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› AFERIY P210 Portable Power Station User Manual

AFERIY P210

AFERIY P210 Portable Power Station User Manual

Model: P210 | Model Number: AF-P210-2400W

1. INTRODUCTION

Thank you for choosing the AFERIY P210 Portable Power Station. This powerful and versatile device is designed to provide reliable electricity for various applications, including camping, home backup, office use, and emergency situations. Featuring a high-capacity 2048Wh LiFePO4 battery and a 2400W (4800W surge) pure sine wave AC output, the P210 ensures stable and safe power for your electronic devices and appliances. Please read this manual carefully before using the product to ensure proper operation and maintenance.

For optimal performance and longevity, adhere to all safety guidelines and operating procedures outlined herein.

2. SAFETY INSTRUCTIONS

Always follow these basic safety precautions when using the AFERIY P210 Portable Power Station to reduce the risk of fire, electric shock, or injury:

- Do not disassemble, repair, or modify the unit. Incorrect reassembly may cause fire or electric shock.
- Do not place the unit near fire or expose it to direct sunlight or high temperatures.
- Do not charge, use, or store the unit in a bathroom or in an area exposed to water or moisture.
- Use only the original charger and cables provided with the unit.
- Do not use the unit if it is damaged or has been dropped.
- Keep the unit out of reach of children and pets.
- Ensure proper ventilation during use to prevent overheating. Do not block the ventilation openings.
- Do not insert foreign objects into the ports or openings.
- Disconnect the unit from all power sources when not in use or before cleaning.
- Dispose of the unit and its battery according to local regulations.

3. PACKAGE CONTENTS

Verify that all the following items are included in your package:

- AFERIY P210 Portable Power Station (x1)
- AC Charging Cable (EU standards) (x1)
- MC4-XT90 Cable (60CM) (x1)
- Tool Bag (x1)
- Protective Cover (x1)
- User Manual (x1)
- Warranty Card (x1)

Contenu de l'Emballage



1. AF-P210
Générateur



2. Sac à Outils



3. Cordon
d'Alimentation



4. Câble
MC4-XT90



5. Housse
Anti-poussière



6. Présentation
de l'App



7. Manuel
d'Utilisation



8. Carte de
Garantie

Image: Contents of the AFERIY P210 package, including the power station, various cables, and accessories.

4. PRODUCT OVERVIEW

Familiarize yourself with the components and ports of your AFERIY P210 Portable Power Station:

Haute Puissance

Supporte 13 appareils



1. Sortie CA x3 2400W
2. Sortie Type-C x4 (100W / 20W)
3. Sortie USB QC3.0 x2
4. Sortie CC x2
5. Sortie XT60 x1
6. Sortie Allume-cigare x1

Image: Detailed front view of the AFERIY P210, highlighting the input/output ports, display, and control buttons.

4.1. Ports and Controls

- **AC Output Ports (x3):** 220-240V, 2400W (Pure Sine Wave). Used for powering household appliances.
- **Type-C Ports (x4):** Two 100W and two 20W ports for fast charging compatible devices like laptops and

smartphones.

- **USB QC3.0 Ports (x2):** Quick Charge 3.0 ports for rapid charging of USB devices.
- **DC Output Ports (x2):** Standard DC outputs for various DC-powered devices.
- **XT60 Port (x1):** High-current output port, often used for specific DC applications or solar input.
- **Cigarette Lighter Port (x1):** 12V output for car appliances.
- **LCD Display:** Shows real-time information including input/output power, battery level, remaining charge/discharge time, and error indicators.
- **Power Button:** Turns the unit on/off.
- **LED Light:** Multi-mode LED light (continuous, flashing, SOS) for illumination.
- **AC Input Port:** For charging the power station via AC wall outlet.
- **DC Input Port:** For charging via solar panels or car charger.

4.2. Dimensions and Weight

- **Dimensions (L x W x H):** 39.8 cm x 28.0 cm x 31.5 cm (15.7 in x 11.0 in x 12.4 in)
- **Net Weight:** 22 kg (48.5 lbs)



Image: The AFERIY P210 power station with its length, width, and height measurements clearly indicated.

5. SETUP

5.1. Initial Charge

Before first use, it is recommended to fully charge the AFERIY P210. This helps to calibrate the battery management system and ensures optimal performance.

