sunpura

SUNPURA
Product Catalog

"PLUG & PLAY" ESS EXPERT

Plug in, Power Your Life

01

MISSION

Committed to being the Leader in Plug & Play Energy Systems

02

VISION

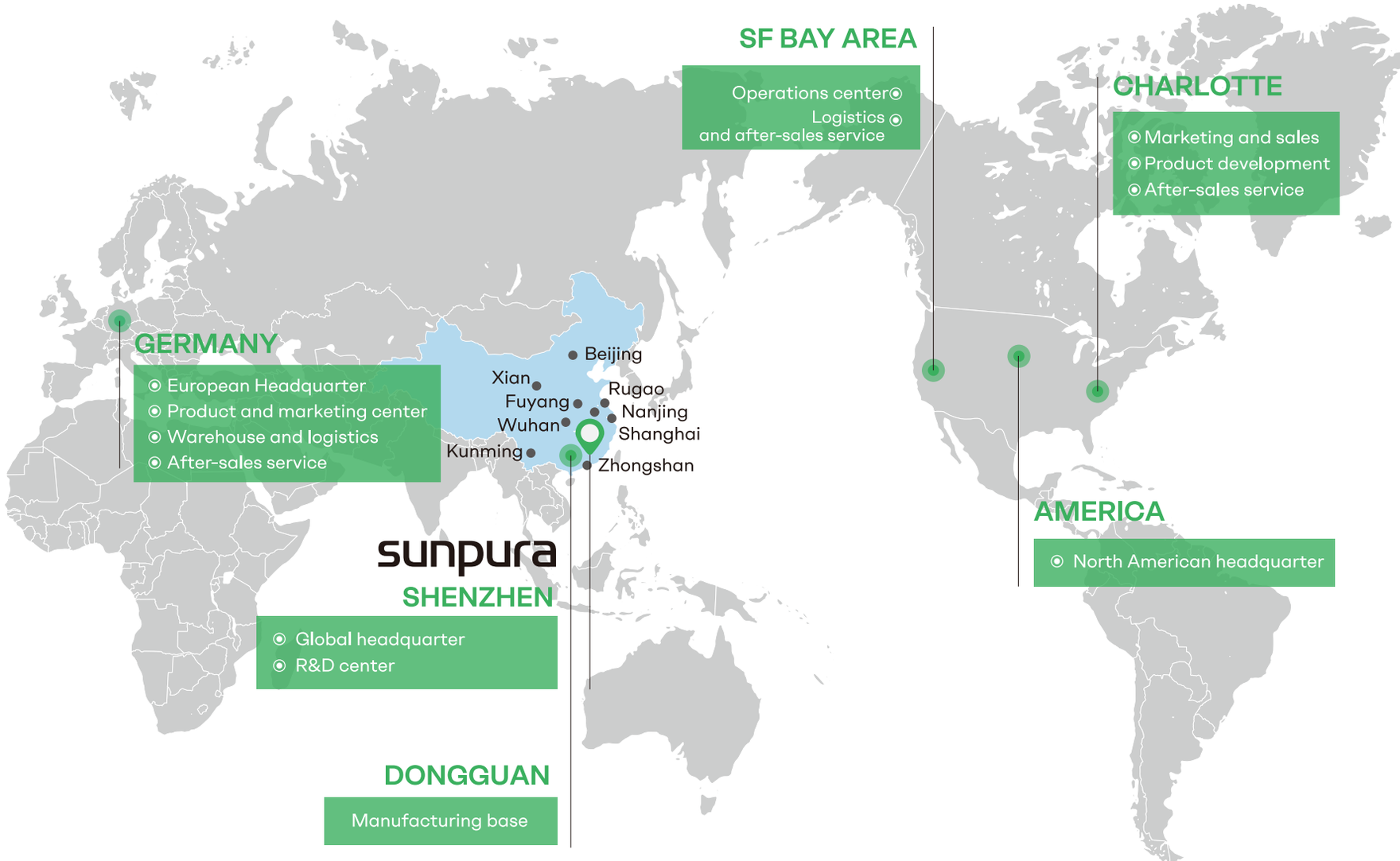
Plug in, Power Your Life

03

VALUES

Empowering a Sustain-able Future through Flexible Green Energy

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.



01

1993

Founded as the 1st Photovoltaic Enterprise in China

02

1997

Built the first factory and established the industry standard for civilian photo-voltaic lighting

03

2000

Became the 1st photovoltaic module manufacturer in China that offers 20-year warranty

04

2005

Cooperated with Sun Yat-sen University to develop ultra-high conversion efficiency batteries

05

2006

Mass produced N-type pull-crystal, solar cells and modules

06

2014

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

07

2016

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

08

2022

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

09

2023

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

10

2024

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

LOCAL SERVICE TEAM--Hamburg, Germany

- Own Warehouse
- Local Repair & Technical Support
- Drop-Shipping Service
- Professional Service Team
- Fast Response & Communication
- Product Training Support
- Joint Marketing Activities
- Full Europe Coverage
- Customer Satisfaction Guaranteed

SUNPURA Products Family Portfolio

sunpura HOME

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

sunpura HOME Integrates:

