

# LESSO

Residential Smart Energy Solutions



**Intelligent Storage for Smart Living**

for Asia, Africa and Latin America

Ver. 2026.01

# INTELLIGENT STORAGE FOR SMART LIVING



## SAFETY

The battery system complies with multiple key international standards – UN38.3, MSDS, etc.



## EFFICIENCY

MPPT efficiency **>99%**, PV efficiency **>96%**, system efficiency up to **95%**.



## DURABILITY

Module warranty **30** years, system design life **>15** years.



## RELIABILITY

Grid/solar/battery switching time **<10** ms for an uninterrupted experience.



## FLEXIBLE

Requires only **4.5** m<sup>2</sup>/kW for module installation, fitting different installation scenarios easily.



## 1.5kW Off-grid Solar Energy Solution



Powers home essentials: lighting, charging, fans, small appliances.

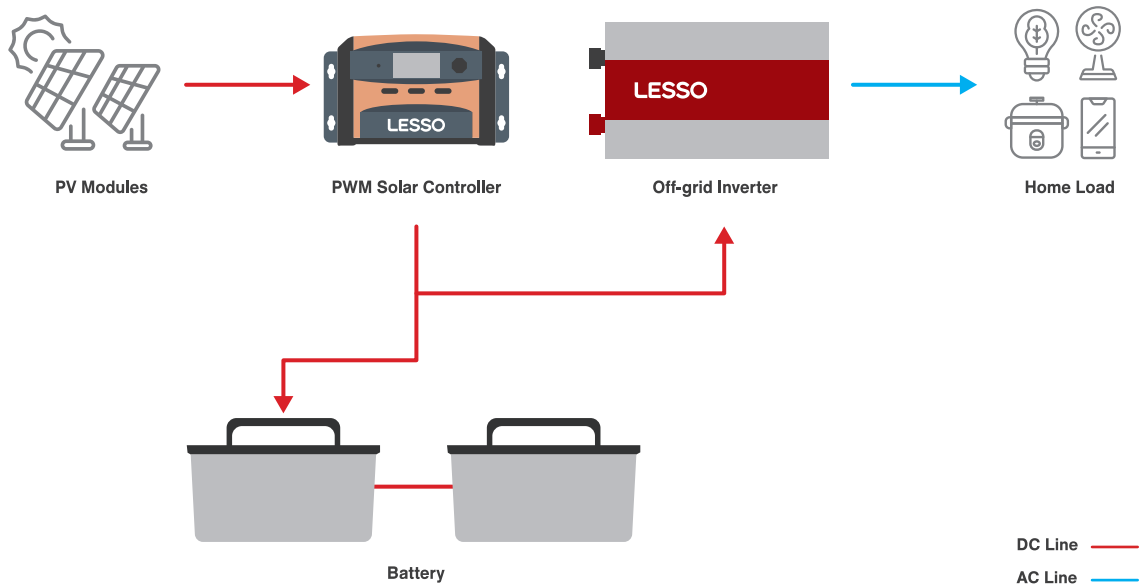


Output: 4kWh/day, supports basic loads for 8-12 hours.



Simple & quick setup, ready to use fast.

### Schematic Diagram



### System Configuration

	1.5kW+2.4kWh
AC Output Type	Single phase 230Vac L-N
PV Capacity	450Wp x 2pcs
Daily Average Energy Production (5h)	4kWh
PV Installation Footprint	> 4m <sup>2</sup>
Energy Storage Capacity	12V / 100Ah ×2
PWM / Inverter	PWM: 40A Inverter: 1.5kW
BOS (optional)	PV cable, Battery cable, AC cable, Circuit breakers

\* The daily average available energy production is calculated based on 90% of the total power of PV modules.

\* Remark: Specifications are subject to change without notice.

## 4kW Off-grid Solar Energy Solution



All-day electricity  
for medium  
households.

