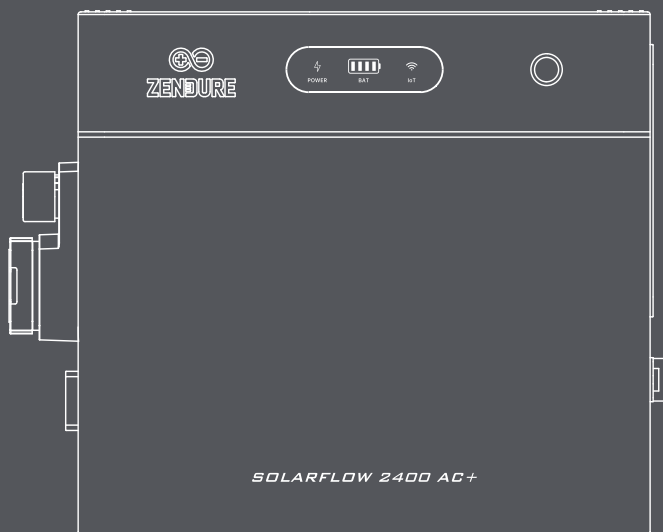




ZENDURE

The Global Pioneer of Plug-in HEMS



SolarFlow 2400 AC+

User Manual / Bedienungsanleitung / Manuel d'utilisation /
Manuale d'uso / Manual de usuario / Gebruikershandleiding /
Посібник користувача

Disclaimer

Please read all safety guidelines, warnings, and other product information in this manual carefully, and read any labels or stickers attached to the product before using. Users are fully responsible for the safe usage and operation of this product. Make sure you are familiar with the relevant regulations in your area. It is your sole responsibility to ensure compliance with these regulations while using Zendure products.

Content

1. SolarFlow 2400 AC+ Specification	2
2. Safety Instruction	3
2.1 Safety Guidelines	3
2.2 Disposal Guide	4
2.3 EC DECLARATION OF CONFORMITY	4
3. Symbols Used in This Guide	4
4. Important Tips	5
5. What's in the Box	5
6. Overview	6
6.1 System Overview	6
6.2 Product Overview	7
6.3 Button Controls	7
6.4 LED Display	8
7. Installing the SolarFlow 2400 AC+	9
7.1 Before Assemble	9
7.2 Selecting a Location for the SolarFlow 2400 AC+	9
7.3 Assembly Process	10
7.3.1 Cable Managemet	11
7.3.2 Connect to the Add-on Batteries	11
7.3.3 Connect to the Grid	12
7.4 Installing Multiple SolarFlow 2400 AC+ Sets	12
7.5 Connect to the Grid via a Circuit Breaker. (Optional)	13
8. RJ45 Communication Port Wiring (Optional)	16
8.1 Pin Definitions	16
8.2 Connect SF2400 AC+ with the Smart Meter 3CT-S/1CT-S(Optional)	16
9. Off-Grid Power Socket Usage Instructions	18
9.1 Function Overview	18
9.2 Off-Grid Output	18
9.3 Off-Grid Input	18
10. Zendure APP	19
10.1 Download	19
10.2 Registration and Login	19
10.3 Add SolarFlow 2400 AC+	19
10.4 How to Use SolarFlow 2400 AC+	19
10.4.1 Charge/Discharge Status	19
10.4.2 Energy Flow	19
10.4.3 Product Preview Image	19
10.4.4 Total Remaining Battery Capacity	20
10.4.5 Add to HEMS Swich	20
10.4.6 Device Real-time Monitoring	20
10.4.7 Device Setting	21
10.5 How to Use Home Energy Management System	22
10.5.1 Create An Energy System	22
10.5.2 System Status	23
10.5.3 Energy Plan	24
10.5.4 Historical Data	25
10.5.5 System Settings	25
10.5.6 System Management	27
10.5.7 Exception Handling Logic	27
10.6 More	27
11. Maintenance	28
11.1 Disconnection of SolarFlow 2400 AC+	28