· High-Performance Solar Generation

· Smart Battery Storage

· AI-Driven Automation

· Real-Time IoT Connectivity

· Cloud-Edge Collaborative Control

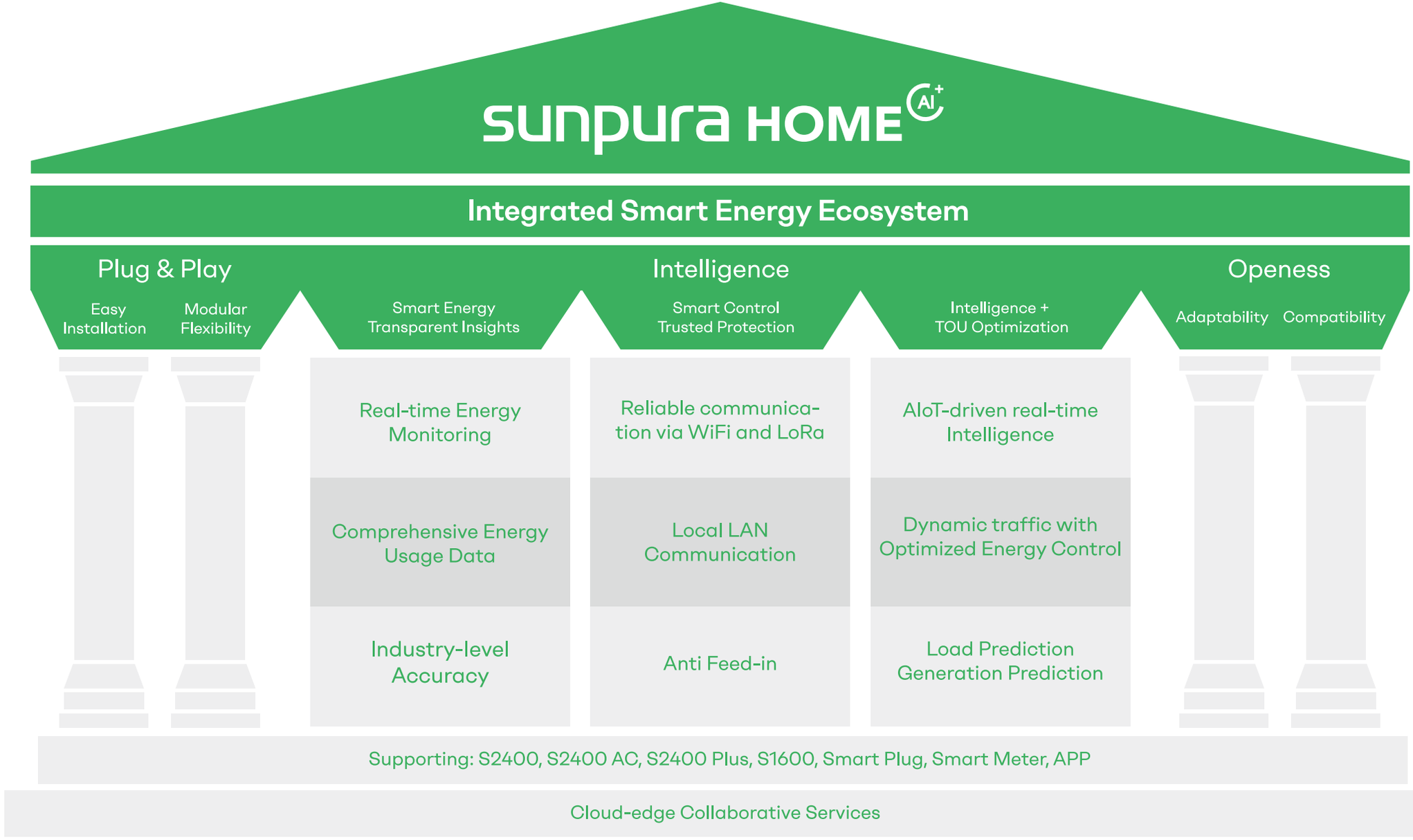
· Modular & Scalable Design

Why Choose sunpura HOME

- **AI-Driven Efficiency:** Cutting-edge technology for intelligent energy optimization.
- **Empowering 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.

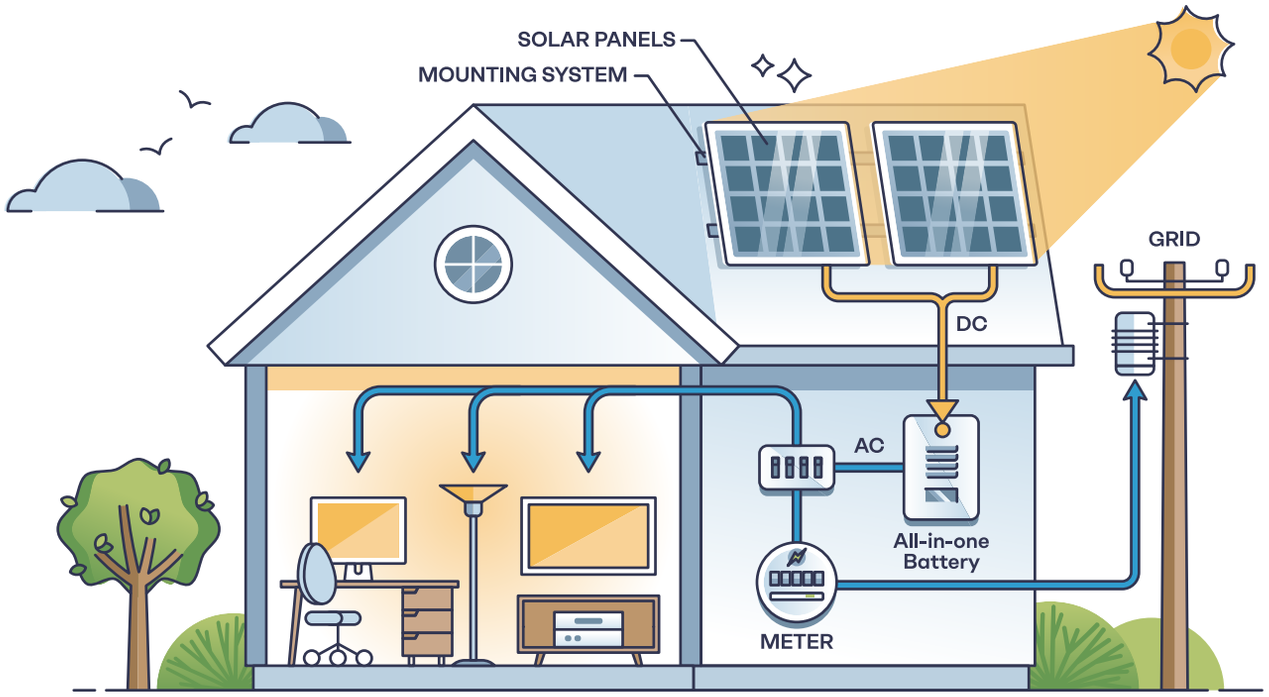
sunpura HOME – Empowering Tomorrow's Energy, Starting from Today.


sunpura HOME AI+
Integrated Smart Energy Ecosystem
Plug & Play
Easy Installation
Modular Flexibility
Intelligence
Smart Energy Transparent Insights
Smart Control Trusted Protection
Intelligence + TOU Optimization
Openess
Adaptability
Compatibility
Real-time Energy Monitoring
Reliable communica-tion via WiFi and LoRa
AIoT-driven real-time Intelligence
Comprehensive Energy Usage Data
Local LAN Communication
Dynamic traffic with Optimized Energy Control
Industry-level Accuracy
Anti Feed-in
Load Prediction Generation Prediction
Supporting: S2400, S2400 AC, S2400 Plus, S1600, Smart Plug, Smart Meter, APP
Cloud-edge Collaborative Services

sunpura HOME AI+ --Making Clean Energy Effortless

A Fully Integrated Home Energy System

sunpura HOME AI+ 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.

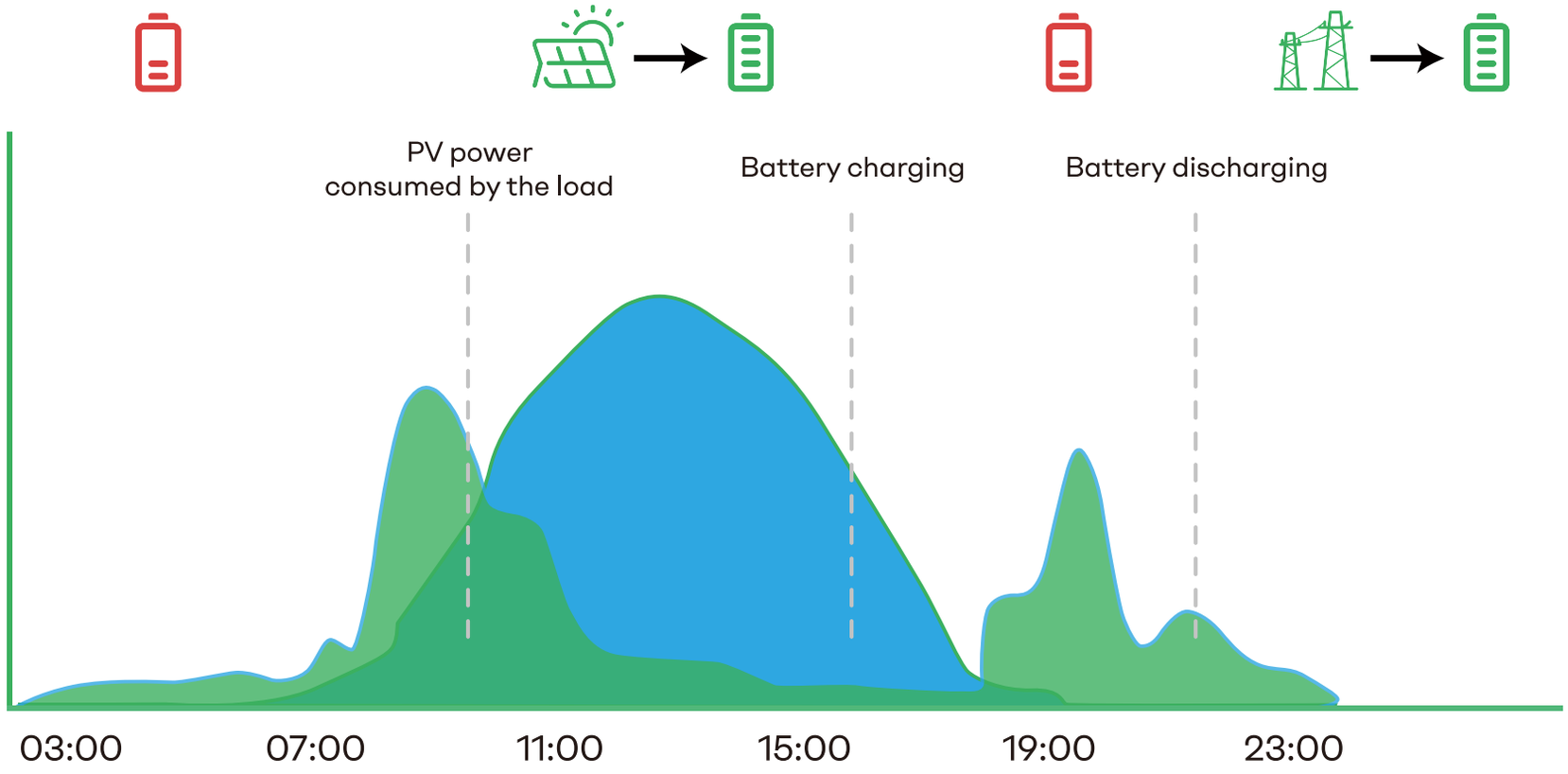
Once the battery reaches full capacity, surplus electricity can be fed into the grid—potentially earning a feed-in tariff.

