SolarFlow 2400 AC

Effortless AI Energy Management, Shaping the Future of Smart Storage

The World's First AI-Integrated Easy-to-Install AC-Coupled Residential Storage System

SolarFlow 2400AC+AB3000X

SolarFlow 2400 AC

On-grid Terminal

Nominal Input/Output Voltage	230V a.c.
Nominal Input/Output Frequency	50Hz
Max. Input/Output Power	2400W

Off-grid Terminal

Nominal Output Voltage	230V a.c.
Nominal Output Frequency	50Hz
Max. Output Power	2400W

General Information

Power Factor	0.8(lagging)-0.8(leading)
Protective Class	I
Operating Temperature	-20℃~60℃
Type of Enclosure	IP65*
Product Size	410*302*75 mm
Net Weight	10.12KG
Gross Weight	12.96KG

Battery Charge/Discharge

Battery Voltage Range	37.5V d.c. to 54.75V d.c.
Battery Charge/Discharge Power	2400W/2600W Max
Battery Charge/Discharge Current	60A/54.17A d.c.
Expandable Battery Quantity per Unit	6
Maximum Expandable capacity	2,880Wh × 6 =17.28kWh

Wireless Information

Bluetooth	Protocol: Bluetooth 5.0
	Frequency: 2402-2480MHz
	Maximum Transmit Power: 20.0 dBm
Wi-Fi	Protocol: 802.11b/n/g
	Frequency: 2412-2472MHz
	Maximum Transmit Power: 20.0 dBm

*The device does not maintain IP65 waterproof protection when the off-grid socket is in use (plugged in) or when the waterproof cover is not properly sealed.

AB3000X

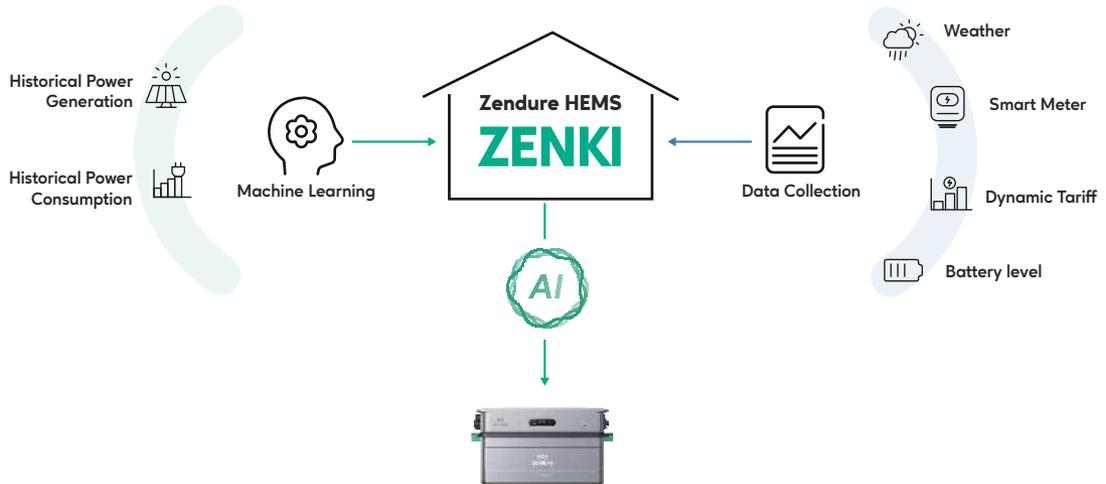|	
Battery Rated Voltage	48V d.c
Battery Life Cycle	6,000 Cycles
Rated Capacity	60Ah/2,880Wh
Battery Type	LiFePO₄
Maximum Input/Output Power	One AB3000X Battery: 2,880W
	Two or More Batteries: 3,840W
Charging Temperature	0° C ~ 55° C (32° F ~ 131° F)
Discharging Temperature	-20° C ~ 60° C (-4° F ~ 140° F)
Self-heating Function	Yes
Automatically Self-heating Function	-20° C ~ 0° C (-4° F ~ 32° F)
Storage Temperature	-30° C to 45° C (-22° F to 113° F): 1 month
	-20° C to 35° C (-4° F to 95° F): 6 months
Aerosol Fire Suppression Syst	Yes
Activation Temperature	170° C ±10° C (338° F ±18° F)
Battery Protection	Overvoltage, Overcurrent, Short-circuit, Overheat Protections
Compatibility	SolarFlow 2400 AC, AB3000X
Dimensions	477.5 × 320 × 194 mm
Weight	26.1 kg
IP Rating	IP65

ZENKI: Harness Algorithmic Intelligence for Optimal Energy Orchestration

ZENKI is the core AI technology module powering the HEMS Energy Management System. This intelligent platform predicts, schedules, and optimizes energy flows to maximize clean energy utilization, reduce costs, and enhance management convenience.

