

## AFERIY P210

# AFERIY P210 Portable Power Station 2400W User Manual

Brand: AFERIY | Model: P210

## 1. INTRODUCTION

The AFERIY P210 Portable Power Station is a robust and versatile energy solution designed to provide reliable power for various applications, including home backup, outdoor camping, RV adventures, and emergency situations. With a powerful 2400W output and a long-lasting 2048Wh LiFePO4 battery, it ensures your essential devices remain powered. Key features include fast dual charging (AC + Solar), pure sine wave output for sensitive electronics, a built-in Uninterruptible Power Supply (UPS) for seamless power transfer, and mobile app control for convenient management.

## 2. PACKAGE CONTENTS

Upon receiving your AFERIY P210 Portable Power Station, please ensure all items listed below are included in the package:

- AFERIY P210 Portable Power Station
- AC Charging Cable
- MC4-to-XT90 Solar Cable
- Protective Cover
- User Manual
- Tool Bag

# Package Contents



1. AF-P210 power station



2. Tools Bag



3. AC charging cable



4. MC4-XT90 Cable



5. Anti-Dust Cover



6. App Introduction



7. User Manual



8. Warranty Card

Image: The package contents of the AFERIY P210 Portable Power Station, including the unit, cables, cover, manual, and tool bag.

## 3. PRODUCT OVERVIEW: PORTS AND FEATURES

The AFERIY P210 is equipped with a comprehensive array of ports and features to meet diverse power needs.

### Front Panel

- **DC Outputs:** 12V/10A (cigarette lighter port), 12V/3A (x2), 12V/25A (XT60).
- **USB Outputs:** QC 3.0 (x2), PD 20W (x3), PD 100W (x1).
- **Display Screen:** Shows battery percentage, input/output wattage, time remaining, and various status indicators.
- **Power Button:** To turn the unit on/off.

- **Light Button:** To activate the built-in LED light with multiple modes.

## Rear Panel

- **AC Outputs:** 6 x 100V-120V AC outlets (Pure Sine Wave, 2400W total).
- **AC Input:** For wall charging (1100W Max).
- **DC(XT90) Input:** For solar charging (11.5-50V, 500W Max).
- **Overload Protection:** Reset button for circuit breaker.

## Top Panel

- **Storage Compartment:** Conveniently store cables and small accessories.
- **Integrated Handles:** For easy portability.

# Charge Up to 16 Devices

Output power 2400W



x6  
AC



x2  
USB QC3.0



x4  
Type-C



x2  
DC



x1  
XT60



x1  
Cigarette lighter



Image: Detailed view of the AFERIY P210's front panel, highlighting the various DC, USB, and display features.

# Monitor and control via smart app

Monitor power usage, adjust settings, etc.



Status Confirmation



Battery Level Check



Customised Option



Image: AFERIY P210 connected to a laptop and controlled via a smartphone app, demonstrating remote monitoring capabilities.

## 4. SETUP

### Unboxing

The AFERIY P210 is securely packaged in a double-boxed container with ample Styrofoam padding to protect the unit during transit. Carefully remove all components from the packaging.

### Initial Charging

It is recommended to fully charge the power station before its first use to optimize battery performance and longevity.

## AC Wall Charging

Connect the provided AC charging cable to the AC input port on the rear panel of the power station, then plug the other end into a standard wall outlet. The unit supports up to 1100W AC charging, allowing a full charge in approximately 2 hours.

## Solar Charging

The AFERIY P210 supports solar charging via its DC(XT90) input port, accepting up to 500W. Use the provided MC4-to-XT90 solar cable to connect compatible solar panels. Ensure the input voltage does not exceed 50V to prevent damage and maintain warranty validity. For faster charging, you can combine AC and solar input simultaneously for a full charge in just 1.5 hours.