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



Morning

Before sunrise, your solar system does not yet produce any electricity. You either draw power from your supplier or from the storage system.

Late Morning

At sunrise, you generate your own electricity with the first rays of sunlight.

Midday

When the sun produces the most energy, you are self-sufficient, and the surplus energy is stored in your storage system.

Evening

At sunset, electricity production decreases, allowing you to use power from your own storage.

Night

At night, you take the required electricity from your storage. If your storage is empty, you automatically draw electricity from your supplier.

Zero Feed-In: Maximize Your Solar Energy Use

SUNPURA HOME AI 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

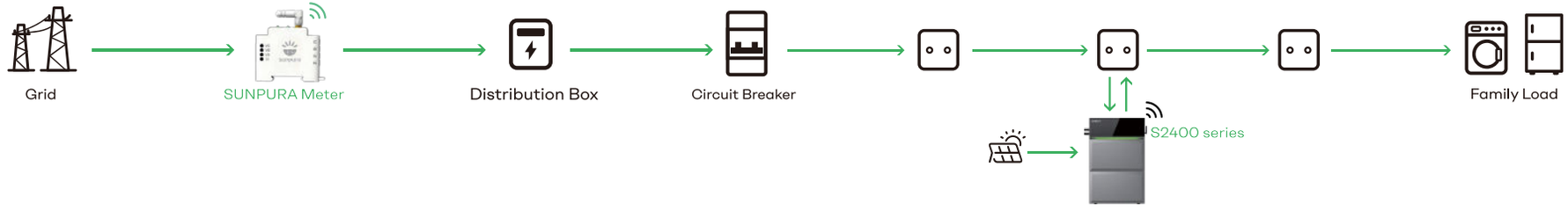
By consuming more of your own solar energy and drawing less from the grid, you can significantly reduce your monthly energy bills.

System Performance

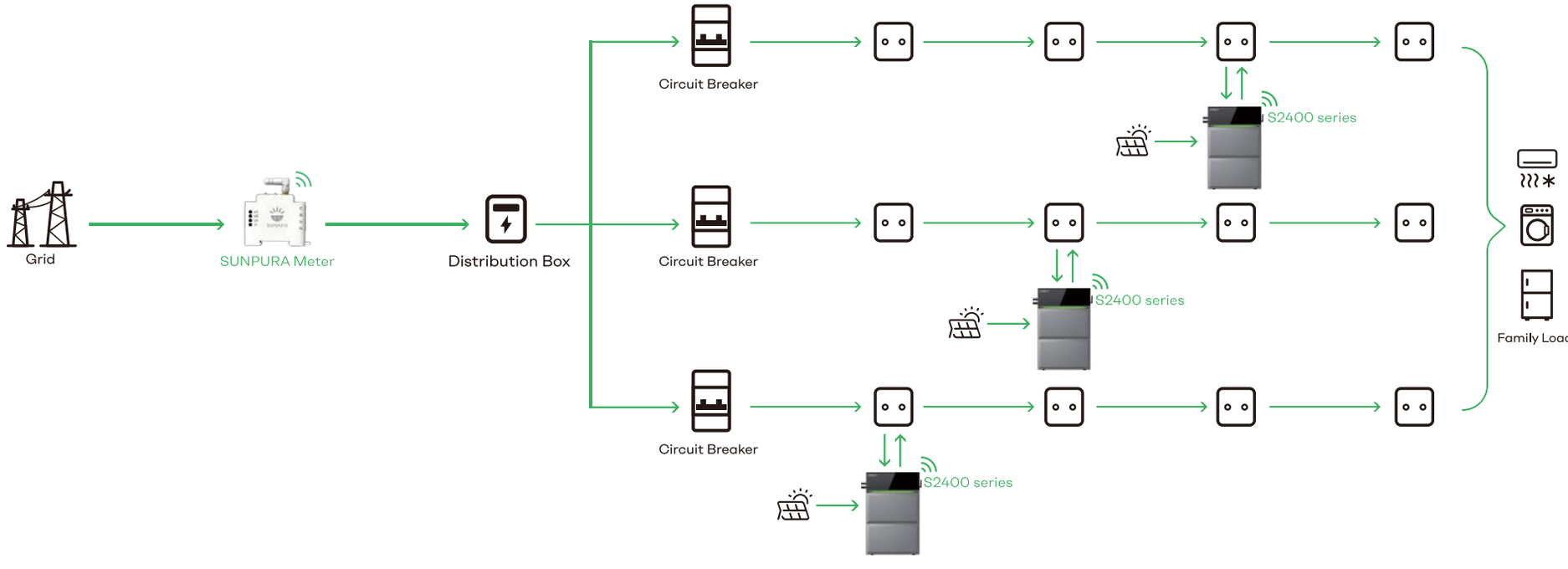
· Local area network (LAN) communication with a response time of 2S.

· Grid-connected power detection accuracy within 10W.

Single-phase setup



Three-phase setup



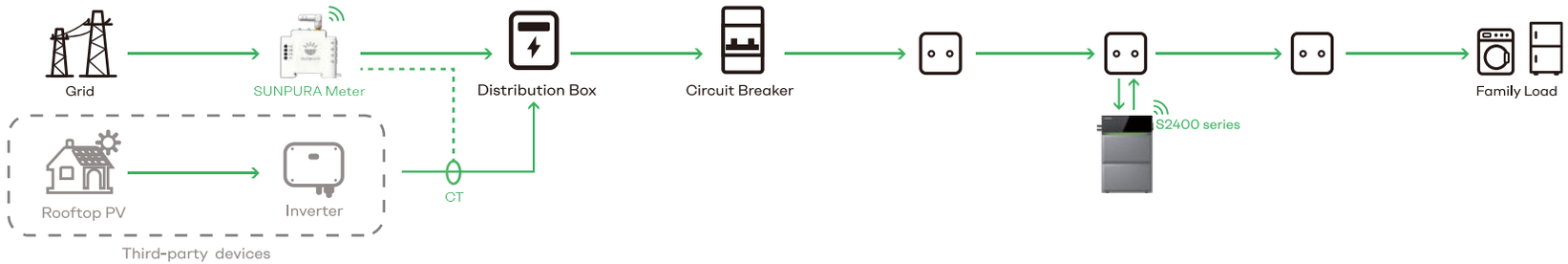
Flexible Integration with AC-coupled Systems

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.