- AI algorithms analyze historical data, weather forecasts, and user behavior to deliver high-precision forecasting, enabling proactive resource planning.
- Advanced algorithms optimize operations in complex energy environments, maintaining perfect balance between production, storage, and consumption through real-time adjustments.
- The intuitive dashboard simplifies energy management complexity, providing clear visualizations, automation capabilities, and granular control options.
- ZENKI prioritizes renewable energy utilization through smart load shifting and energy arbitrage, supporting low-carbon lifestyles while reducing grid dependence.

Zendure App

Download On The
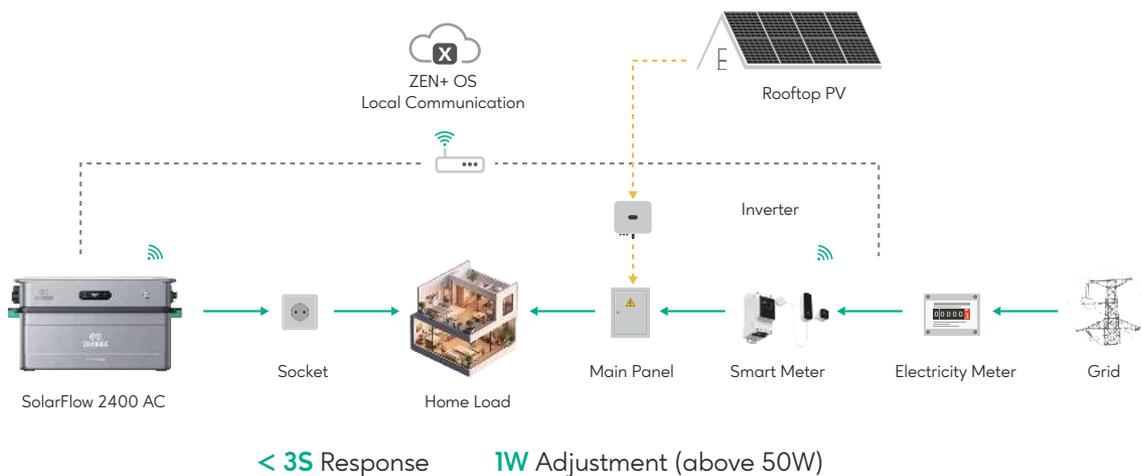**App Store**

Download For
Android

Seamlessly Access TOU Anytime, Anywhere

Easily connect to 700+ European energy suppliers across 32 markets. The HEMS optimizes your energy use, taking full advantage of dynamic tariffs to boost savings.

Enjoy ZEN+ OS by The HEMS, Take Control of Your Energy

ZEN+ OS Local Communication

Rooftop PV

Inverter

SolarFlow 2400 AC — Socket — Home Load — Main Panel — Smart Meter — Electricity Meter — Grid

< 3S Response   1W Adjustment (above 50W)

Zen+ OS, integrated with SolarFlow 2400 AC and various smart devices, empowers you to take full control of your energy. Experience instant responsiveness, unwavering reliability even without internet, and precise energy management that minimizes waste.

Store More Energy, Boost Your Savings

93%

With third-generation semiconductor technology, our system achieves up to 93% AC round-trip efficiency, maximizing energy savings and improving your energy usage effiency.
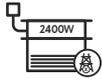
*Data is based on Zendure lab.

Cut Energy Loss, Boost Efficiency

25% Less Energy Loss

48V — ZENDURE

16V — ALTERNATIVE

· The SolarFlow 2400 AC features 48V battery, reducing energy loss by 25% compared to a 16V battery system. Saveving money on energy has never been so easy.