1. Connect the provided AC charging cable to the AC input port on the power station.
2. Plug the other end of the AC charging cable into a standard 220-240V wall outlet.
3. The LCD display will show the charging status. The unit will be fully charged in approximately 2 hours using AC input only.

5.2. App Connection (For models manufactured after February 2025)

For enhanced control and monitoring, download the BrightEMS mobile application. This allows you to manage the power station remotely.

1. Scan the QR code in the "Presentation de l'App" document included in your package, or search for "BrightEMS" in your mobile app store.
2. Install the application on your smartphone.
3. Follow the in-app instructions to pair your AFERIY P210 via Bluetooth or Wi-Fi.

Commande via App

Mise à niveau



Puissance actuelle



Capacité restante



Option personnalisée



Image: A user interacting with the AFERIY P210 via a mobile application, demonstrating remote control capabilities.

6. OPERATING INSTRUCTIONS

6.1. Turning On/Off

Press and hold the main Power Button for a few seconds to turn the unit on or off. The LCD display will illuminate when the unit is on.

6.2. Charging the Power Station

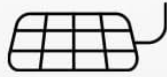
The AFERIY P210 supports multiple charging methods:

- **AC Wall Outlet:** Connect the AC charging cable to the AC input port and a wall outlet. Full charge in approximately 2 hours.
- **Solar Panels:** Connect compatible solar panels (up to 500W, 50V) to the DC input port using the MC4-XT90 cable. The built-in MPPT controller optimizes solar charging efficiency. Full charge in approximately 5 hours with 500W solar input.
- **Car Charger:** Connect a car charger (not included, but compatible with 15V/30V 8A/10A) to the DC input port. Full charge in approximately 18 hours.
- **AC + Solar Simultaneous Charging:** Combine AC (1100W) and solar (500W) input for the fastest charging, achieving a full charge in just 1.5 hours.

Recharge à 99% en 1.5H



Prise CA
Environ 2H



PV 500W (Max)
Environ 5H



Prise CA + PV 500W
Environ 1.5H



Allume Cigare
Environ 18H



Image: Visual representation of the various charging options for the AFERIY P210, including AC, solar, and car charging, with estimated charging times.

6.3. Discharging (Using Outputs)

To use the output ports, ensure the power station is turned on. Press the respective button for the output type you wish to use (e.g., AC, DC, USB) to activate it. The LCD display will show the output power.

- **AC Output:** Plug your AC appliances into the 220-240V AC outlets. Ensure the total power consumption does not exceed 2400W.

- **USB/Type-C Output:** Connect your USB-powered devices to the USB-A or Type-C ports.
- **DC/Cigarette Lighter/XT60 Output:** Connect your 12V DC devices to these ports.

6.4. Uninterruptible Power Supply (UPS) Function

The AFERIY P210 features an Uninterruptible Power Supply (UPS) function, providing seamless power during outages.

1. Connect the power station to an AC wall outlet using the AC charging cable.
2. Plug your critical devices (e.g., computer, medical equipment) into the AC output ports of the AFERIY P210.
3. In the event of a power failure, the P210 will automatically switch to battery power within 10 milliseconds, ensuring your connected devices continue to operate without interruption.

Fonctions Remarquables

Haute qualité & sécurité



Image: Illustration of the AFERIY P210's 10ms UPS function, showing it powering a computer during an outage, and highlighting its advanced BMS and pure sine wave inverter.

6.5. LED Light Operation

Press the LED Light button to cycle through its modes:

- First press: Continuous illumination.
- Second press: Flashing mode.
- Third press: SOS signal mode.
- Fourth press: Turn off the light.

7. COMPATIBILITY AND USAGE EXAMPLES

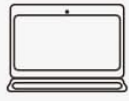
The AFERIY P210 is designed to power a wide range of devices and appliances. Below are some examples of typical runtimes for common devices:

Haute Compatibilité

2400W | 2048Wh



Lampe
(8W) **250H**



Ordinateur
(60W) **33 Fois**



Loudspeaker
(120W) **17H**



Bouilloire
(1000W) **2H**



Image: The AFERIY P210 providing power to a laptop, lamp, and other devices in an outdoor camping environment, illustrating its high compatibility.