# Full Recharge in 1.5 H

## Multiple recharging options

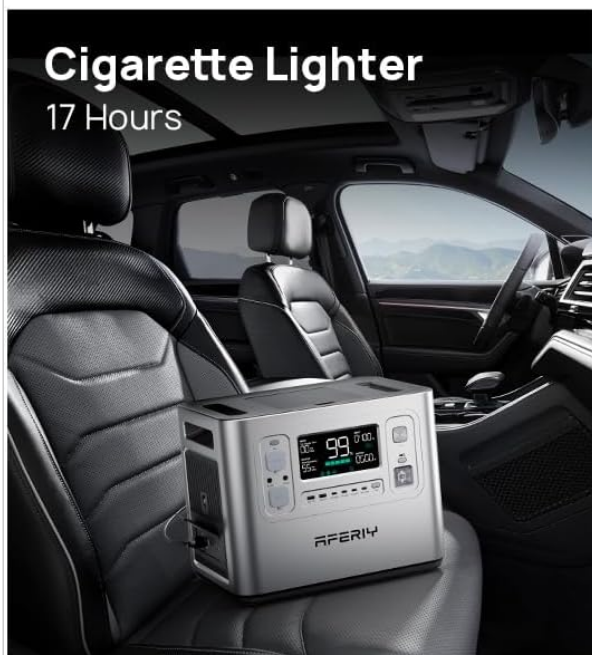


Image: Visual representation of various charging methods for the AFERIY P210, including AC, solar, and car charging.

# Electricity Freedom (500W Max)

Support Solar Input - Eco-friendly



Image: The AFERIY P210 being charged by a solar panel in an outdoor setting, emphasizing eco-friendly power generation.

## Package included

- 1\* AFERIY P210 (Sliver)
- 1\* AC Plug Power Cord
- 1\* MC4-XT90 Cable
- 1\* Tools Bag
- 1\* Dust Cover
- 1\* Coverage Card
- 1\* User Manual



Image: Infographic showing charging times for the AFERIY P210 using 500W solar, 1100W AC, and combined AC+solar methods.

## 5. OPERATING INSTRUCTIONS

### Powering On/Off

Press and hold the main Power button on the front panel to turn the unit on or off. The display screen will illuminate, showing the current battery status.

### Using AC Outputs

To activate the AC outlets, press the AC button located near the AC output ports on the rear panel. The display will indicate AC output is active. The P210 provides a pure sine wave output, ensuring stable and safe power for sensitive electronics.

### Using DC Outputs

Press the DC button on the front panel to enable the DC output ports (12V/10A, 12V/3A, 12V/25A). The display will show DC output is active.

### Using USB Outputs

The USB-A (QC 3.0) and USB-C (PD 20W, PD 100W) ports are automatically active when the unit is powered on. Simply plug in your devices to begin charging.

### Display Information

The digital display provides real-time information including battery charge level, input wattage, output wattage, and estimated time remaining for charging or discharging.

### Built-In UPS Function

In the event of a power failure, the built-in UPS system automatically switches power within 10 milliseconds, ensuring uninterrupted operation for connected devices like computers, servers, and medical equipment.

### Mobile App Control

Download the BrightEMS mobile app to monitor battery status, manage power settings, and control the power station remotely via wireless connection.

# High-Power High-Duration

2400W | 2048Wh



Camping light  
(8W) **230Hrs**



Laptop (60Wh)  
**30Times**



Phone (10W)  
**180Times**



Electric kettle  
(1000W) **1.8Hrs**



Image: AFERIY P210 powering various devices like a camping light, laptop, phone, and electric kettle in an outdoor setting.

# No Blackout, Free Output Full Protection

## 10ms UPS

Faster response time, safeguarding your precision equipment.



## BMS

## 4800W Surge

Intelligent BMS Mainboard,  
Unafraid of Power Fluctuations

## PureSine WaveInverter

Deliver Ultra-Stable Clean Power  
to Shield **Your Appliances**



Image: Infographic detailing the AFERIY P210's 10ms UPS, intelligent BMS, and pure sine wave inverter for stable power.



Image: A family using the AFERIY P210 to power kitchen appliances during an outage, demonstrating its reliable backup power.




Image: A person using the AFERIY P210 to power power tools in a workshop, illustrating its utility for work and daily tasks.

## Reliable Backup Power

2048Wh Capacity – Stay Prepared for Outages and Emergencies

 Lights  
10W **178**hours

 Refrigerator  
120W **15**hours

 Microwave  
300W **1.4**hours

 Hair Dryer  
1000W **1.8**hours



Image: People enjoying outdoor entertainment powered by the AFERIY P210, showcasing its use for car fridges, coffee makers, and electric grills.



Image: The AFERIY P210 providing emergency power to a home office setup, ensuring critical devices remain operational during outages.

## Easy Organization

Designed with a built-in groove to conveniently store power cables and essentials, making everyday use more practical and organized.



Image: A smartphone displaying the AFERIY mobile app interface, demonstrating wireless control and monitoring of the power station.