· Each battery unit is equipped with an innovative energy management system for separate charging and discharging. This eliminates the Barrel Effect when charging, thereby improving the charging and discharging efficiency and enhancing energy utilization efficiency.
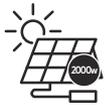
Energy Anytime with 2400W Off-Grid Backup Power

2400W

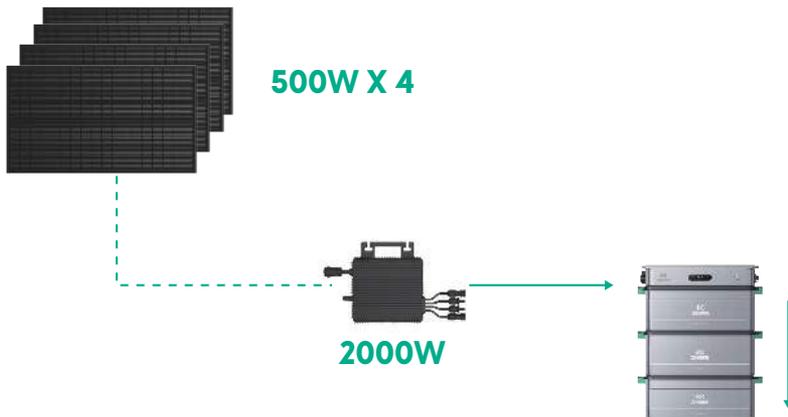Stay powered during outages by simply connecting essential appliances to SolarFlow 2400 AC, ensuring you're always prepared for emergencies.

The First 2000W Plug-and-Play AC-Coupled Microinverter Solar System

500W X 4

2000W

Those with up to 2000W microinverters can now store solar energy with our SolarFlow 2400 AC. Maximize efficiency and make the most of your energy with our smart storage solution.

Embrace the New Smart Energy Solution

Daytime

ZEN+OS
Local Communication

Grid — Electricity Meter — Smart Meter — Main Panel

Solar Panels — Inverter — SolarFlow 2400 AC — Appliances

Night

ZEN+OS
Local Communication

Grid — Electricity Meter — Smart Meter — Main Panel

Rooftop PV — Inverter — SolarFlow 2400 AC — Appliances

During the day, SolarFlow 2400 AC powers your home with solar energy and stores excess in the battery. In the evening, the battery supplies power to your home through the SolarFlow 2400 AC. This efficient energy management reduces your reliance on the grid and saves your money.

Battery Capacity Customized to Your Needs

Recommended combination			
PV Power	2000-4000W	4000-6000W	6000-8000W
Annual electricity consumption	2000-4000kWh	4000-6000kWh	6000-8000kWh
Phase	One-phase	One-phase	One-phase
Capacity	5.76kWh	11.52kWh	17.28kWh
Maximum AC Input	2400W	4800W	7200W
Maximum AC Output	2400W	4800W	7200W
Energy Saved (daily)	≈5.2kWh	≈10.4kWh	≈15.6kWh

Scenarios

Garden

Terrace

Garage

Rooftop

ZEN+ Home

Experience the power of Zen+ Home, a smart energy management hub that puts you in control while driving sustainability and cost savings, empowering energy management, taking charge of your consumption via Zendure App. It will also help you to take full control of your home appliances anywhere and anytime, resulting in a more energy-conscious lifestyle.

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The SolarFlow 2400 AC is a cost-effective plug-and-play energy storage solution featuring an AI-integrated energy management system, capable of reducing electricity costs by up to 42%. Combined with the AB3000X, it efficiently stores solar energy to meet the demands of high-power rooftop systems. Its modular design allows for hassle-free installation and scalable capacity expansion up to 17.28 kWh, significantly enhancing economic benefits and user convenience. SolarFlow 2400 AC is the optimal choice for users with existing rooftop solar PV installations yet to adopt energy storage solutions.

ZENDURE

Founded in 2017, Zendure is one of the fastest-growing EnergyTech start-ups located in the technology hubs of Silicon Valley, USA, and the Greater Bay Area, China, Japan, and Germany.

Our purpose is to accelerate a sustainable future.
Our mission is to deliver reliable and affordable clean energy for households worldwide by popularizing the latest EnergyTech.

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🌐 European site: https://eu.zendure.com
🌐 US site: https://zendure.com

Contact us

Support: support@zendure.com
PR & Influencer: pr@zendure.com
Distributors: sales@zendure.com

zendure.com
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