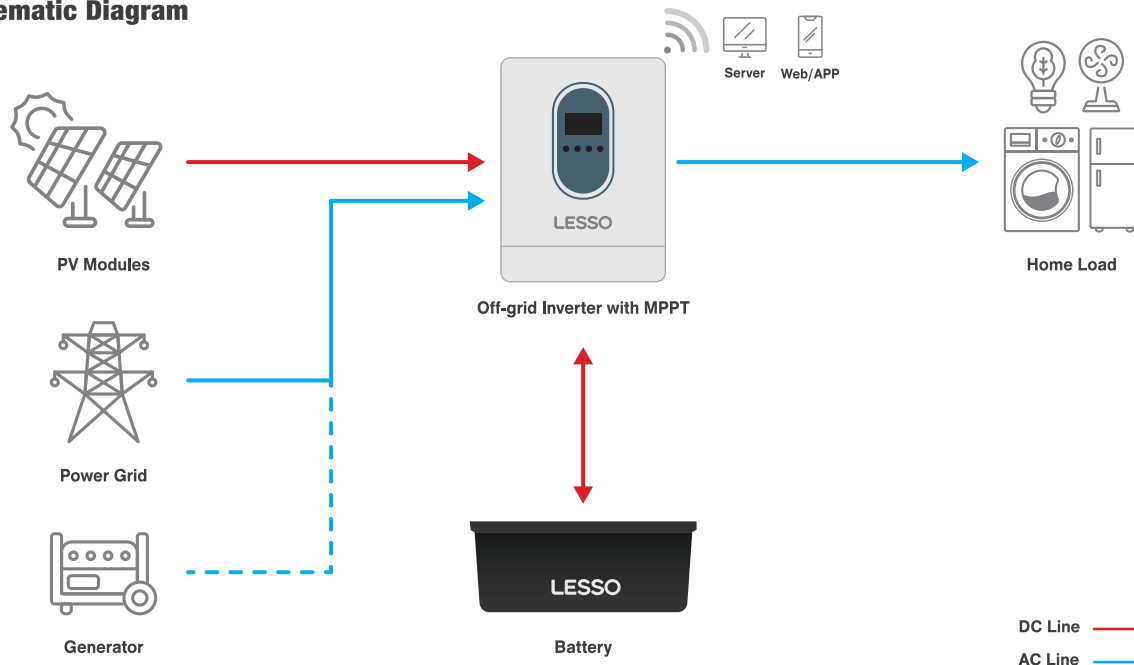


Output: 17kWh/day,  
24-hour uninterrupted power  
for home appliances.



No blackout,  
smart auto-switch  
between solar/grid/battery.

### Schematic Diagram



### System Configuration

	4kW+3.8kWh
AC Output Type	Single phase 220/230/240Vac L-N
PV Capacity	635Wp x 6pcs
Daily Average Energy Production (5h)	17kWh
PV Installation Footprint	> 18m <sup>2</sup>
Energy Storage Capacity	25.6V / 150Ah / 3.8kWh
Inverter	4kW
BOS (optional)	PV cable, Battery cable, AC cable, Distribution box

\* The battery distribution box can be expanded to accommodate one additional set of batteries of the same capacity.

\* The daily average available energy production is calculated based on 90% of the total power of PV modules.

\* Remark: Specifications are subject to change without notice.

## 6.2kW Off-grid Solar Energy Solution



For high-power needs:  
air conditioners,  
water pumps.

