

SUNPURA Product Catalog

"PLUG & PLAY" ESS EXPERT

Plug in, Power Your Life



Brand Introduction | Global Layout

NOVGEN is a technology-driven whose brand--SUNPURA is company dedicated to delivering safe, smart, and sustainable energy storage solutions. With a customer-first approach, we provide integrated clean energy systems built on innovation, reliability, and trust.





2022

08

Introduced the strategic investor, the state-owned capital of Fuyang, Anhui Province

2024

10

Launched Sunpura, specializing in Plug & Play micro-storage systems. Within a year, our balcony storage products gained acclaim across Europe, deliver efficient energy solutions for households

2014

06

Acquired power station assets and EPC company Huayuan, and started photovoltaic power generation business

09

2023

Established Novgen, expanding into balcony, residential, and commercial energy storage, successfully penetrating Europe's mainstream market

2016

07

Established Jiawei Long Power subsidiary and entered Lithium battery and energy storage industry

Q LOCAL SERVICE TEAM--Hamburg, Germany



SUNPURA Products Family Portfolio

sunpura



sunpura

sunpura Home

In 2025, SUNPURA unveils SUNPURA HOME[®], an advanced AI-driven energy management solution, designed to redefine modern living.

sunpura номе[®] Integrates:

- · High-Performance Solar Generation
- · Smart Battery Storage
- \cdot Al-Driven Automation
- · Real-Time IoT Connectivity
- · Cloud-Edge Collaborative Control
- · Modular & Scalable Design

Why Choose SUNPURA HOME

- ⊘ AI-Driven Efficiency: Cutting-edge technology for intelligent energy optimization.
- Self-Sufficiency: Designed for personal energy consumption and independence.
- Simple Plug & Play: Easy installation and seamless integration.
- Smart Load Management: Achieve tangible savings through advanced load control.
- ⊘ Eco-Friendly Innovation: Sustainable and practical solutions for your everyday needs.

With **SUNPURA HOME**[®], energy is more than managed – it's optimized, automated, and entirely within your control. **SUNPURA HOME**[®] – **Empowering Tomorrow's Energy, Starting from Today.**

SUNPUra HOME

Integrated Smart Energy Ecosystem



Cloud-edge Collaborative Services

Product Introduction | Living the Easy Energy Life

SUNPUra HOME[®]--Making Clean Energy Effortless

A Fully Integrated Home Energy System

SUNPURA HOME[©] seamlessly integrates solar panels, smart inverters, batteries, intelligent accessories, EMS into one unified system—empowering you to maximize your self-generated renewable energy and reduce dependence on the grid.



1. Generate Your Own Power—Right from Your Balcony

Harness the sun's power right from home. With high-performance balcony solar panels, you can produce clean electricity efficiently, sustainably, and independently—taking control of your energy bills.

2. Maximize Solar Energy Utilization

During the day, solar power is directly used in your home whenever possible. If a battery system is installed, excess energy is stored for later use.

Once the battery reaches full capacity, surplus electricity can be fed into the grid—potentially earning a feed-in tariff. When solar production is low—during cloudy days or at night—your system seamlessly switches to drawing electricity from the grid, ensuring uninterrupted power without manual intervention.

3. Uninterrupted Power During Blackouts

In the event of a grid failure, the system automatically activates Backup Mode via a dedicated offgrid port, keeping your essential appliances running without interruption.

A Day Empowered by the Sun



Zero Feed-In: Maximize Your Solar Energy Use

SUNPURA HOME[®] is designed to help you optimize the use of your self-generated solar energy. With support from smart meters, meter readers, and related accessories, the system intelligently prioritizes local consumption, reducing dependency on the public grid.

Smart Energy Management

Efficiently directs solar energy to power your home appliances during daylight hours, ensuring optimal usage of your clean electricity.

Reliable Energy Storage

Excess solar energy is stored in the battery system for use at night or during cloudy weather—ensuring consistent energy availability throughout the day.