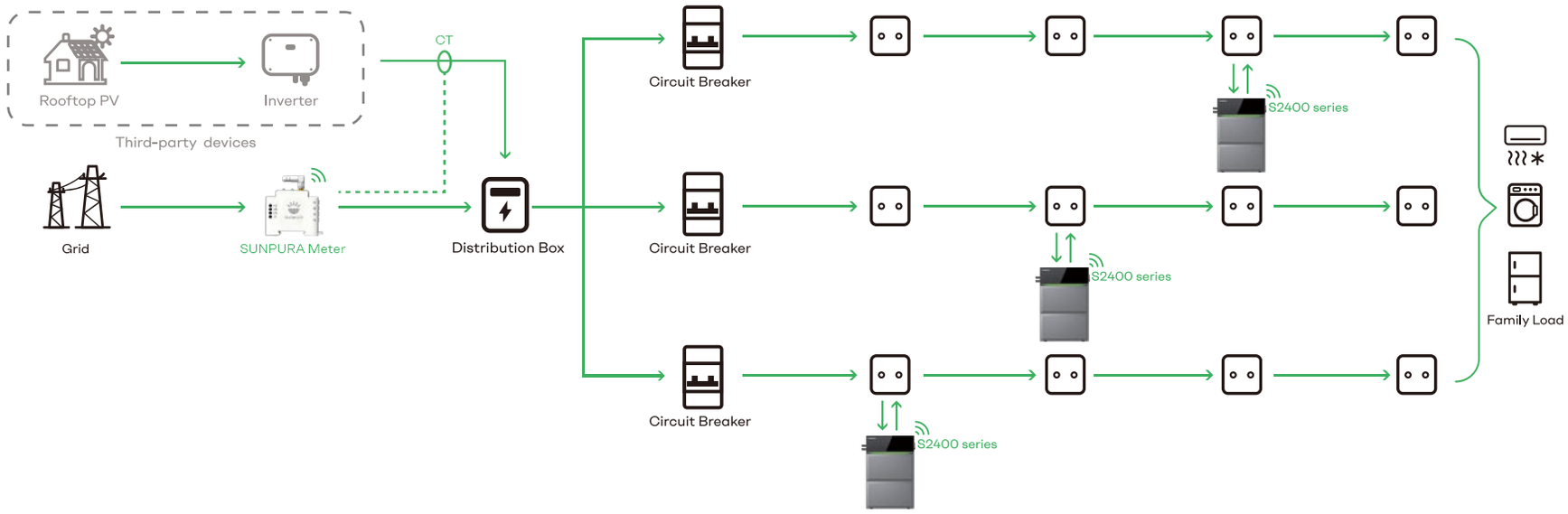
Easy Retrofits: Adds storage to existing PV systems with minimal modifications.

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

Single-phase setup

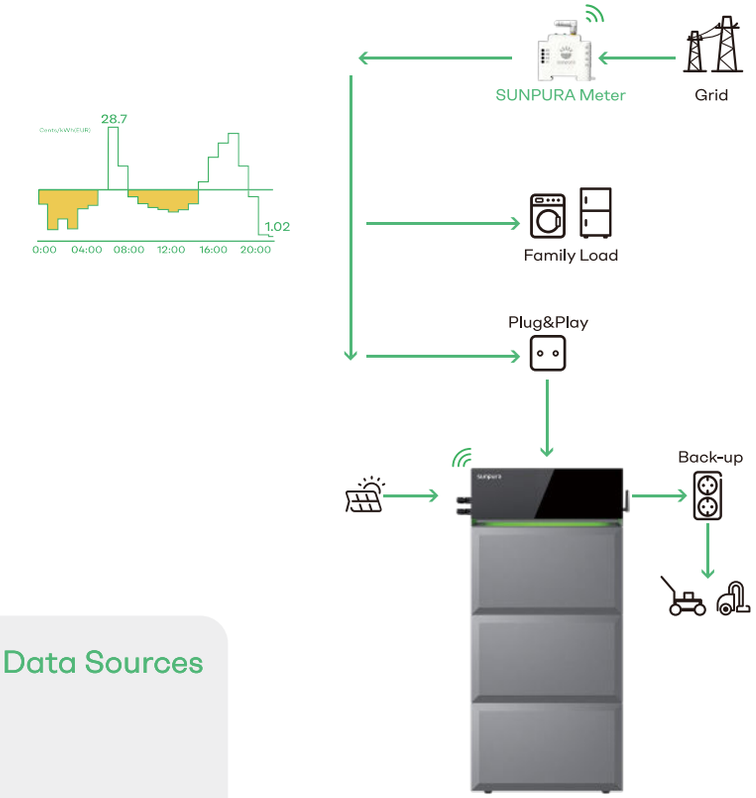


Three-phase setup



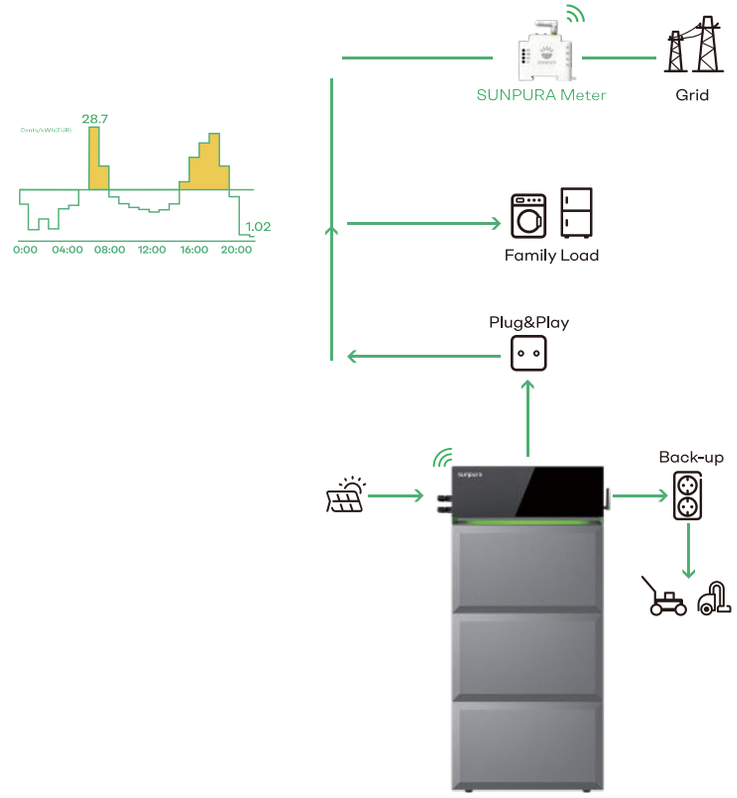
Dynamic Tariffs

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.



Off-Peak Optimization

Charge batteries or activate smart loads during off-peak or negative pricing periods.



Peak Reduction

Discharge batteries and deactivate smart loads during peak times to minimize grid consumption.

Electricity Price Data Sources

Nord Pool
Tibber
Octopus Energy
Omie
.....

sunpura Ecosystem

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.

