LESSO

Residential Hybrid Smart Energy Solutions



Intelligent Storage for Smart Living

Ver. 2026.11

A Bright and Exciting Journey

LESSO Group is a Hong Kong-listed (2128.HK) manufacturer of building materials with an annual revenue of over USD4.38 billion from its global operations.

LESSO Solar, a flagship division of LESSO Group, specialises in manufacturing solar panels, inverters, and energy storage systems, and providing solar-energy solutions.

Since launching its global expansion strategy in 2022, LESSO Solar has been growing at a spectacular pace, extending its reach to over 50 countries worldwide with dedicated global support teams.

USD4.38 bil
Annual Sales Revenue

4 major
Production Bases

40 years
Production Experience

50+ countries
Global Support Teams





By utilizing only the finest raw materials and cutting-edge technology, we meticulously oversee every stage of the production process to provide our customers with the highest-quality products.







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^2/kW for module installation, fitting different installation scenarios easily.





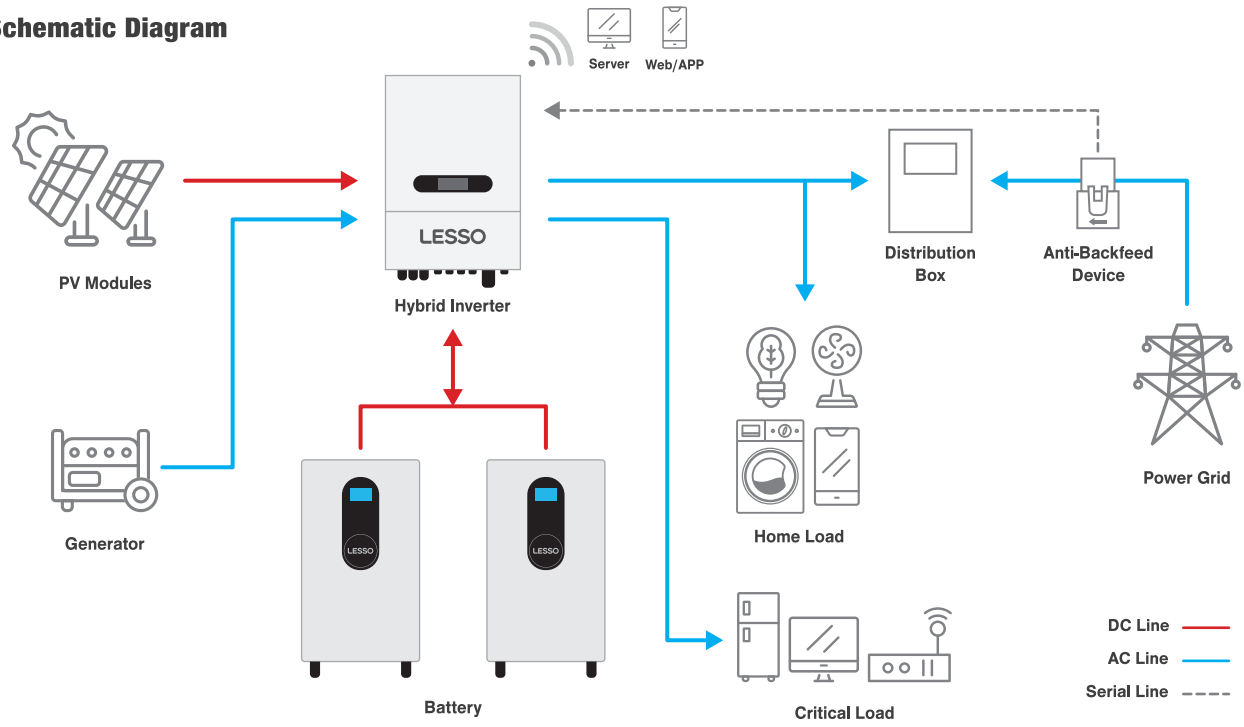
8kW Single Phase Hybrid Solar Energy Solution

For high-demand homes: multi-zone AC, large appliances.

Output: 66kWh/day, supports extensive backup needs.

High-capacity hybrid operation & scalable storage for energy independence.

Schematic Diagram



System Configuration

	8kW+32kWh
AC Output Type	Single phase 220/230Vac L-N
PV Capacity	450Wp x 33pcs
Daily Average Energy Production (5h)	66kWh
PV Installation Footprint	> 66m²
Energy Storage Capacity	51.2V / 314Ah / 16kWh ×2
Inverter	8kW
BOS (optional)	PV cable, Battery cable, AC cable, Distribution box

* The battery pack can be expanded to 4 groups (the battery distribution box needs to be replaced).
* 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.