Lower Energy Costs

By consuming more of your own solar energy and drawing less from the grid, you can significantly reduce your monthly energy bills.

System Performance

- \cdot Local area network (LAN) communication with a response time of 2S.
- · Grid-connected power detection accuracy within 10W.

Single-phase setup



Three-phase setup



Flexible Integration with AC-coupled Systems

The S2400 series supports AC-coupled configurations, making it ideal for retrofitting existing PV systems or integrating with third-party inverters. This setup allows battery systems to connect via the AC side of the energy system, enabling seamless upgrades without altering the existing solar array.

Easy Retrofits: Adds storage to existing PV systems with minimal modifications.

Flexible Installation: Suitable for both new installations and upgrades to existing systems.



Dynamic Tariffs

Tibber

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Europe's dynamic tariffs unlock demand flexibility through price signals. Integrated with balcony storage and smart devices, this system reduces energy bills, boosts renewable energy usage, and stabilizes the grid---perfect for high-consumption or solar-powered homes.



sunpura Ecæsystem

Smart balcony storage + your smart home = Total energy control.

At the forefront of energy transition and smart home adoption, Our balcony energy storage seamlessly integrates with smart meters, Smart plug, and smart home applications (like EV chargers, water heaters and heat pumps), creating an efficient energy ecosystem that transforms home power management.





The Value of Ecosystem Compatibility



Lower Electricity Bills

Priorities your own solar energy for home use

Reduces dependence on the grid and saves money



Smart Scheduling Dynamic Tariff Optimization

Detects off-peak and peak pricing automatically

Charges and discharges at optimal times to boost efficiency



Compatible with smart plugs, heat pumps, water heaters, EV chargers

Automates operation based on weather and electricity prices



Open Ecosystem Future-Proof Design

Supports additional devices such as more PV panels or EVs Scalable and flexible to grow with your energy needs

Flexible and Reliable Connectivity with Wi-Fi and LoRa



SUNPURA APP

The Sunpura Cloud and SUNPURA APP enable dynamic workload adjustments through AI-driven intelligent algorithms, optimizing energy efficiency effectively. You can also Monitor energy consumption trends via intuitive charts.

V1.0 ~ (F) (+)	< Intelligent Control Mode	< Custom mode	< Smart Socket Mode
OW OW OW	Al Regulation 1.5 🛈	Usage Plan	
Home power ① Solar ① Grid	Zero Feeder 🕞	0 18:38~19:38 -2400W 0W 🦊	My_Smart Plug
	Boundary parameters of the g $3kW$ >	1 19:38~20:38 800W 0W ↑	
- Co	● Set electricity GER > Lut Energy Analysis >	⊕ Set Plan	
	00:00~05:59 Troughs, 3000W, ↓ 100%		
	06:00~08:59 €		
OW OW OW 0% Other Loads Storage	09:00~16:59 ™ ³		
0W No Smart Devices Yet	17:00~17:59 Smart Linkage, 0W, ↓99% ↑10%		
	18:00~21:59		
Power Gen… CO2 Revenue 0.00 kwh 0.00 kg 0.00 \$	22:00~23:59		
Day Month Year Total	Save	Setting	Save

Product Introduction | Scenarios

Scenarios

S2400 series is versatile, fitting various installation scenarios from lush gardens to apartment balconies. Its modular design and flexible configuration cater to any residential setting, enabling you to harness solar power for sustainable living.





S2400

All-in-One Plug & Play Energy Storage System

The S2400 is a true all-in-one system combining a hybrid inverter and battery. Just plug it into any household socket — it's plug-and-play.

Compatible with smart meters or smart plugs, the system enables near zero feed-in to the grid, maximizing self-consumption. With support for AC-coupled and dynamic tariff, the S2400 also integrates seamlessly with a wide range of smart home systems. Its flexible features and ecosystem compatibility empower end users with more choices and greater savings.