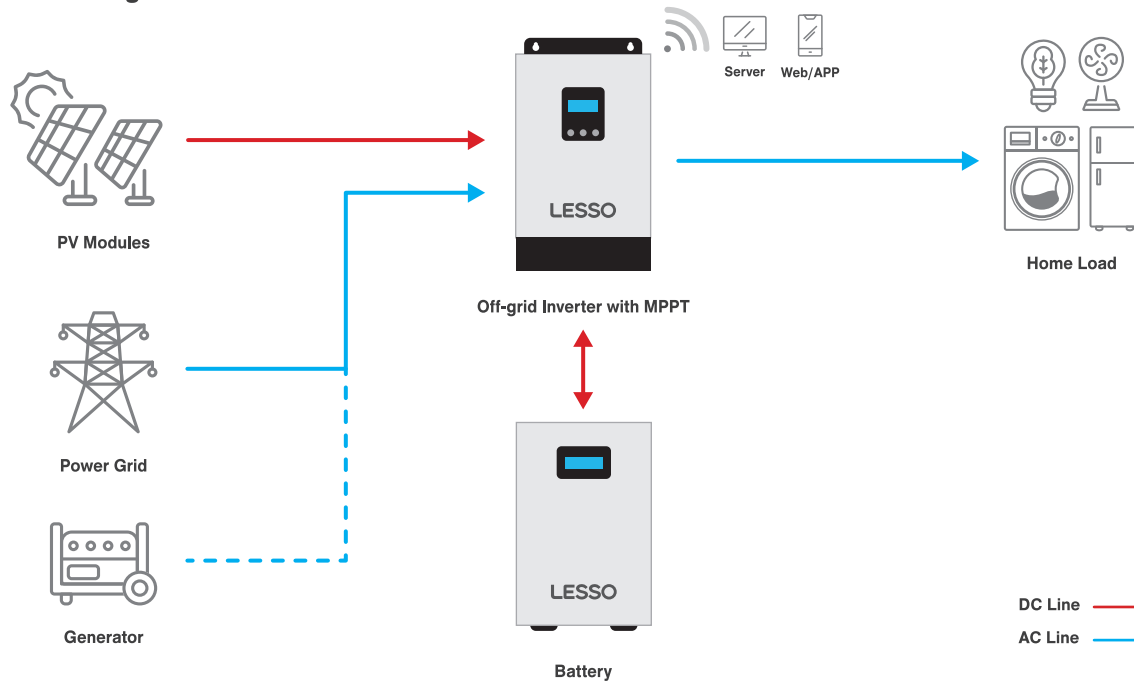


Output: 22kWh/day,  
6-10 hours for  
key equipment.



Strong output & modular  
battery for easy capacity  
expansion.

### Schematic Diagram



### System Configuration

	6.2kW+11.7kWh
AC Output Type	Single phase 220/230/240Vac L-N
PV Capacity	635Wp x 8pcs
Daily Average Energy Production (5h)	22kWh
PV Installation Footprint	> 24m <sup>2</sup>
Energy Storage Capacity	51.2V / 230Ah / 11.7kWh
Inverter	6.2kW
BOS (optional)	PV cable, Battery cable, AC cable, Distribution box

\* The battery distribution box can be expanded to accommodate one additional set of batteries of the same capacity.

\* The daily average available energy production is calculated based on 90% of the total power of PV modules.

\* Remark: Specifications are subject to change without notice.

## 6.2kW Hybrid Solar Energy Solution



For all-day power use:  
AC, heating,  
EV charging.