Estimated Runtimes for Common Devices

Device	Power Consumption	Estimated Runtime
Lamp	8W	250 Hours
Laptop	60W	33 Times (Charges)
Loudspeaker	120W	17 Hours
Kettle	1000W	2 Hours
Lawnmower	850W	2 Hours
Chainsaw	1100W	1.5 Hours
Electric Drill	800W	2.1 Hours
Water Pump	120W	13.6 Hours
Hair Dryer	1300W	1.2 Hours
Oven	2200W	0.8 Hours
Coffee Machine	600W	2.7 Hours
Refrigerator (500L)	N/A	2 Days
Television	110W	16 Hours
Electric Pan	1500W	1.1 Hours
Ice Maker	600W	2.7 Hours
Projector	200W	8 Hours
Camera	12Wh	136 Times (Charges)
Drone	40Wh	40 Times (Charges)

Note: Runtimes are estimates and may vary based on actual power consumption, device efficiency, and environmental factors.

8. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your AFERIY P210:

- **Storage:** Store the power station in a cool, dry place, away from direct sunlight and extreme temperatures. For long-term storage, charge the unit to 50-80% every 3-6 months to preserve battery health.
- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Do not use abrasive cleaners or immerse the unit in water. Ensure all ports are free of dust and debris.
- **Battery Health:** The LiFePO4 battery is designed for over 4000 charge cycles, providing a lifespan of more than 10 years with proper care. Avoid consistently fully discharging the battery to 0% or keeping it at 100% for extended periods when not in use.
- **Ventilation:** Ensure the ventilation vents are clear and unobstructed during operation to prevent overheating.

9. TROUBLESHOOTING

If you encounter issues with your AFERIY P210, refer to the following common problems and solutions:

Troubleshooting Guide

Problem	Possible Cause	Solution
Unit does not turn on	Battery is completely discharged.	Connect the unit to an AC outlet and charge it for at least 10 minutes before attempting to turn it on.
No output from AC ports	AC output not activated; Overload; Overheating.	Press the AC output button to activate. Reduce the load if overloaded. Allow the unit to cool down if overheated.
Slow charging via solar panel	Insufficient sunlight; Panel not optimally angled; Panel power too low.	Ensure panels are in direct sunlight and angled correctly. Use higher wattage panels if needed. Check cable connections.
LCD display not working	Unit is off; Display malfunction.	Ensure the unit is turned on. If the problem persists, contact customer support.
Unit making unusual noise	Cooling fan operating; Internal issue.	The cooling fan operates normally during high load or charging. If the noise is excessive or unusual, discontinue use and contact support.

If the problem persists after trying these solutions, please contact AFERIY customer support for assistance.

10. SPECIFICATIONS

AFERIY P210 Portable Power Station Specifications

Feature	Detail
Model	P210 (AF-P210-2400W)
Battery Type	LiFePO4 (Lithium Iron Phosphate)
Capacity	2048Wh
Rated Output Power	2400W
Surge Power	4800W
AC Output Voltage	220-240V (Pure Sine Wave)
AC Input (Charging)	1100W (Full charge in ~2 hours)
Solar Input (Charging)	Max 500W, 50V (MC4-XT90)
Car Charger Input (Charging)	15V/30V 8A/10A
USB-A Output	2x QC3.0
USB-C Output	2x 100W, 2x 20W
DC Output	2x DC, 1x XT60, 1x Cigarette Lighter
UPS Function	<10ms automatic switch
Charge Cycles	>4000 cycles to 80% capacity
Noise Level	As low as 15dB (under 30dB at full power)
Dimensions (L x W x H)	39.8 x 28.0 x 31.5 cm
Weight	22 kg

11. WARRANTY AND SUPPORT

AFERIY provides a comprehensive warranty and dedicated customer support for your P210 Portable Power Station.

11.1. Warranty Information

The AFERIY P210 comes with a standard **5-year warranty**. This warranty can be extended for free to a total of **7 years**. Please refer to the included Warranty Card for details on how to register your product for the extended warranty and for specific terms and conditions.

11.2. Customer Support

For any questions, technical assistance, or warranty claims, please contact AFERIY customer service. You can find contact information on the warranty card or by visiting the official AFERIY website.

Please have your model number (AF-P210-2400W) and purchase date ready when contacting support.