Technical Parameters

PV INPUT		BATTERY SPEC		GENERAL DATA	
MPPT Voltage Range	10-100V	Battery Type	LiFePO4	Charging / Discharging Temperature	-20~55°C/-20~60°C
Max Input Current	16A x 2	Cycles	8000	Weight (Power Box/Battery Box)	43.7kg (A2400: 13.7kg/B2400: 30kg)
Max Input Power	1000W x 2	Nominal Voltage	48V	Ingress Protection	IP65
AC Output		Capacity	2400Wh	Dimensions (WxHxD)	450x464x290mm (Height: A2400: 177mm/B2400: 287mm)
AC Output (On/Off Grid)	On Grid:800W / Off Grid:2400W			Overvoltage / Overcurrent /	Integrated
Frequency	50Hz			Short Circuit / Temperature Protection	
Rated Voltage	230V			Communication Method	WIFI/Bluetooth
Peak Output power (0.2s)	3600W				



All-in-One Plug & Play Battery, Inverter & Control in one unit



Reliable Performance Charge cycles: 8000 times / IP65



Intelligent BMS Accurate algorithm



Maximum safety Integrated aerosol fire suppression system



Zero Feed-in Use your energy smarter



Easy AC-coupled Plug & Play for flexible expansion



Dynamic Tariffs Save with Al-optimized energy



2400W Off-Grid Power Independent energy anywhere



Stackable expansion Max expand up to 9.6kWh

S2400 AC

All-in-One Plug & Play Energy Storage System for AC-coupled

The S2400 AC is a plug-and-play all-in-one energy storage system without PV input. Through smart meter integration, it seamlessly works with existing grid-connected PV systems, enhancing self-consumption and energy flexibility.

With support for dynamic tariffs, the S2400 AC also integrates effortlessly with a wide range of smart home systems. Its flexible features and ecosystem compatibility empower end users with more control, smarter energy usage, and greater savings.



Technical Parameters

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AC Output (On/Off Grid)	On Grid:800W / Off Grid:2400W
Frequency	50Hz
Rated Voltage	230V
Peak Output power (0.2s)	3600W

BATTERY SPEC Battery Type Cycles Nominal Voltage Capacity

GENERAL DATA

LiFePO₄

2400Wh

8000

48V

Charging / Discharging Temperature Weight (Power Box/Battery Box) Ingress Protection Dimensions (WxHxD) Overvoltage / Overcurrent / Short Circuit / Temperature Protection Communication Method -20~55°C/-20~60°C 42.7kg (A2400: 12.7kg/B2400: 30kg) IP65 450x464x290mm (Height: A2400 AC: 177mm/B2400: 287mm) Integrated

WIFI/Bluetooth

S2400 Plus

All-in-One Plug & Play Energy Storage System (4.8kWh J14.4kWh)

The S2400 Plus is a true all-in-one system combining a hybrid inverter and battery. Just plug it into any household socket — it's plug-and-play. Compatible with smart meters or smart plugs, the system enables near zero feed-in to the grid, maximizing self-consumption. With support for AC-coupled and dynamic tariff, the S2400 Plus also integrates seamlessly with a wide range of smart home systems. Its flexible features and ecosystem compatibility empower end users with more choices and greater savings.



Technical Parameters

10-100V
16A x 2
1000W x 2
On Grid:800W / Off Grid:2400W
50Hz
230V
3600W

BATTERY SPEC

Battery Type Cycles Nominal Voltage Capacity

GENERAL DATA

LiFePO₄

4800Wh

8000

48V

Charging / Discharging Temperature Weight (Power Box/Battery Box) Ingress Protection Dimensions (WxHxD) Overvoltage / Overcurrent / Short Circuit / Temperature Protection Communication Method -20~55°C/-20~60°C 60.7kg (A2400: 13.7kg/B4800: 47kg) IP65 450x672x290mm (Height: A2400: 177mm/B4800: 495mm) Integrated

WIFI/Bluetooth

GLASS-LIGHT PANEL KIT

P210NGL-BK 210Wp*2

Engineered for strength and durability, our light-steel photovoltaic modules integrate reinforced steel frames with high-efficiency solar cells. These modules are ideally suited for rooftop installations, ground-mounted systems, and challenging environmental conditions.