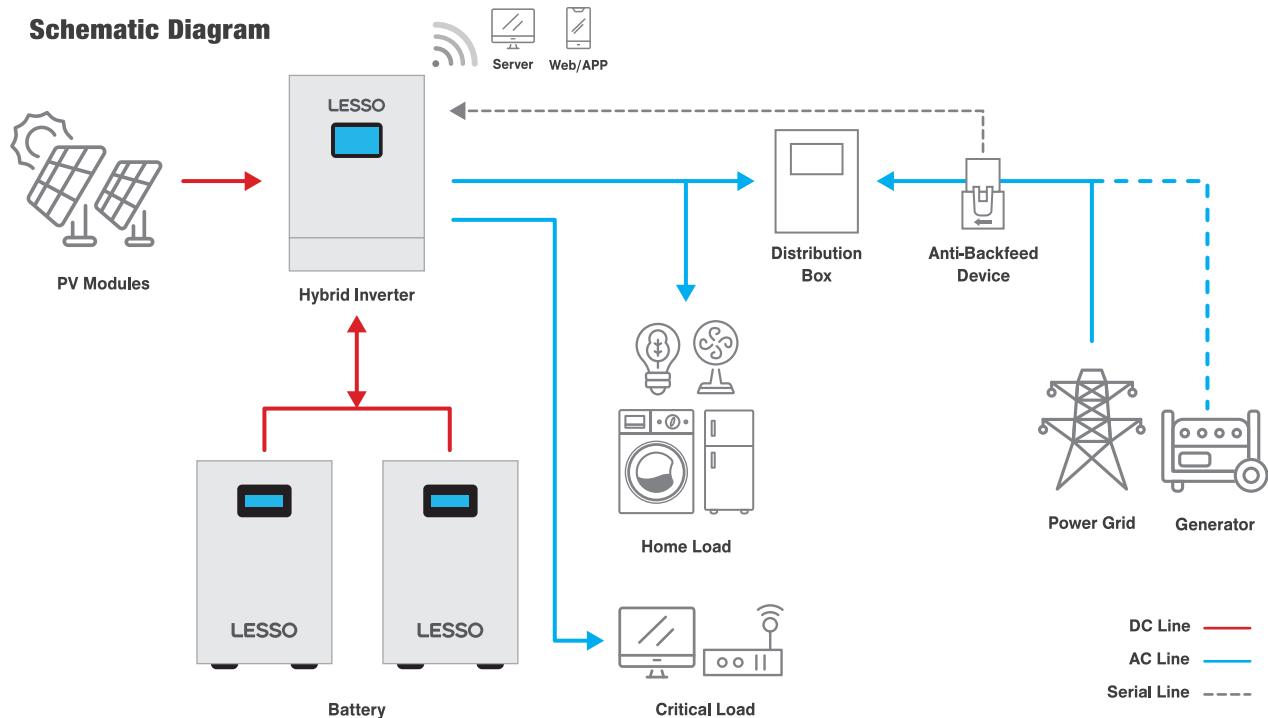


Output: 40kWh/day,  
supports whole-house  
backup.



Grid-tied efficiency &  
modular battery for smart  
energy management.

### Schematic Diagram



### System Configuration

	6.2kW+23.5kWh
AC Output Type	Single phase 220/230Vac L-N
PV Capacity	635Wp x 14pcs
Daily Average Energy Production (5h)	40kWh
PV Installation Footprint	> 52m <sup>2</sup>
Energy Storage Capacity	51.2V / 230Ah / 11.7kWh x2
Inverter	6.2kW
BOS (optional)	PV cable, Battery cable, AC cable, Distribution box

\* The daily average available energy production is calculated based on 90% of the total power of PV modules.

\* Remark: Specifications are subject to change without notice.

## 12.4kW Off-grid Solar Energy Solution



For Ideal for large, high-consumption households.