SUNPURA


SUNPURA Smart Plug


SUNPURA Meter


SUNPURA Tracker (Infrared/P1)

Shelly


Shelly Plug Gen3


Shelly Plus 2PM


Shelly Pro 1


Shelly 3EM


Shelly Pro 3EM


Shelly Pro EM-50


Shelly H&T Gen3

Tibber


Tibber PLUSE

everHome


EcoTracker IR/P1

Homewizard


P1 Meter

Powerfox


Poweropti

IOmeter


IOmeter

MYPV Water Heater


AC ELWA 2


AC·THOR


AC·THOR 9s

EV Charger


7kW/11kW/22kW

Knebel Infrared Radiator

Smart Home Platform

everHome SmartHome in der Cloud

Home Assistant

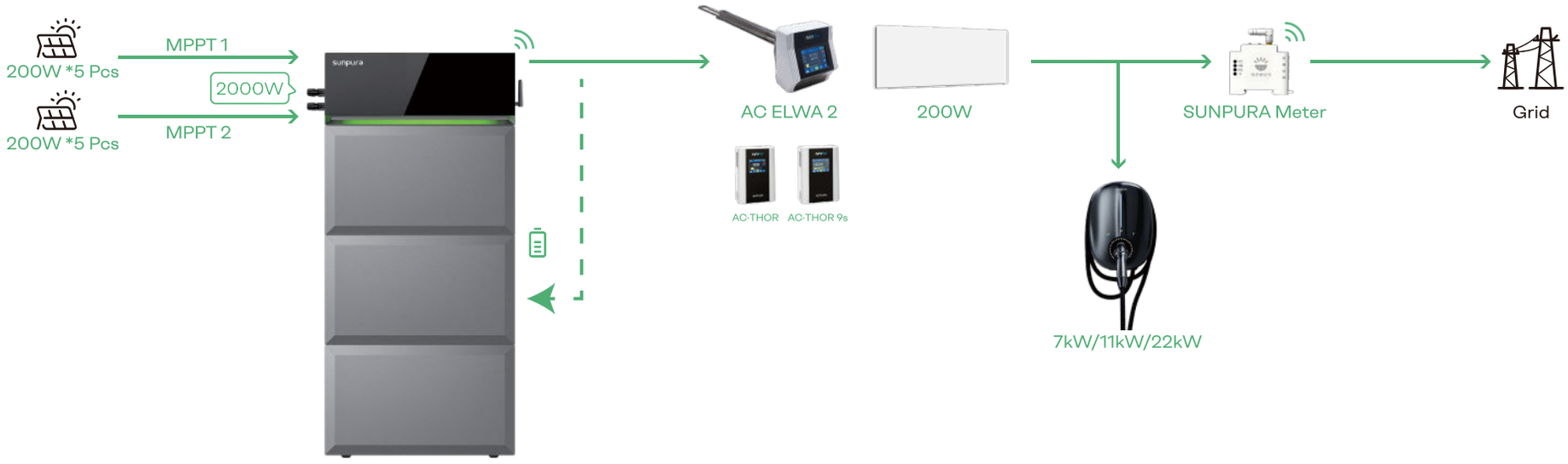
Dynamic Tariffs

octopus energy

omie

NORD POOL

tibber



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

Seamless Smart Home Integration

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

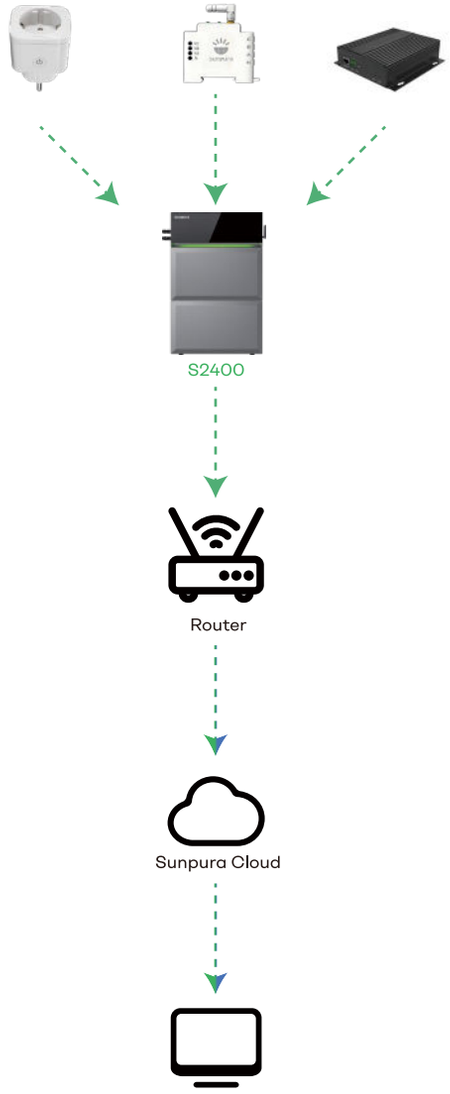
Automates operation based on weather and electricity prices

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



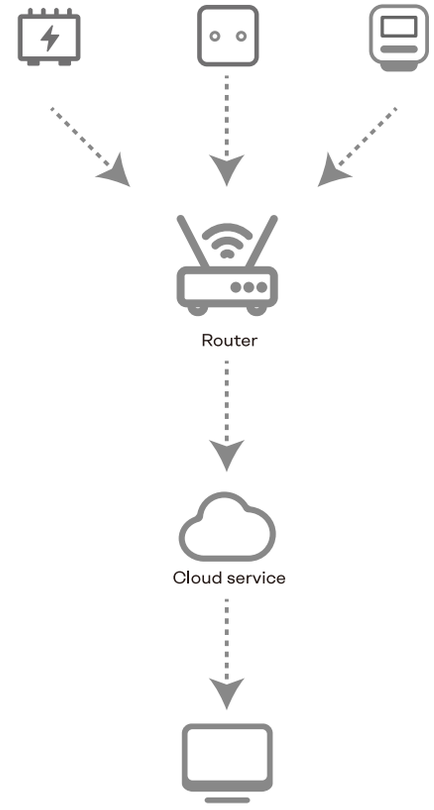
IoT System Based on LoRa and Local Wi-Fi

Latency: 100-200ms

Communication range: >100m with strong wall penetration (LoRa-specific)

Internet dependency: Operates independently from the Internet

VS



IoT System Based on Traditional Wi-Fi

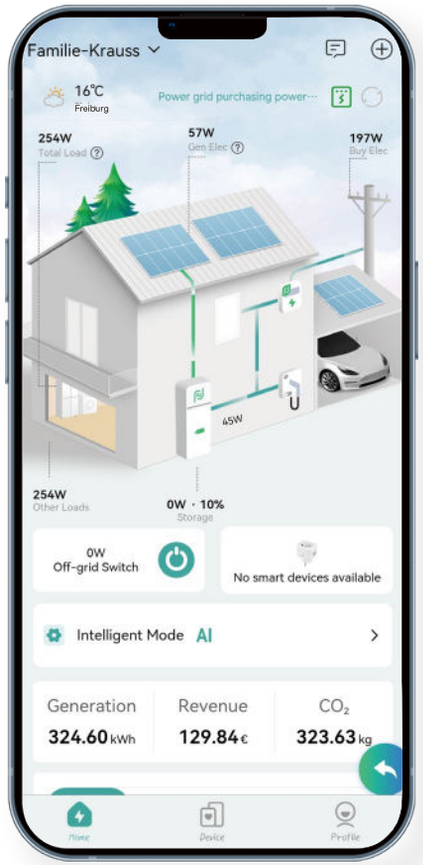
Latency: 2000-3000ms

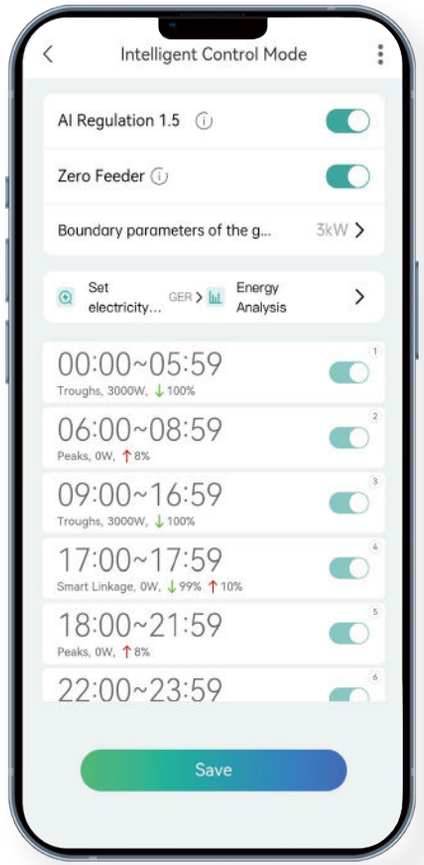
Communication range: <100m with limited wall penetration