Panel/Pcs

N-Type **All-Black Great Aesthetics** 182 Wafer



PV Panel Bracket









Technical Parameters

Module Electrical Data (STC)		Temperature Ratings	
Max Power(W)	210	Power Tolerance (W)	0~+5
Max Power Voltage Vmp(V)	16.23	Temperature Coefficients of yPmp (%/°C)	-0.29
Max Power Current Imp(A)	12.94	Temperature Coefficients of βVoc (%/°C)	-0.25
Open Circuit Voltage Voc (V)	19.26	Temperature Coefficients of alsc (%/°C)	+0.045
Short Circuit Current lsc(A)	13.70	Max Over-Current	25A
Module Efficiency(%)	20.8	NOCT (Nominal Operating Cell Temperature)	43±2°C

Working Condition

Max System Voltage (V) Operating Temp (°C) Max Wind Load (Pa) Max Snow Load (Pa)

Mechanical Parameters

Cell Type (mm)	
No. of Cells and Connection	s
Dimensions (LxWxH) (mm)	
Front AR Coated Glass (mm))
Backsheet (mm)	
Cable Length (mm)	
Weight (kg)	
No. of Diodes	

N type 182*91
54(6x9)
1139x885x5.1
2
0.5
450,can be customized
7.3kg/panel, 3.63kg/brackets
2

Dimensions of PV Module(mm)

1139.0±2.0





Packaging Information





System Guidelines

1500V DC

-40~+85

2400

2400

1. For the S2400 series, each MPPT input supports up to 5 PV modules, allowing a total of 10 panels across two MPPT inputs.

2. You can use available MC4 cables as extension leads to connect PV strings. If the cable length is insufficient, additional cables can be purchased separately from SUNPURA's authorized distributors.

3. Important: When connecting third-party PV modules, ensure that the total open-circuit voltage (Voc) of the series string does not exceed the maximum input voltage of the storage-integrated inverter.

FEXIBLE-LIGHT PANEL KIT

P200FL-BK 200Wp*4

Engineered for performance and versatility, our ultra-light solar modules are ideal for weight-limited roofs, curved surfaces installations, and off-grid applications.











Technical Parameters

Module Electrical Data (STC)	
Max Power(W)	200
Max Power Voltage Vmp(V)	15 3

	200
Max Power Voltage Vmp(V)	15.30
Max Power Current Imp(A)	13.10
Open Circuit Voltage Voc (V)	18.55
Short Circuit Current lsc(A)	13.70
Module Efficiency(%)	19.17

Temperature Ratings	
Power Tolerance (W)	0~+5
Temperature Coefficients of γPmp (%/°C)	-0.35
Temperature Coefficients of βVoc (%/°C)	-0.25
Temperature Coefficients of αlsc (%/°C)	+0.050
Max Over-Current	20A
NOCT (Nominal Operating Cell Temperature)	41±2°C

Working Condition

- Max System Voltage (V)
- Operating Temp (°C)

- Mechanical Parameters
- Cell Type (mm) No. of Cells and Connections Dimensions (LxWxH) (mm) Backsheet Cable Length (mm) Weight (kg) Connector

Monocrystalline sillicon cell 182*91 54(9x2x3) 1140x915x3 Black PV Backsheet /Original White 500,can be customized 3.3kg MC4 compatible

Dimensions of PV Module(mm)





Back side



Packaging Information





System Guidelines

1000V DC

-40~+85

1. For the S2400 series, each MPPT input supports up to 5 PV modules, allowing a total of 10 panels across two MPPT inputs.

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Plug in, Power You Life







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