



SUNBOX HOME ENERGY SYSTEM

Reliable Solar Energy Storage
for Homes and Small Businesses



Store Solar Power
Use daytime solar
energy anytime



Reliable Backup
Keep essential loads
running during outages



Lower Costs
Reduce generator use
and save energy costs



Clean & Green
Sustainable energy
for a better future

Power your home, shop, clinic, restaurant
or workshop with clean solar energy.

SunBox integrates battery storage, inverter
control and intelligent energy management
into one compact system.



Powering Better Lives
with Clean Energy

ENERGY INDEPENDENCE STARTS AT HOME

Take control of your energy.

SunBox Home Energy System stores the clean energy you generate and delivers reliable power when you need it most.

KEY BENEFITS



USE CLEAN ENERGY

Maximize self-consumption of solar power and reduce reliance on the grid.



RELIABLE POWER

Enjoy uninterrupted power supply for your home and business.



SAVE MORE

Lower electricity bills and reduce generator fuel costs.



GO GREEN

Reduce carbon footprint and contribute to a sustainable future.



POWER ESSENTIAL LOADS

Keep your important appliances running such as lights, fans, refrigerators, TV and more.



STORE & USE ANYTIME

Store excess solar energy in the battery and use it anytime – day or night.



SMART CONTROL

Monitor and manage your energy system anytime, anywhere with our app.



SAFE & DURABLE

Built with LiFePO₄ battery and multiple protection systems for long life.

ALL-IN-ONE POWER FOR DAILY ENERGY SECURITY

SunBox H12SD-16 Home Energy System

SunBox H12 is a all-in-one home energy storage system that combines a lithium battery, a 12kW inverter and intelligent energy management in a compact cabinet. It is designed to provide reliable, efficient and safe power for homes and small businesses.

The system supports solar priority, grid charging, battery backup and UPS emergency power supply to keep your essential loads running at all times.



16 kWh

Battery Energy



51.2 V

Low-Voltage Battery Platform



12 kW

Rated Inverter Power



WiFi / RS485

Remote Monitoring & Communication



SOLAR PRIORITY

Use solar energy first to reduce grid dependence.



GRID CHARGING

Charge from the grid when solar power is insufficient.



BATTERY BACKUP

Automatic switch to battery power during grid outages.



UPS FUNCTION

Seamless power protection for critical loads and appliances.



Safe & Reliable

LiFePO4 battery cells with multiple protection designs ensure long life and maximum safety.



Intelligent Management

Smart EMS optimizes energy usage and delivers higher efficiency and reliability.



INTEGRATED DESIGN

16 kWh integrated battery and inverter in one system.



PURE SINE WAVE

Stable AC output for connected home loads.



EASY INSTALLATION

High integration enables easy installation.

BUILT FOR RELIABLE HOME ENERGY

SunBox provides reliable, clean and stable electricity for household energy needs. Supports high-power home loads such as air conditioners, heat pumps and electric ovens.



SunBox H12SD-16

Home Energy System



HOME BACKUP POWER

Reliable backup power for daily household loads.

- Lights
- Refrigerators
- WiFi & TV



HIGH-POWER HOME LOADS

Supports appliances such as:

- Air Conditioners
- Heat Pumps
- Electric Ovens



ESSENTIAL HOME LOADS

Stable electricity for everyday household use.

- Residential Loads
- Lighting
- Home Appliances



SOLAR SELF-CONSUMPTION

PV DC coupling and intelligent energy management support daily energy savings.

INTELLIGENT ENERGY MANAGEMENT FOR MAXIMUM EFFICIENCY

SunBox intelligently manages the flow of electricity between solar, battery, grid and your home loads to ensure stable power, lower costs and higher reliability.

SUNBOX H12SD-16 All-in-One Home Energy System



SAFE & RELIABLE

LiFePO₄ battery with multiple protection systems for long life and maximum safety.

INTELLIGENT ENERGY MANAGEMENT

Optimizes household energy use for integrated, efficient operation.

RS485 / WIFI COMMUNICATION

Supports communication via RS485 and WiFi.



MULTIPLE MODES

Support solar priority, grid priority, battery priority and backup mode.

FLEXIBLE OPERATING MODES



SOLAR PRIORITY

Use solar power first. Excess energy charges the battery.



BATTERY PRIORITY

Use stored battery power first to reduce grid dependence.



GRID PRIORITY

Use grid power when solar is insufficient and charge battery when possible.



BACKUP MODE (UPS)

Automatically switch to battery power during grid outages within 20 ms.