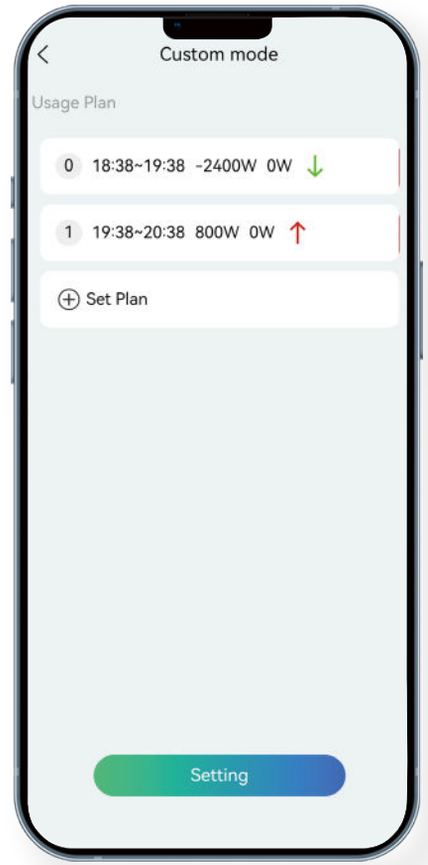
Internet dependency: Requires connection to the Internet

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.



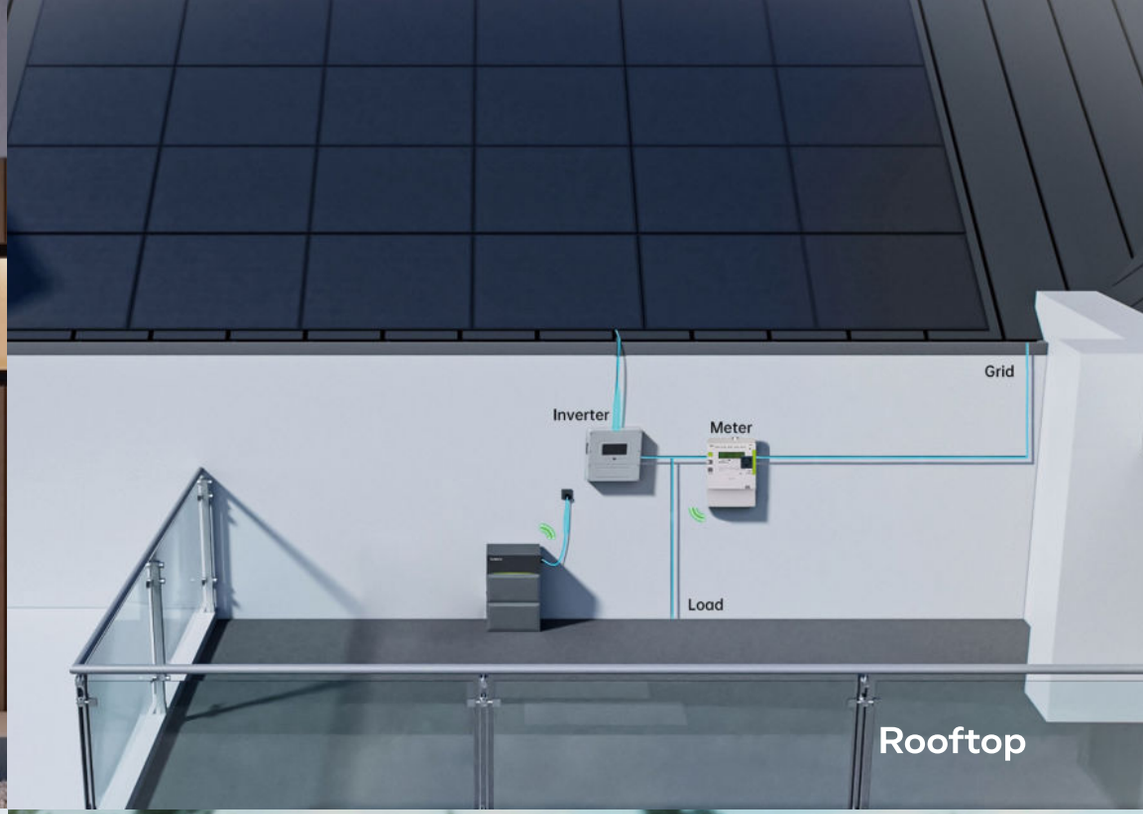




Scenarios

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.


sunpura
Garden


Grid
Inverter
Meter
Load
Rooftop


sunpura
Camping


Outdoor Cabins

Plug-In Home Battery

S2400 / S4800

The S2400 / S4800 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.

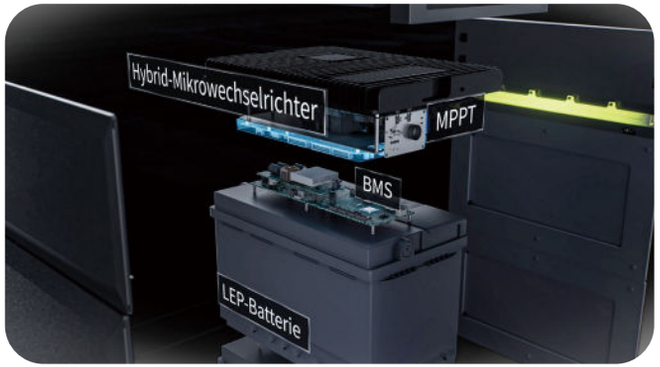
Compatible with smart meters or smart plugs, the system enables near zero feed-in to the grid, maximizing self-consumption.With support for AC-coupled and dynamic tariff, the S2400 / S4800 also integrates seamlessly with a wide range of smart home systems. Its flexible features and ecosystem compatibility empower end users with more choices and greater savings.

Technical Parameters

PV INPUT	
MPPT Voltage Range	10-100V
Max Input Current	16A x 2
Max Input Power	1000Wp x 2
AC Output	
AC Output (On Grid)	800W
AC Output (Off Grid)	2400W
Frequency	50Hz
Rated Voltage	230V
Peak Output power (5s)	3600W

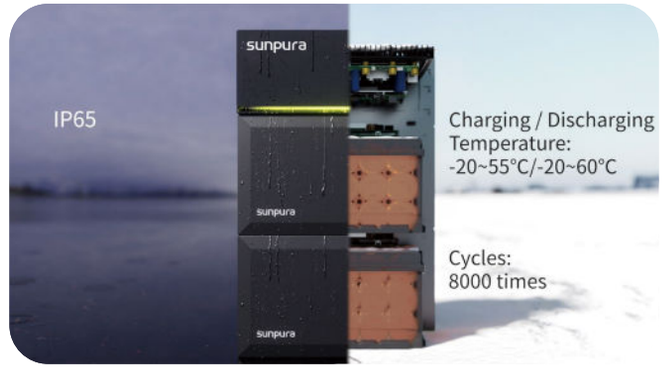
BATTERY SPEC	
Battery Type	$LiFePO_4$
Cycles	8000
Nominal Voltage	48V
Capacity	2400Wh / 4800Wh