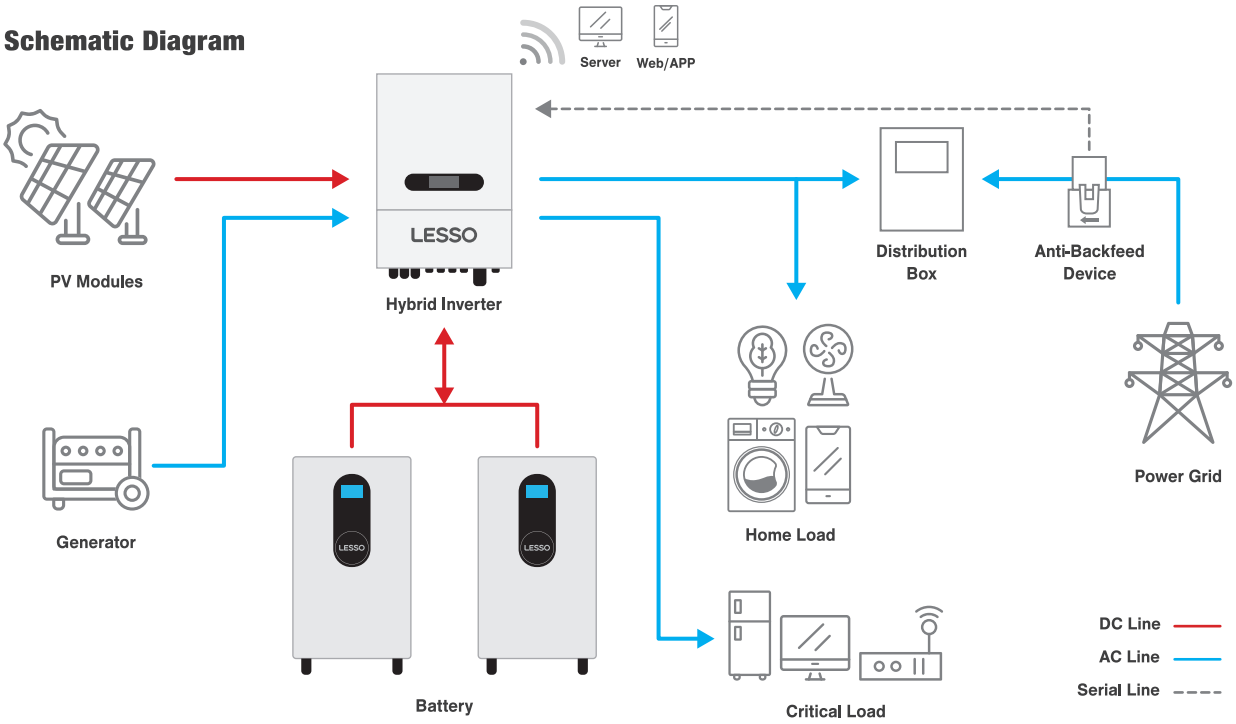
12kW Three Phase Hybrid Solar Energy Solution

For premium estates: full-house automation, pools, workshops.

Output: 97kWh/day, enables full energy self-sufficiency.

Utility-scale hybrid power & intelligent storage for zero-waste energy.

Schematic Diagram



System Configuration

	12kW+32kWh
AC Output Type	Three phase 380/400Vac L1-L2-L3-N
PV Capacity	450Wp x 48pcs
Daily Average Energy Production (5h)	97kWh
PV Installation Footprint	> 96m²
Energy Storage Capacity	51.2V / 314Ah / 16kWh ×2
Inverter	12kW
BOS (optional)	PV cable, Battery cable, AC cable, Distribution box

* The battery pack can be expanded to 4 groups (the battery distribution box needs to be replaced).
* The daily average available energy production is calculated based on 90% of the total power of PV modules.
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Product Specifications

450C(HBD)48(210R)

210R N-TOPCon dual-glass bifacial PV module

Solar cell type: 210R N-TOPCon Mono Cell (Half cell)
Solar cell arrangement: 96pcs(6x16)
Max power: 450W
Max efficiency: 22.52%
Dimension: 1762x1134x30mm
Weight: 24.7kg



LEC-802A3BD-AT/LEC-123B3BD-AT

Hybrid inverter

Rated power: 8kW/12kW
DC input voltage: 48Vdc
Output voltage: 220/230V@8kW, 380V/400V@12kW
Output type: Single phase / Three phase



LHD-51F314L1C

Low voltage battery

Nominal voltage: 51.2Vdc
Nominal capacity: 314Ah
Nominal energy: 16kWh
Battery type: $LiFePO_4$ battery



Residential Solar Power Project Highlights





Location: Essex,UK | **Project Capacity:** 16.3kWp PV + 2x5kW Hybrid Inverters / 6x5kWh Batteries





Location: Essex,UK | **Project Capacity:** 7.7kWp PV + 2x5kW Hybrid Inverters / 3x10kWh Batteries





Location: Greater London, UK | **Project Capacity:** 2.2kWp PV + 2x5kW Hybrid Inverters / 3x10kWh Batteries

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

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