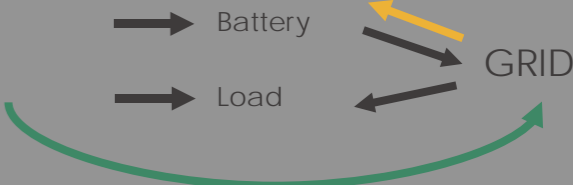
## Circuit Diagram



## Mode 1

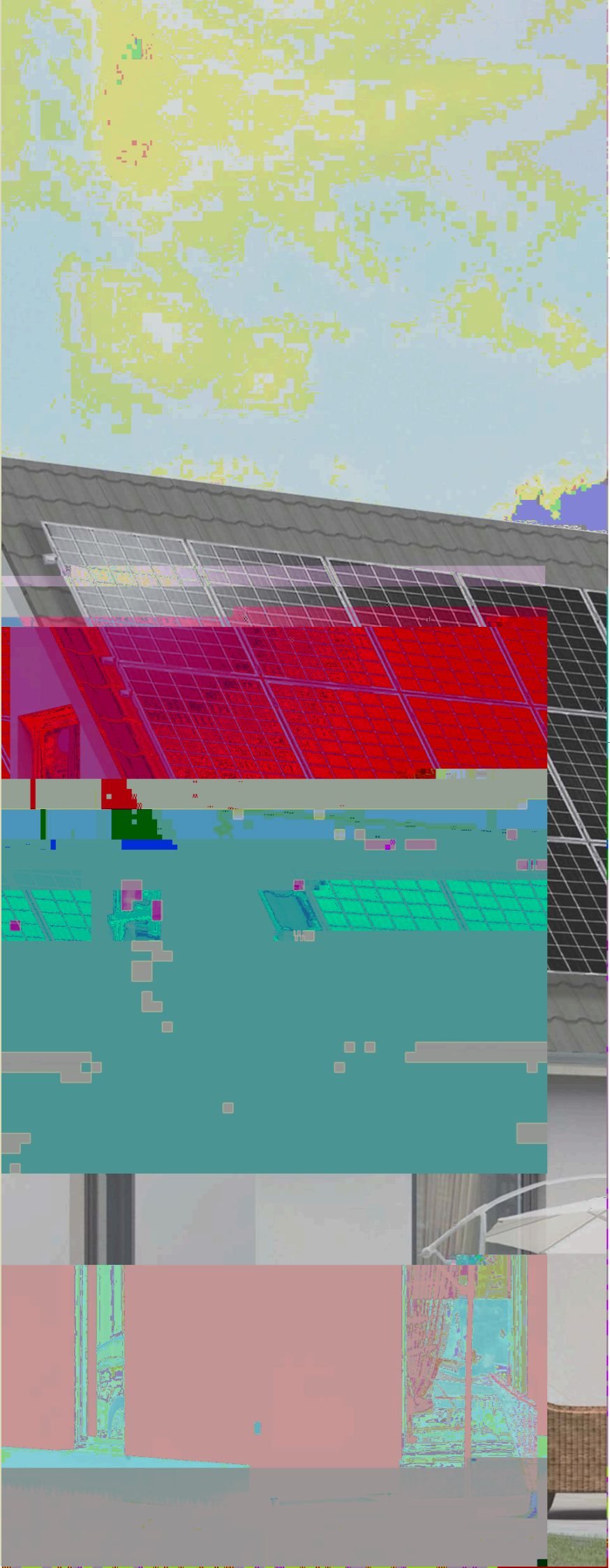


## Mode 2

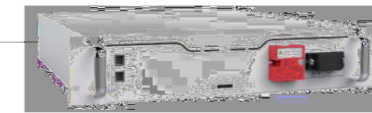


## Key Features

- 24 - hour clean energy supplying
- Fast, easy installation
- Flexible design, easy to scale up
- Automatically on/off-grid switch
- Real-time monitoring at anywhere via APP



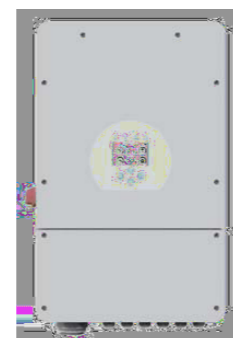
## Pack Configuration



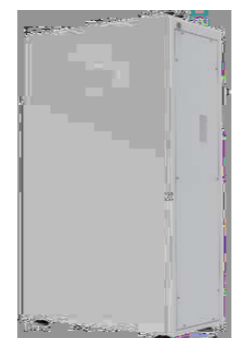
Battery type	LFP	LFP
Cell capacity	50Ah	25Ah
Rated capacity	2.4kWh	2.56kWh
Rated voltage	48V	102.4V
Max. ~Min.voltage	42~52V	86.4~112V
Rated charge/discharge C rate	0.4C	0.5C/0.8C
W*D*H Dimensions	482 x 91 x 433mm	440 ~ 86 ~ 520mm
Weight	24kg ± 1kg	27kg ± 1kg

## Low Voltage

### System Specifications



INVERTER



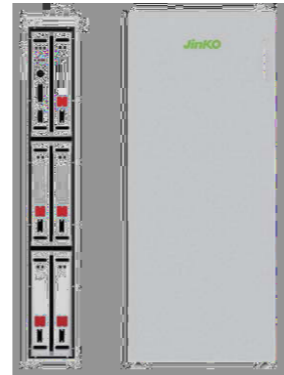
Battery

		Q =	Q = N
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 k 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.





**For single phase version Parameters**

Self consumption  
Off-grid & AC Bypass



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 - 00.5C070%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	