

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.

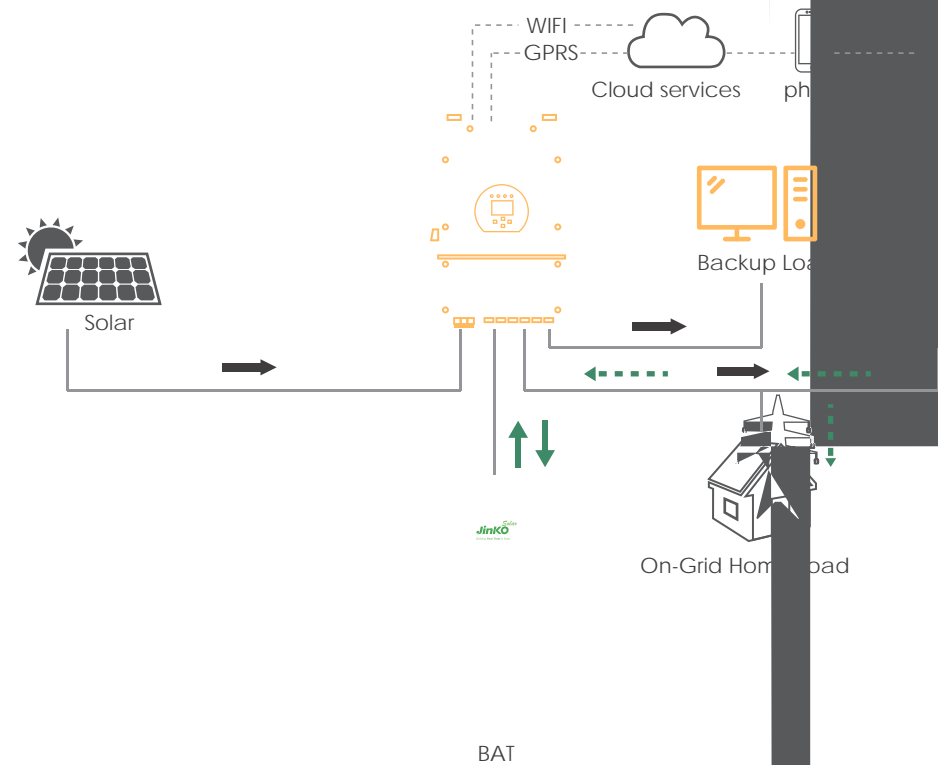
2. Maximum return, minimum cost:

