FF FLASHFISH E103

FF Flashfish E103 Portable Power Station User Manual

Model: E103 | Brand: FF FLASHFISH

1. Introduction

Thank you for choosing the FF Flashfish E103 Portable Power Station. This device is designed to provide reliable power for various indoor, outdoor, and emergency scenarios. Featuring a 179Wh LiFePO4 battery, 300W AC output, and multiple charging options, it offers a versatile and portable energy solution. Please read this manual thoroughly before use to ensure safe and optimal operation.

2. Safety Instructions

Always follow these basic safety precautions to reduce the risk of injury or damage to the unit:

- Do not disassemble, repair, or modify the unit.
- Keep the unit away from fire, water, and extreme temperatures.
- Do not use or store the unit in direct sunlight or high temperatures.
- Avoid dropping, heavy impacts, or strong vibrations.
- Keep out of reach of children.
- Ensure proper ventilation during use and charging.
- Use only recommended accessories and charging cables.

3. Product Overview

The FF Flashfish E103 Portable Power Station is equipped with various ports and features for diverse power needs.



Figure 3.1: Overview of the FF Flashfish E103 showing its 8 output ports including AC, USB-A, USB-C, DC5521, and a 12V/10A cigarette lighter port, along with a 2W LED flashlight.

3.1. Ports and Indicators

- **Power Button:** Turns the unit on/off.
- **LCD Display:** Shows battery percentage, input/output power, remaining time, and frequency.
- **AC Output (2x 120V/300W):** For devices requiring standard wall power.
- **USB-C Output (1x 60W):** For fast charging compatible devices.
- **USB-A Output (2x 18W):** For charging various USB devices.
- **DC5521 Output (2x):** For DC-powered devices.
- **Car Lighter Output (1x 12V/10A):** For automotive accessories.
- **LED Flashlight (2W):** Provides illumination with multiple modes.



Figure 3.2: Front view of the power station, highlighting the LCD display, power button, and various output ports.

3.2. Key Features

- **179Wh LiFePO4 Battery:** Durable and long-lasting with 3,000+ life cycles.
- **300W AC Output (600W Peak):** Powers a wide range of electronics.
- **UPS Function:** Provides uninterruptible power supply during outages.
- **Fast Charging:** Full charge in 70 minutes with combined AC+DC input (190W Max).
- **Portable Design:** Weighs only 6.6 lbs, ideal for travel and outdoor use.

4. Setup

4.1. Initial Charging

Before first use, fully charge the power station. This ensures optimal battery performance and calibration.

1. Connect the provided AC charging cable to the AC input port on the power station.

2. Plug the other end into a standard wall outlet.
3. The LCD display will show the charging status. The unit is fully charged when the battery indicator shows 100%.



Figure 4.1: The power station can be charged via AC outlet, solar panel, or car charger. Combined AC+DC charging can achieve a full charge in approximately 70 minutes.

4.2. Alternative Charging Methods

- **Solar Charging:** Connect a compatible solar panel (not included) to the DC input port. Ensure the solar panel is positioned to receive maximum sunlight.
- **Car Charging:** Use a car charger (not included) to charge the unit from your vehicle's 12V/24V cigarette lighter port.

5. Operating Instructions

5.1. Powering On/Off

Press and hold the Power button for 3 seconds to turn the unit on or off. The LCD display will illuminate when the unit is on.

5.2. Using Output Ports

To use a specific output port (AC, USB, DC), press the corresponding button next to the port section. The indicator light for that section will turn on, signifying it is active.

Video 5.1: Official Flashfish video demonstrating the features and various output ports of the E103 Portable Power Station, including its 300W AC output and multiple USB ports for charging devices like laptops, phones, and drones.

5.3. LCD Display Information

The smart LCD display provides real-time information:

- **Battery Percentage:** Current charge level.
- **Input/Output Power:** Real-time power consumption or charging rate.
- **Remaining Time:** Estimated time until empty or full, based on current usage.
- **Function Indicators:** Icons for AC, DC, USB, and LED light status.

5.4. UPS Function

The Uninterruptible Power Supply (UPS) function allows the power station to provide continuous power to connected devices even during a power outage. When connected to an AC wall outlet, the power station will pass through power to

connected devices while simultaneously charging its internal battery. If the grid power fails, it will automatically switch to battery power within 0.02 seconds.