SUNBOX H12SD-16

HOME ENERGY SYSTEM



SAFE & RELIABLE
LiFePO₄ battery
Multiple protection



SMART & EFFICIENT
Advanced EMS
High performance



EASY INSTALLATION
All-in-one design
Plug and play



REMOTE MONITORING
WiFi / RS485
Real-time control

MODEL H12SD-16	
Battery	
Battery Type	LiFePO4 Battery
Battery Energy	16 kWh
Nominal Voltage	51.2 V
Rated Capacity	314 Ah
Voltage Range	42.0-58.0 V
PV	
Max. PV Power	15 kW
Max. PV Voltage	500 Vdc
MPPT Voltage Range	60-450 Vdc
Max. PV Charging Current	25 A
AC Output	
Rated Power	12 kW
AC Voltage	230 Vac +/-5%
AC Frequency	50 Hz / 60 Hz
Efficiency	>=94%
Transfer Time	<20 ms
Waveform	Pure sine wave
AC Input	
Rated AC Voltage	230 Vac
AC Voltage Range	170-280 Vac (PC) / 90-280 Vac (Appliances)
General	
Altitude	<=2000 m
Humidity	5%-95%
Operating Temperature	-10 C to +50 C
IP Grade	IP20
Communication	RS485 / WiFi
Dimensions (L x W x H)	510 x 377 x 770 mm
Weight	130 kg



Dimensions: 510 x 377 x 770 mm
Weight: 130 kg

SUPPORTS DAILY ESSENTIAL LOADS



Lighting



Refrigerator



TV & Wi-Fi



Fan



Water Pump



Air Conditioner



CCTV



Computer



More Appliances

INTEGRATED HOME ENERGY

LiFePO4 battery, pure sine-wave output, RS485/WiFi communication, and UPS backup function.

¹ Usable energy may vary depending on system configuration and operating conditions.

SUNBOX H5SK

MODULAR STACKABLE SYSTEM

SunBox H5SK is a stacked all-in-one home energy system integrating the battery, inverter and PV controller. Capacity configurations range from 5.12 kWh to 25 kWh.



MODULAR DESIGN

Capacity configurations from 5.12 to 25 kWh.



FLEXIBLE CAPACITY

Select the capacity that fits your needs.



EASY INSTALLATION

Integrated design supports easy installation.



SAFE & RELIABLE

LiFePO4 battery with integrated protection.

SCALABLE CAPACITY FROM 5.12 kWh TO 25 kWh



5.12 kWh

1 module



10.24 kWh

2 modules



15 kWh

3 modules



20 kWh

4 modules



25 kWh

5 modules

Each module: 5.12 kWh | Up to 5 modules | Max. 25 kWh

TECHNICAL SPECIFICATIONS - H5SK

Battery	
Battery Type	LiFePO4 Battery
Battery Energy	5.12 / 10.24 / 15 / 20 / 25 kWh
Nominal Voltage	51.2 V
Rated Capacity	100 Ah / 100 Ah x2 / x3 / x4 / x5
Voltage Range	42.0-58.0 V
PV	
Max. PV Power	5.5 kW
Max. PV Voltage	500 Vdc
MPPT Voltage Range	120-430 Vdc
Max. PV Charging Current	80 A
AC Output	
Rated Power	5 kW
AC Voltage	230 Vac +/-5%
AC Frequency	50 Hz / 60 Hz
Efficiency	<=94%
Transfer Time	10 ms (PC) / 20 ms (Appliances)
Waveform	Pure sine wave
AC Input	
Rated AC Voltage	230 Vac
AC Voltage Range	170-280 Vac (PC) / 90-280 Vac (Appliances)
General	
Communication	RS485 / WiFi
Operating Temperature	-10 C to +50 C
IP Grade	IP20

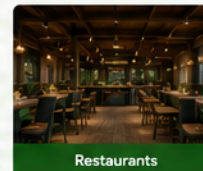
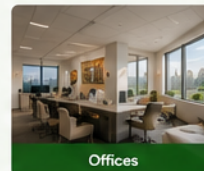
SYSTEM CONFIGURATION EXAMPLE



Battery, inverter and PV controller are integrated into one unit.
Connect PV, utility grid and residential loads as required.

RS485 / WiFi | 5 kW output | Pure sine wave

IDEAL FOR



LET'S BUILD A CLEANER, MORE RELIABLE FUTURE

SunBox delivers safe, intelligent and efficient energy storage solutions for homes and small businesses.

Work with us to bring stable and affordable solar energy to more communities across Africa.



WHY PARTNER WITH US?



RELIABLE QUALITY

High-quality LiFePO₄ cells and strict quality control.



INNOVATIVE TECHNOLOGY

Advanced EMS and smart protection.



STRONG SUPPORT

Technical support, training and after-sales service.



GROW TOGETHER

Competitive solutions for long-term partnership.

LET'S CONNECT



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BRINGING CLEAN ENERGY TO MORE PLACES



We are expanding our global partner network.
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Clean Energy

Reduce carbon footprint and protect our planet.



Lower Costs

Save on electricity bills and operating costs.



Energy Independence

Store your own power and be ready anytime.



Peace of Mind

Reliable backup power when you need it most.

SunBox
Home Energy System

Powering Better Lives with Clean Energy