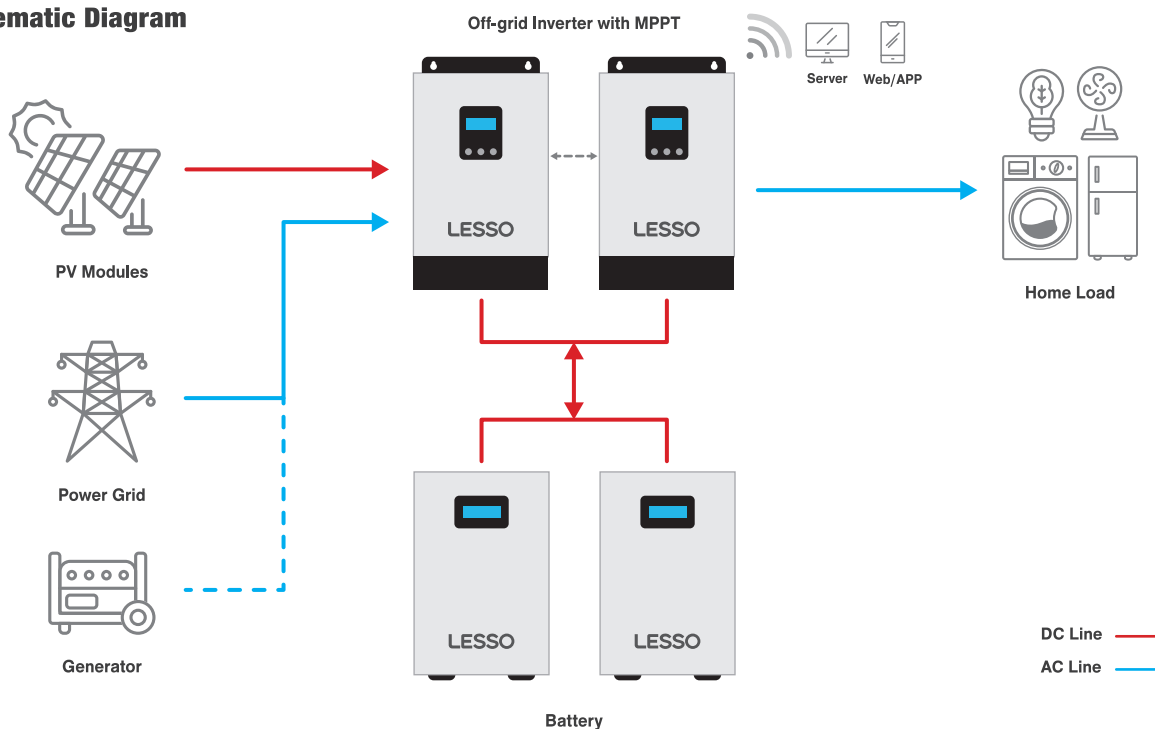


Output: 45kWh/day, Power all appliances simultaneously.



Achieve year-round reliable energy independence.

### Schematic Diagram



### System Configuration

	12.4kW+23.5kWh
AC Output Type	Single phase 220/230/240Vac L-N
PV Capacity	635Wp x 16pcs
Daily Average Energy Production (5h)	45kWh
PV Installation Footprint	> 48m <sup>2</sup>
Energy Storage Capacity	51.2V / 230Ah / 11.7kWh x2
Inverter	6.2kW x2
BOS (optional)	PV cable, Battery cable, AC cable, Distribution box

\* The daily average available energy production is calculated based on 90% of the total power of PV modules.

\* Remark: Specifications are subject to change without notice.

## 18.6kW Off-grid Solar Energy Solution



Ideal for large homes/villas with three-phase supply.