1. SolarFlow 2400 AC+ Specification

SolarFlow 2400 AC+ Power Station	
Parameter	Specification
Model	ZDSF2400AC+
On-grid Terminal	
Nominal Input/Output Voltage	230 V a.c.
Nominal Input/Output Frequency	50 Hz
Nominal AC Output Power	800 W(default) / 2400 W(*premium)
Nominal AC Output Current	3.5 A a.c.(default) / 10.4 A a.c.(*premium)
Max. AC Input Power	3200 W
Max. AC Input Current	13.9 A a.c.
Off-grid Terminal	
Nominal Input/Output Voltage	230 V a.c.
Nominal Input/Output Frequency	50 Hz
Max. AC Output Power	3200 VA
Max. AC Output Current	13.9 A a.c
Max. AC Input Power	2400 VA
Max. AC Input Current	10.4 A a.c.
SolarFlow 2400 AC+ Battery (Port)	
Battery Type	LiFePO ₄
Battery Rated Energy	2400 Wh
Battery Rated Capacity	50 Ah
Battery Rated Voltage	48 V d.c.
Max. Charge/Discharge Power	2400 W
Max. Charge/Discharge Current	50 A d.c.
Charge Temperature	0° C to 55° C
Discharge Temperature	-20° C to 55° C
Charge/Discharge Voltage Range	37.5 V d.c. to 54.75 V d.c.
General Information	
Protection Class	Class I
PowerFactor	0.8(lagging)-0.8(leading)
Operating Temperature	-20° C to 55° C
Type of Enclosure	IP65
Dimensions	326 × 294 × 251 mm
Weight	27.8 kg
Bluetooth	Bluetooth 5.0 Frequency: 2402-2480 MHz
	Maximum Transmit: Power20.0 dBm
Wi-Fi	Wi-Fi 4 802.11 b/n/g Frequency: 2412-2472 MHz
	Maximum Transmit Power: 20.0 dBm

2. Safety Instruction

2.1 Safety Guidelines

1. Please read all current documentation before installing, using, or servicing the product, as documentation may be updated over time.
2. Please check whether the product is damaged, cracked, leaking liquids, becoming hot, or exhibiting other abnormalities, and check any cables for damage before operating. If there are any problems, please stop using the product immediately and contact our customer service.
3. To ensure safe use of the product and maintain your warranty rights, please avoid the following improper operations: overcharging, over-discharging, using non-original accessories, or disassembling the product yourself. Damage caused by such improper use is not covered under warranty. For detailed disclaimer terms, please refer to <https://eu.zendure.com/pages/warranty-policy>.
4. Do not place heavy objects on top of the product.
5. Make sure all cords and plugs are intact and dry before connecting to avoid electric shock.
6. Do not install or operate the system under extreme climatic conditions such as lightning, snow, heavy rain, strong winds, etc.
7. To reduce the risk of injury, close supervision is necessary when the product is used near children.
8. Keep hands and fingers away from the product's internal components.
9. For safety purposes, please use only the original charger and cables designed for the equipment. We are not liable for damage caused by third-party equipment, and this may render your warranty invalid.
10. Maintain a minimum clearance of 50mm between the product and any surrounding objects.
11. During the operation of the solar energy system, avoid direct sunlight to prevent the product from overheating. Do not place the product near any heat source.
12. Please install the product according to our user manual to avoid damage to the product or injury to other people.
13. Do not use this product near strong static electricity or strong magnetic fields.
14. Do not place the equipment in an environment with flammable or explosive compounds, gas, or smoke. Since the product relies on the shell to dissipate heat, exposing the enclosure to excessive heat will lead to damage.
15. To reduce the risk of damage to the electric cords and connectors, pull the connectors rather than the cord when disconnecting the product.
16. Do not use the product over its output rating. Overloads may result in a risk of fire or injury to persons.
17. Do not use any products or accessories that are damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior, resulting in fire, explosion, or risk of injury.
18. Do not operate the product with a damaged cord or plug, or a damaged output cable.
19. Do not disassemble the product. Take it to a qualified service person when service or repair is required. Incorrect reassembly may result in a risk of fire or electric shock.
20. Do not expose the product to fire or high temperatures.
21. Do not attempt to replace the internal components of the equipment by any unauthorized personnel. Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
22. The product cannot be immersed in liquids. If the product accidentally falls into the water during use, please place it in a safe and open area and stay away from it until it is completely dry. The dried product should not be used again and should be properly disposed of according to the disposal guidelines in this manual.
23. The product may feel warm when it's working. This is a normal operating condition and should not be a cause of concern.
24. To reduce the risk of electric shock, disconnect the solar photovoltaic panels, batteries, and home grid before attempting any instructed servicing.
25. When charging the battery, work in a well-ventilated area and do not restrict ventilation in any way, as inadequate ventilation may cause permanent damage to the equipment.
26. Do not clean the product with harmful chemicals or detergents. Only clean it with a dry cloth.
27. Do not move or shake the unit while operating, as vibrations and sudden impacts may lead to poor connections to the hardware inside.
28. Ensure that the product and the batteries are installed securely to avoid accidents and product damage caused by falling.
29. In case of a fire, only a dry powder fire extinguisher is suitable for this product.
30. Servicing of batteries should be performed or supervised by personnel knowledgeable about batteries and the required precautions.