GENERAL DATA	
Operating Temperature Range	-20~55°C
Weight (Power Box/Battery Box)	43.7kg / 69.3kg
Ingress Protection	IP65
Dimensions (WxHxD)	450x430x285mm / 450x650x285mm
Overvoltage / Overcurrent / Short Circuit / Temperature Protection	Integrated
Communication Method	WIFI/Bluetooth



All-in-One Plug& Play

Battery, Inverter & Control in one unit

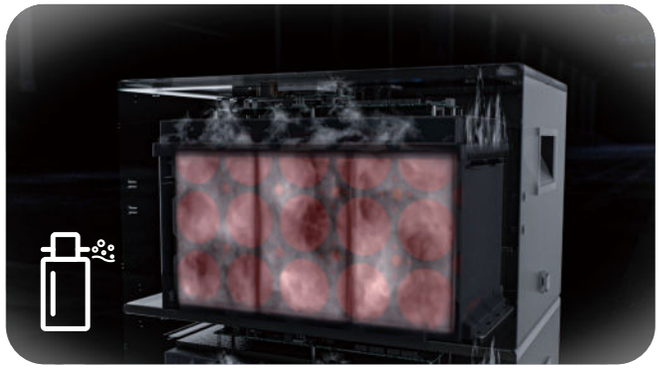


Reliable Performance

Charge cycles: 8000 times / IP65

Intelligent BMS

Accurate algorithm

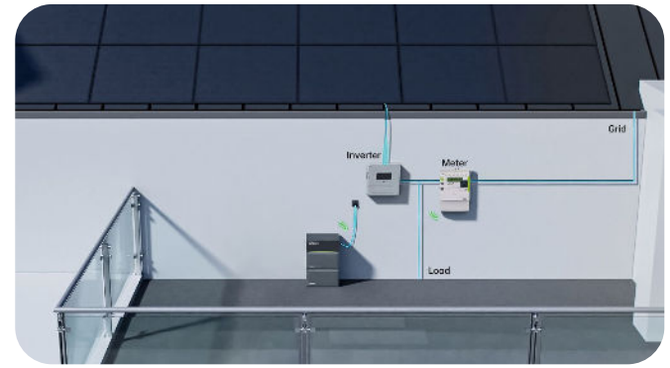


Maximum safety

Integrated aerosol fire suppression system

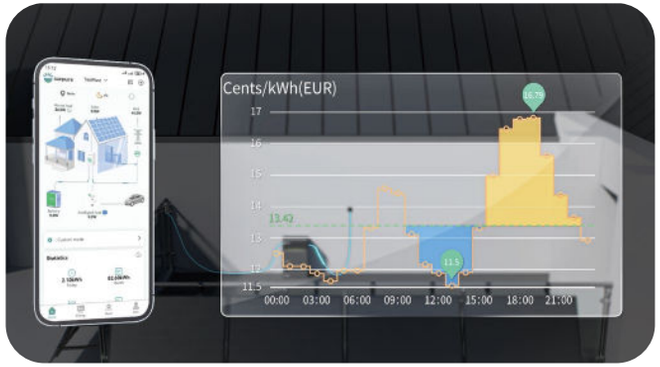
Zero Feed-in

Use your energy smarter



Easy AC-coupled

Plug & Play for flexible expansion



Dynamic Tariffs

Save with AI-optimized energy

2400W Off-Grid Power

Independent energy anywhere

Stackable expansion

Max expand up to 9.6kWh

Plug-In Home Battery

S2400 / S4800 AC-coupled

The S2400 AC / S4800 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 / S4800 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

AC Output	
AC Output (On Grid)	800W
AC Output (Off Grid)	2400W
Frequency	50Hz
Rated Voltage	230V
Peak Output power (5s)	3600W

BATTERY SPEC	
Battery Type	$LiFePO_4$
Cycles	8000
Nominal Voltage	48V
Capacity	2400Wh / 4800Wh

GENERAL DATA	
Operating Temperature Range	-20~55°C
Weight (Power Box/Battery Box)	42.7kg / 68.3kg
Ingress Protection	IP65
Dimensions (WxHxD)	450x430x285mm / 450x650x285mm
Overvoltage / Overcurrent / Short Circuit / Temperature Protection	Integrated
Communication Method	WIFI/Bluetooth

Product Certification

MODEL	S2400 / S2400 AC	S4800 / S4800 AC
EN IEC 61000 (CE EMC)	√	√
EN IEC 62109 (CE LVD)	√	√
EN IEC 62619 （battery）	√	√
EN 50549-1 (Europe: NL,LT,LU,ES,FR,IT,PL)	√	√
VDE AR-N4105 (Germany)	√	√
C10/11 (Belgium)	√	√
Belgium List	√	√
TOR Erzeuger (Austria)	√	√
IEC 60529:1989（IP 65）	√	√
RED	√	√
REACH	√	√
ROHS	√	√

- **Guaranteed Grid Integration in Europe**
- **Environment Safety at the Core**
- **Comprehensive Compliance Across Europe**
- **Proven Quality Control**
- **High Durability for Harsh Conditions**

GLASS-LIGHT PANEL KIT

P210NGL-BK 210Wp*2

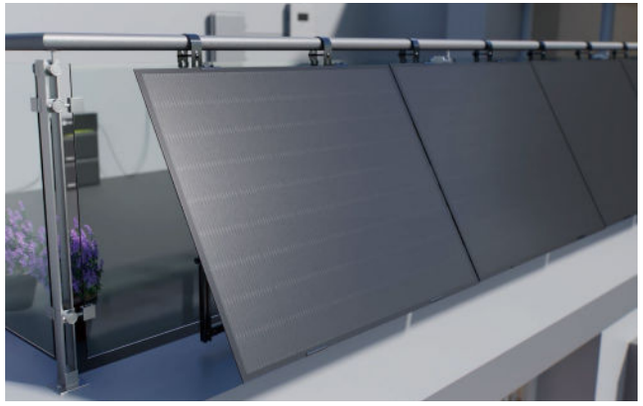
Engineered for strength and durability, our light-steel photovoltaic modules integrate reinforced steel frames with high-efficiency solar cells. These modules are ideally suited for rooftop installations, ground-mounted systems, and challenging environmental conditions.

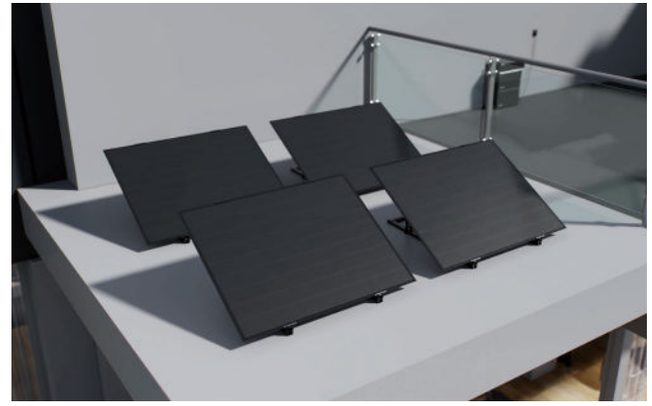
7.3KG
Panel/Pcs

N-Type
182 Wafer

All-Black
Great Aesthetics

Pre-installed
PV Panel Bracket





Technical Parameters

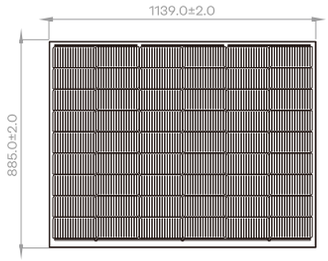
Module Electrical Data (STC)	
Max Power(W)	210
Max Power Voltage Vmp(V)	16.23
Max Power Current Imp(A)	12.94
Open Circuit Voltage Voc (V)	19.26
Short Circuit Current Isc(A)	13.70
Module Efficiency(%)	20.8