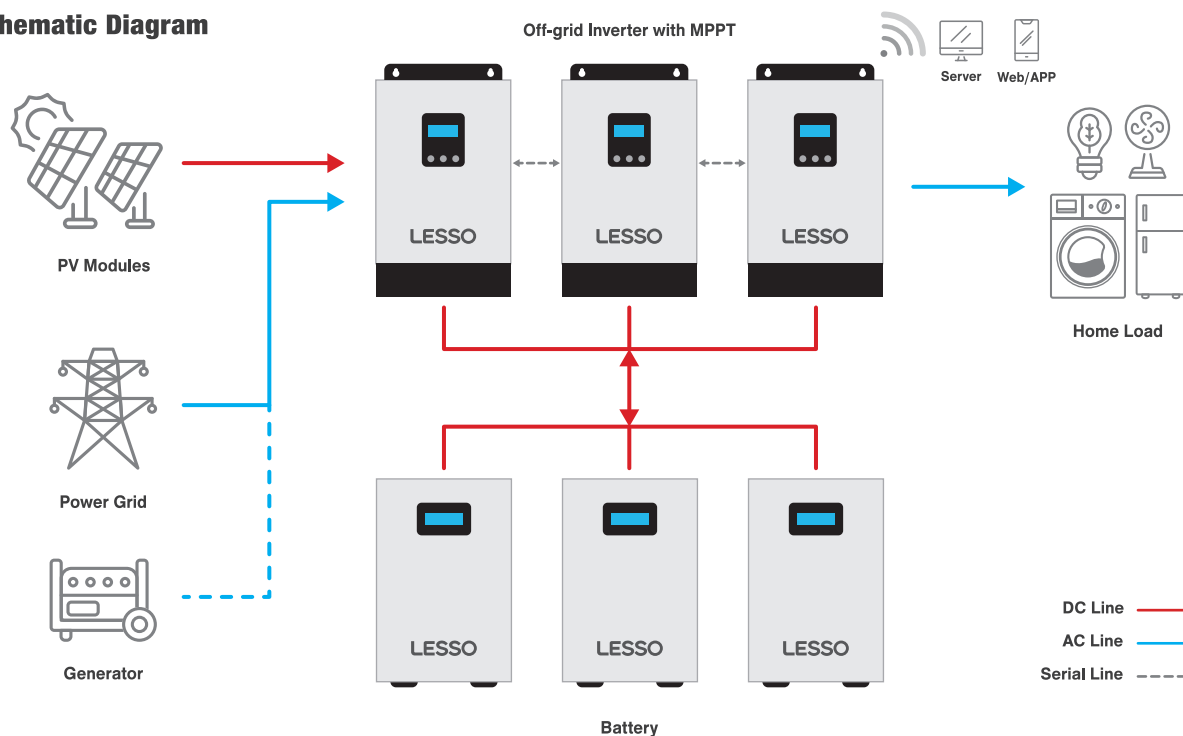


Output: 68kWh/day, runs high-power appliances (e.g., electric stoves) for long periods.



Supports unbalanced 3-phase loads, better compatibility.

### Schematic Diagram



### System Configuration

	18.6kW+35.3kWh
AC Output Type	Three phase 380/400Vac L1-L2-L3-N
PV Capacity	635Wp x 24pcs
Daily Average Energy Production (5h)	68kWh
PV Installation Footprint	> 72m <sup>2</sup>
Energy Storage Capacity	51.2V / 230Ah / 11.7kWh x3
Inverter	6.2kW x3
BOS (optional)	PV cable, Battery cable, AC cable, Distribution box

\* The daily average available energy production is calculated based on 90% of the total power of PV modules.

\* Remark: Specifications are subject to change without notice.

## Product Specifications

### 450C(HBD)54(182)

#### 182 N-TOPCon dual-glass bifacial PV module

**Solar cell type:** 182mm N-TOPCon Mono Cell (Half cell)

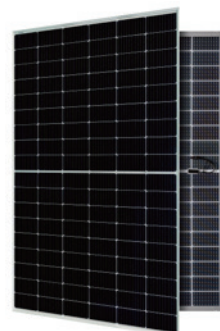
**Solar cell arrangement:** 108pcs(6x18)

**Max power:** 450W

**Max efficiency:** 23.04%

**Dimension:** 1722x1134x30mm

**Weight:** 23.1kg



### 635C(HBD)66(210R)

#### 210R N-TOPCon dual-glass bifacial PV module

**Solar cell type:** 210R N-TOPCon Mono Cell (Half cell)

**Solar cell arrangement:** 132pcs(6x22)

**Max power:** 635W

**Max efficiency:** 23.51%

**Dimension:** 2382x1134x30mm

**Weight:** 32.5kg



### LET-B40KN1E1

#### PWM-controlled PV DC-DC converter

**DC Output Voltage:** 24Vdc

**PV Input Voltage:** 12-54Vdc



### LGC-152BLP2

#### Off-grid inverter

**Rated power:** 1.5kW

**DC input voltage:** 24Vdc

**Output voltage:** 230Vac

**Output type:** Single phase modified sine wave



### DJM12100

#### Low voltage battery

**Rated voltage:** 12V

**Nominal capacity:** 100Ah

**Battery type:** Lead acid battery



## LES-402

### Off-grid inverter with MPPT

Rated power: 4kW

DC input voltage: 24Vdc

Output voltage: 220/230/240Vac

Output type: Single phase



## LES-602

### Off-grid inverter with MPPT

Rated power: 6.2kW

DC input voltage: 48Vdc

Output voltage: 220/230/240Vac

Output type: Single phase



## LEC-602

### Hybrid inverter

Rated power: 6.2kW

DC input voltage: 48Vdc

Output voltage: 220/230/240Vac

Output type: Single phase



## LYB-3K8BL7

### Low voltage battery

Nominal voltage: 25.6V

Nominal capacity: 150Ah

Nominal energy: 3.84kWh

Battery type: LiFePO<sub>4</sub> battery



## LHD-51G230L

### Low voltage battery

Nominal voltage: 51.2Vdc

Nominal capacity: 230Ah

Nominal energy: 11.7kWh

Battery type: LiFePO<sub>4</sub> battery



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LESSO Group (2128) is listed in the Stock Exchange of Hong Kong.



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