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



5-10 years



20°C



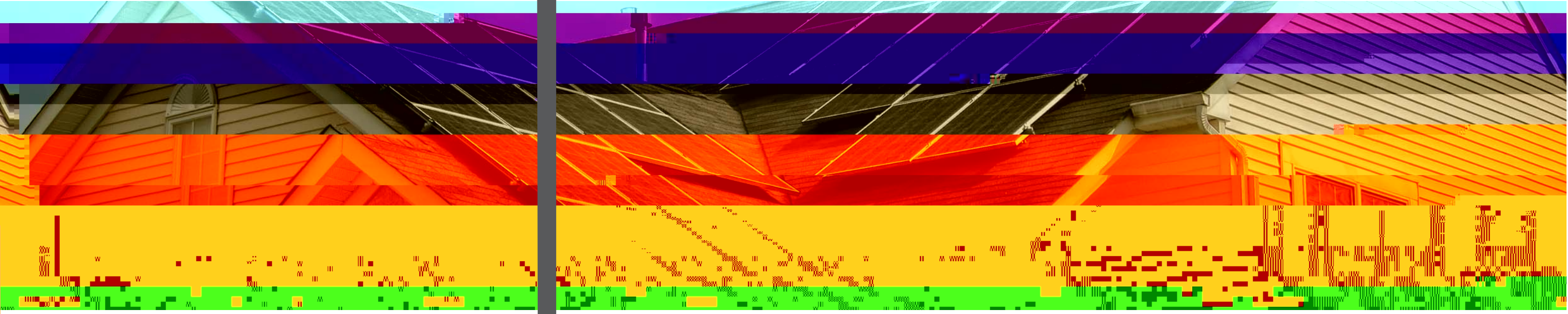
Flexible design, easy to scale up

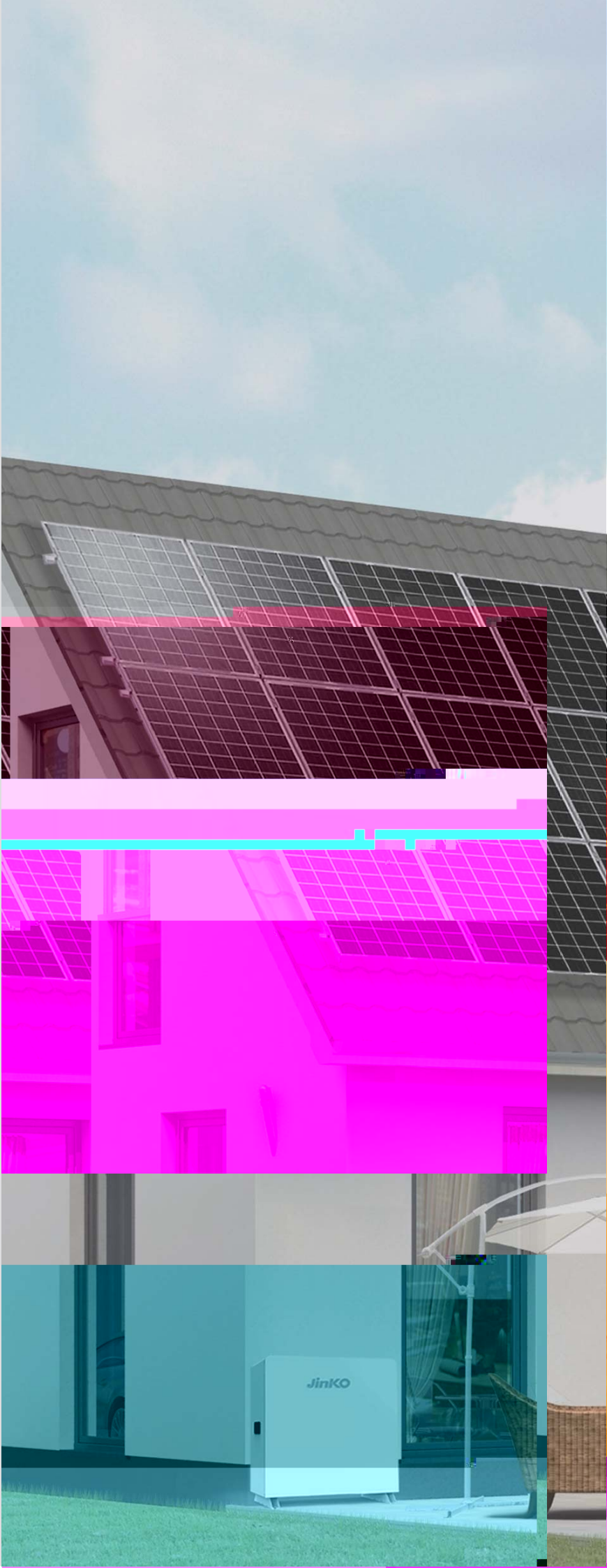


Automatically on/off-grid switch



Real-time monitoring at anywhere via APP





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 433 mm | 440 ~ 86 ~ 520mm |
| Weight | 24kg ± 1kg | 27kg ± 1kg |

Low Voltage

System Specifications



INVERTER



Battery

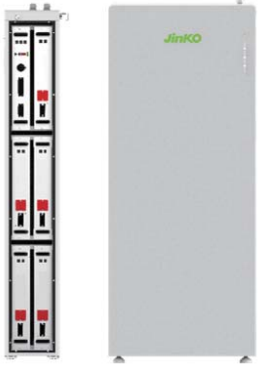
| Item | 3.6kW-7.2kWh | 5kW-9.6kWh | Q = | Q = N |
|-----------------------|---|------------|---------|-------|
| Max. PV Input power | 4.68kW | 6.5kW | 10.4kW | |
| MPPT range | 125-425V, Max. 500V | | | |
| AC rated power | 3.6kW | 5kW | 8kW | |
| Output voltage | 230Vac (Single phase), 50/60 Hz | | | |
| 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.

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 k 0.5C k 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 r2kg(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 - 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 | |