Temperature Ratings	
Power Tolerance (W)	0~+5
Temperature Coefficients of γPmp (%/°C)	-0.29
Temperature Coefficients of βVoc (%/°C)	-0.25
Temperature Coefficients of αIsc (%/°C)	+0.045
Max Over-Current	25A
NOCT (Nominal Operating Cell Temperature)	43±2°C

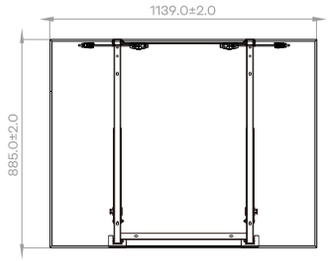
Working Condition	
Max System Voltage (V)	1500V DC
Operating Temp (°C)	-40~+85
Max Wind Load (Pa)	2400
Max Snow Load (Pa)	2400

Mechanical Parameters	
Cell Type (mm)	N type 182*91
No. of Cells and Connections	54(6x9)
Dimensions (LxWxH) (mm)	1139x885x5.1
Front AR Coated Glass (mm)	2
Backsheet (mm)	0.5
Cable Length (mm)	450,can be customized
Weight (kg)	7.3kg/panel, 3.63kg/brackets
No. of Diodes	2

Dimensions of PV Module(mm)

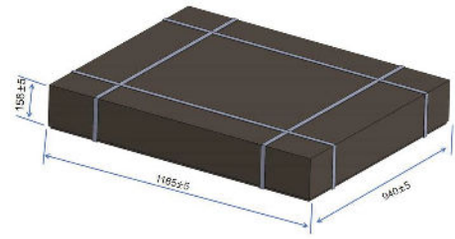


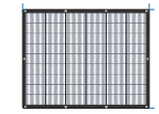
Front side



Back side

Packaging Information




2 x 210Wp Solar Panel


2 x 3m MC4 Cable

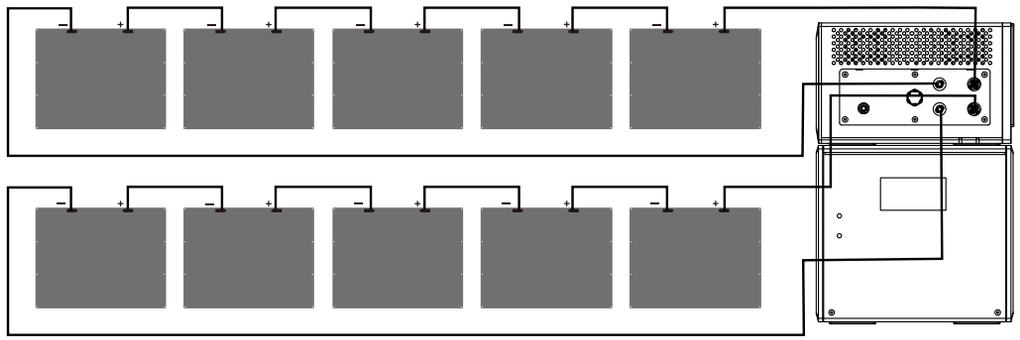

1 x Labor Protection Gloves


2 x Bracket Hook


4 x 304 Hoseclamp


2 x Anti-dropping Rope


1 x MC4 Wrench



System Guidelines

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

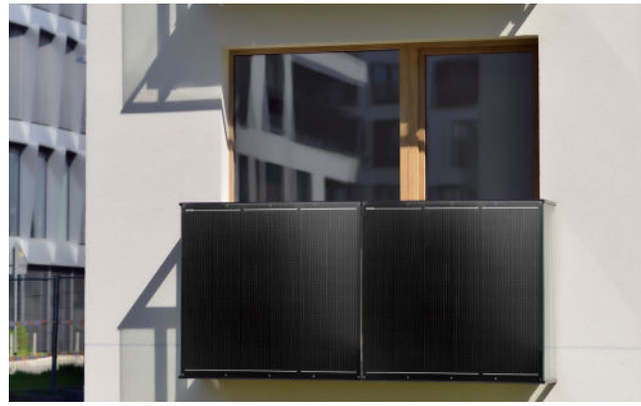
P200FL-BK 200Wp*4

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

3.3KG
Ultra Light/Pcs

~200°
Bendable

Save 50%
Installation Costs



Technical Parameters

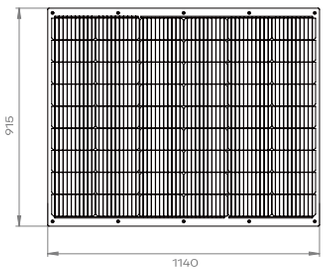
Module Electrical Data (STC)	
Max Power(W)	200
Max Power Voltage Vmp(V)	15.30
Max Power Current Imp(A)	13.10
Open Circuit Voltage Voc (V)	18.55
Short Circuit Current Isc(A)	13.70
Module Efficiency(%)	19.17

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

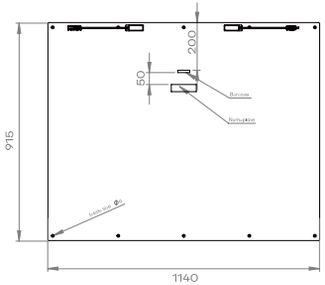
Working Condition	
Max System Voltage (V)	1000V DC
Operating Temp (°C)	-40~+85

Mechanical Parameters	
Cell Type (mm)	Monocrystalline sillicon cell 182*91
No. of Cells and Connections	54(9x2x3)
Dimensions (LxWxH) (mm)	1140x915x3
Backsheet	Black PV Backsheet /Original White
Cable Length (mm)	500,can be customized
Weight (kg)	3.3kg
Connector	MC4 compatible

Dimensions of PV Module(mm)

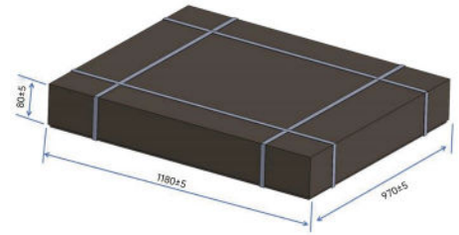


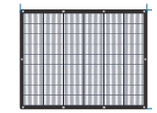
Front side



Back side

Packaging Information





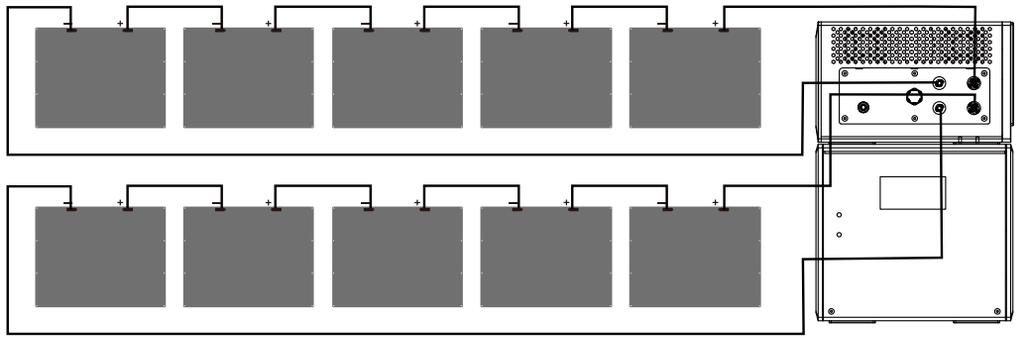
4 x 200Wp Solar Panel

4 x 3m MC4 Cable

1 x Labor Protection Gloves

1 x Anti-dropping Rope

45 x Stainless Steel Cable Tie



System Guidelines

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.

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Power You Life

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