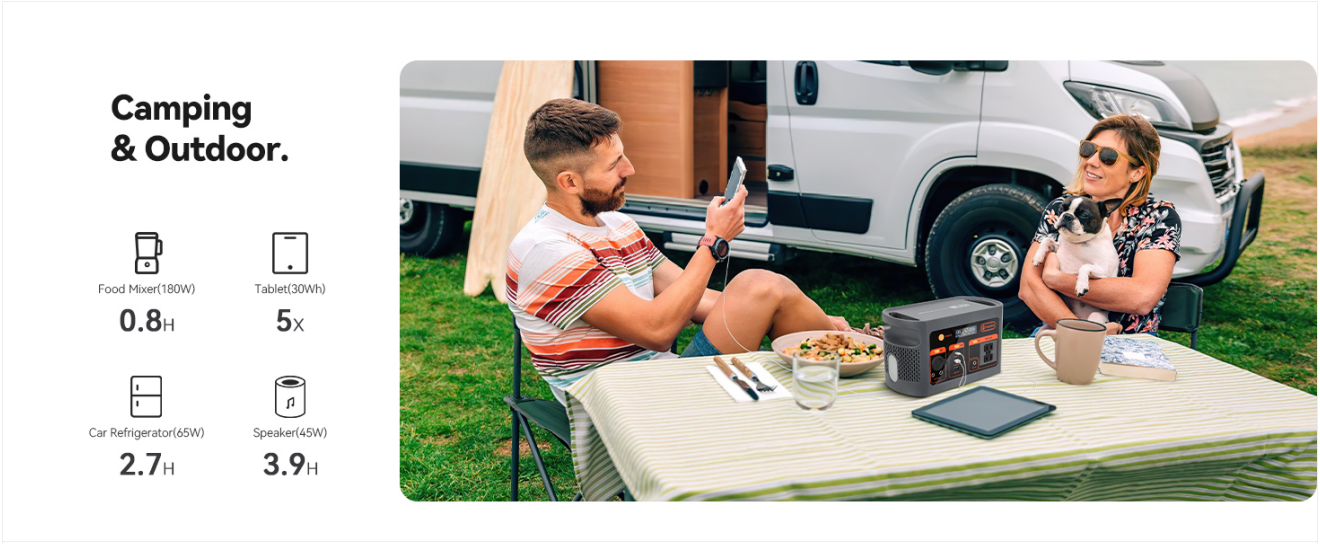


Figure 5.2: Illustration of the UPS function, showing the power station providing continuous power to devices with a rapid 0.01s switching time during a power interruption.

5.5. LED Light Modes

The integrated 2W LED flashlight offers four lighting modes:

- **Reading Light Mode:** Standard illumination.
- **Half-Bright Mode:** Reduced brightness for extended use.
- **Full-Bright Mode:** Maximum brightness.
- **SOS Mode:** Flashes an SOS signal for emergencies.



Figure 5.3: The power station's LED light in use during a camping scenario, illustrating its reading light and SOS modes.

6. Maintenance

6.1. Storage

Store the power station in a cool, dry place, away from direct sunlight and corrosive materials. For long-term storage, charge the unit to 50-80% every 3-6 months to preserve battery health.

6.2. Cleaning

Use a soft, dry cloth to clean the exterior of the unit. Do not use abrasive cleaners or immerse the unit in water.

6.3. Battery Care

The LiFePO4 battery is designed for longevity. Avoid fully discharging the battery frequently, as this can reduce its overall lifespan. Regular partial discharges and recharges are beneficial.

7. Troubleshooting

If you encounter issues with your FF Flashfish E103, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not turn on	Battery is completely discharged.	Charge the unit using the AC adapter for at least 30 minutes.
AC output not working	AC output not activated. Device power exceeds 300W.	Press the AC button to activate. Check device wattage; reduce load if necessary.
USB ports not charging	USB output not activated. Cable or device incompatibility.	Press the USB button to activate. Try a different cable or device.
Slow charging	Using a low-power charging source.	Ensure you are using the original AC adapter or a high-wattage solar panel/car charger. Consider combined AC+DC charging.
Unit overheats	Poor ventilation. Excessive load.	Ensure adequate airflow around the unit. Reduce the number or power of connected devices.

8. Specifications

Detailed technical specifications for the FF Flashfish E103 Portable Power Station:

Feature	Detail
Model Name	E103
Battery Type	LiFePO4
Capacity	179Wh
AC Output	2x 120V/300W (Peak 600W)
USB-C Output	1x 60W
USB-A Output	2x 18W
DC Output	2x DC5521
Car Lighter Output	1x 12V/10A
AC Input	Max 100W
DC/Solar Input	Max 90W
Combined Charging	AC+DC Max 190W (Full charge in ~70 min)
UPS Function	Yes (0.02s switching)
LED Light	2W, 4 modes (Reading, Half-Bright, Full-Bright, SOS)
Dimensions	10.79"L x 5.79"W x 6.42"H
Weight	6.6 lbs

Feature	Detail
Life Cycles	3000+

9. Warranty and Support

9.1. Warranty Information

The FF Flashfish E103 Portable Power Station comes with a 12-month warranty from the date of purchase. This warranty covers manufacturing defects and workmanship. It does not cover damage caused by misuse, accidents, unauthorized modifications, or normal wear and tear.

9.2. Customer Support

For technical assistance, warranty claims, or any questions regarding your product, please contact FF FLASHFISH customer support. Refer to the contact information provided with your purchase or visit the official FF FLASHFISH website for support details.