## 6. SAFETY AND PROTECTION

The AFERIY P210 is built with advanced safety features to protect both the device and your connected electronics.

- **LiFePO4 Battery:** Equipped with a durable and safe LiFePO4 battery, rated for over 4000 charge cycles.
- **Pure Sine Wave Output:** Delivers stable and clean power, preventing damage to sensitive devices.
- **Built-in BMS:** The intelligent Battery Management System (BMS) provides 6 layers of protection:
  - Over-Voltage Protection
  - Short-Circuit Protection
  - Over-Current Protection
  - Over-Discharge Protection
  - Over-Load Protection
  - Over-Charge Protection
- **Overload Protection Reset:** A dedicated button on the rear panel allows for easy resetting in case of an overload.

## Flexible Power Control

5-Level Power Adjustment to Adapt to Various Charging Scenarios, Ensuring Efficiency and Battery Longevity.

Long press for 10s to enter adjustment mode, then increase input by 200W with each press. (300W-1100W)



Image: Infographic illustrating the six types of battery protection provided by the AFERIY P210's intelligent BMS.

## 7. MAINTENANCE

To ensure the longevity and optimal performance of your AFERIY P210 Portable Power Station, follow these maintenance guidelines:

- **Cleaning:** Regularly wipe the exterior with a soft, dry cloth. Avoid using harsh chemicals or abrasive materials.
- **Storage:** Store the unit in a cool, dry place away from direct sunlight and extreme temperatures.

- **Cable Management:** Utilize the built-in top compartment for convenient storage of power cables and accessories, keeping them organized and protected.
- **Charging Frequency:** For prolonged storage, it is recommended to charge the unit to 50-80% every 3-6 months to maintain battery health.

## Power for Work & Daily Life

Ultra-High Compatibility – Supports 99% of Large Appliances

- |   |  |
|---|--|
|  Chain Saw<br>880W <b>2hours</b>       |  Electric Hammer<br>1080W <b>1.7hours</b> |
|  Circular Saw<br>1400W <b>1.3hours</b> |  Lawn Mower<br>1200W <b>1.4hours</b>      |



Image: The AFERIY P210's top storage compartment with cables, illustrating its design for easy organization and practicality.

## 8. TROUBLESHOOTING

If you encounter any issues with your AFERIY P210, please refer to the following common troubleshooting steps:

- **Unit Not Turning On:** Ensure the battery is charged. If not, connect to an AC outlet or solar panel.
- **No Output from Ports:** Verify that the specific output (AC, DC, USB) is enabled via its respective button. Check the display for any error indicators.
- **Overload Protection Triggered:** If an overload occurs, the unit may shut down. Disconnect some devices and press the Overload Protection reset button on the rear panel.
- **Charging Issues:** Ensure all charging cables are securely connected. For solar charging, check panel placement and sunlight exposure. Verify input voltage is within the specified range (11.5-50V).
- **App Connectivity:** Ensure Bluetooth/Wi-Fi is enabled on your mobile device and the power station is within range.

For further assistance, please contact customer support.

## 9. SPECIFICATIONS

Feature	Specification
Model	AF-P210
Battery Capacity	2048Wh (40Ah/51.2V) LiFePO4
AC Charge Input	1100W Max (100V-120V~50/60Hz)
DC(XT90) Input	11.5-50V 500W Max
USB-A Output	QC3.0 18W Max (x2)
USB-C Output	PD 20W Max (x3), PD 100W Max (x1)
XT60 Output	12V/25A
DC 12V Output	12V/3A (x2)

Car Port Output	12V/10A
LED Light	1W
AC Output	100V-120V~50/60Hz (Rated 2400W Total)
UPS Mode	Rated 1100W, Peak 2200W
Item Weight	54 Pounds
Product Dimensions	15.43"L x 10.98"W x 12.72"H
Material	ABS

## 10. WARRANTY AND SUPPORT

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The AFERIY P210 Portable Power Station comes with a comprehensive warranty and dedicated customer support.

- **Standard Warranty:** Enjoy peace of mind with a 5-year warranty.
- **Extended Warranty:** The warranty can be extended to 7 years upon successful registration.
- **Lifetime Customer Support:** Benefit from lifetime customer support from our expert US-based team.
- **Contact Support:** For any after-sales issues or technical assistance, please email [support@afery.com](mailto:support@afery.com).