2.2 Disposal Guide

1. Fully Discharge the Battery (if possible): Before disposal, ensure the battery is fully discharged. This can reduce potential hazards. Always refer to local laws and guidelines for battery recycling and disposal procedures.
2. Handling Failed Batteries: If the battery cannot be fully discharged due to malfunction or product failure, consult a licensed battery recycling facility or professional for proper and safe handling.
3. Segregation of Battery Types: Ensure batteries or cells from different electrochemical systems (e.g., lithium-ion, nickel-metal hydride) are disposed of separately. Mixing different types of batteries can lead to chemical reactions or safety risks.
4. Avoid Physical Damage: Do not expose the battery to physical impacts, punctures, or high temperatures during disposal, as it may lead to leakage, fire, or explosion.
5. Follow Local Regulations: Always adhere to local regulations and guidelines for battery disposal, as improper handling can harm the environment and violate legal requirements.

2.3 EC DECLARATION OF CONFORMITY

ZENDURE TECHNOLOGY CO., LIMITED declares that the SolarFlow 2400 AC+ complies with directive 2014/53/EU (RED), 2011/65/EU(RoHS), 2015/863/EU(RoHS).

The full text of the Declaration of Conformity is available at the following web address: <https://zendure.de/pages/download-center>

	Declaration of conformity The EU Declaration of Conformity can be requested at this address: https://zendure.de/pages/download-center
	Disposal and Recycling Disposal of packaging: dispose of the packaging separately by type of material.
	Disposal of old equipment (applies in the European Union and other European countries with separate collection (waste collection) Old equipment must not be disposed of in household waste. Every consumer is legally obligated to dispose of old equipment that can no longer be used separately from household waste, for example at a collection point for recyclables. To ensure proper recycling and avoid negative impact on the environment, electronic devices must be taken to an appropriate collection site. For this reason, electronic devices are marked with the symbol shown to the left.
	Batteries and accumulators must not be disposed of in household waste. As a consumer, you are legally obligated to dispose of all batteries and accumulators, regardless of whether they contain pollutants or not, at a designated collection point. Marked with: Cd = Cadmium, Hg = Mercury, Pb = Lead. Discharge any built-in or accessory batteries before disposing.

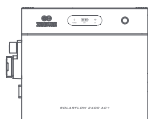
3. Symbols Used in This Guide

Symbol	Explanation
	A high-risk hazard that, if not avoided, could result in death or serious injury.
	Important information that you must pay attention to.
	Included with your product
	Optional (not included)
	Indicates additional information on correct use or useful tips.

4. Important Tips

	Grid-tied Regulation: The system is grid-tied. Please check if it is allowed in your area.
	Protect from Direct Sunlight: Ensure that the SolarFlow 2400 AC+ is placed in a shaded area to avoid rapid temperature increases that could affect performance.
	Accessory Check: Verify the necessary accessories prior to installation, as some may need to be purchased separately.
	Download the Zendure App: After installation, download the Zendure app to unlock additional smart features and remote control options.
	Grid Connection Time: Once installation and the initial startup are complete, allow approximately 1 minute for the SolarFlow 2400 AC+ to connect to the grid.
	Set Safe AC Output: Use the Zendure app to configure the AC output for home use. Ensure the output complies with your country or region's safety power limits to prevent overloads.
	Shutdown Procedure: Before removing the SolarFlow 2400 AC+, press and hold the button for 6 seconds to turn off the device, and disconnect all power cables for safety.
	Optimal Operating Conditions: It is recommended to use this product in environments ranging from 15° C to 30° C, away from water, heat sources, or sharp objects that could cause damage.
	Long-Term Storage: For long-term storage, discharge the battery to 30% and recharge it to 60% every 3 months. If it drops below 1% after use, recharge it to 60% before storing. Prolonged low power can cause irreversible damage and shorten the battery's lifespan.
	No Disassembly: Do not attempt to disassemble the product. For repairs or servicing, consult official Zendure channels. Improper handling could pose risks of fire or personal injury.
	Low SOC Protection: The battery has a 5% discharge limit to prevent over-discharge and extend its lifespan.

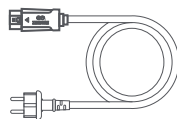
5. What's in the Box



SolarFlow 2400 AC+ *1



User Manual *1



3m 16A AC Power Cable *1



Mounting bracket kit *1



Wrench for Removing Solar Connector and AC Connector *1

Before unpacking, check the packaging for any damage (e.g., holes or cracks) . If damaged , do not unpack and contact Zendure service team immediately.

After unpacking, verify that all items are intact, complete. If anything is missing or damaged, contact customer service.