

EF ECOFLOW EF-DL-H02-3UP

EF ECOFLOW DELTA 3 Ultra Plus Portable Power Station with 2x400W Solar Panel User Manual

Brand: EF ECOFLOW | Model: EF-DL-H02-3UP

1. INTRODUCTION AND OVERVIEW

The EF ECOFLOW DELTA 3 Ultra Plus Portable Power Station with 2x400W Solar Panels is a versatile power solution designed for reliable energy supply in various scenarios, including home backup, outdoor activities, and off-grid living. This system features a 3072Wh LiFePO4 battery, capable of delivering 3600W of continuous power with a 7200W surge capacity. Its modular design allows for expandable capacity from 3kWh up to 11kWh, adapting to diverse power requirements.

The power station is engineered for durability and longevity, utilizing an advanced LiFePO4 battery and an EV-grade cell-to-chassis (CTC) structure, ensuring a 10-year lifespan under daily use. It incorporates a 24/7 smart battery management system (BMS) for protection against extreme temperatures and heavy loads. The system also offers multiple charging options and a rapid <10ms Uninterruptible Power Supply (UPS) feature for seamless power transfer during outages.

30% Tax Rebate

a. You could apply for the 26 USC 25D: Residential clean energy credit for qualified solar electric property costs. The Residential Clean Energy Credit equals 30% of the costs of new, qualified clean energy property for your home installed anytime from 2022 through 2032. The credit percentage rate phases down to 26 percent for property placed in service in 2033 and 22 percent for property placed in service in 2034.

b. Qualified expenses including: Solar electric panels and Battery storage technology (beginning in 2023). Battery storage technology must have a capacity of at least 3 kilowatt hours. Note: only valid for EcoFlow DELTA Pro Ultra, EcoFlow DELTA Pro 3, EcoFlow DELTA Pro, EcoFlow DELTA 3 Ultra, EcoFlow DELTA 3 Ultra Plus and EcoFlow Solar Panels. Accessories such as the Smart Home Panel 2 and Smart Generator are not eligible.

c. You may be able to take credit if you made energy saving improvements for your home located in the United States. The home doesn't have to be your main home. Existing homes and new constructions qualify. Solar power for batteries energy is a must. Rentals do not qualify. Must be grid-tied. No costs relating to a solar panel or other property installed as a roof (or portion thereof) will fail to qualify solely because the property constitutes a structural component of the structure on which it is installed.

Residential Clean Energy Credit - More Details on IRS*

d. *Disclaimer: Individual eligibility depends on specific tax circumstances. Homeowners should visit the IRS website to see if they qualify for the credit. This page was last updated on July 3, 2025. Any updates or changes are subject to the latest information provided by the Internal Revenue Service. Please be aware that EcoFlow does not provide assurances or guarantees concerning potential tax credits that may be associated with our products. Any information we provide is solely for educational purposes only and should not be construed as legal advice. EcoFlow can provide no guarantees, assurances, or representations that tax credit deductions, or other similar benefits may be available with respect to or in connection with any of our products. We recommend you rely on the expertise of a tax professional for accurate and personalized tax advice.



Image 1.1: The DELTA 3 Ultra Plus providing stable power to household appliances, demonstrating its 3600W output and 7200W surge capability.

EV-Grade CTC Structure

Built with a cell-to-chassis (CTC) structure, DELTA 3 Ultra Plus is drop-resistant (0.2m) - protecting against overnight condensation and off-road bumps during transport. You get stable power even in the most demanding conditions.



Image 1.2: Overview of the six versatile charging methods available for the DELTA 3 Ultra Plus, highlighting its rapid charging capabilities.

2. WHAT'S INCLUDED

Your package includes the following components:

- 1 x EF ECOFLOW DELTA 3 Ultra Plus Portable Power Station
- 2 x EF ECOFLOW 400W Portable Solar Panels
- Necessary charging cables (AC charging cable, car charging cable, solar charging cable)
- User Manual and Warranty Card

Please inspect all items upon receipt to ensure they are present and undamaged. If any items are missing or damaged, contact customer support immediately.

3. SETUP

3.1 Initial Charge

Before first use, fully charge the DELTA 3 Ultra Plus. Connect the AC charging cable to a standard wall outlet. The display will show the charging progress. A full charge from 0% to 80% typically takes under an hour using X-Stream fast charging.

3.2 Solar Panel Connection

To connect the 400W solar panels:

1. Unfold the solar panels and position them in direct sunlight for optimal charging.
2. Connect the solar charging cable to the solar input port on the DELTA 3 Ultra Plus.
3. Connect the other end of the solar charging cable to the solar panels. Ensure a secure connection.

The power station's display will indicate solar input wattage. For maximum efficiency, adjust the panel angle throughout the day to follow the sun.

Deeper Insights, Easier Control

Monitor your energy usage, savings, and solar generation—all with one intuitive dashboard. Easily track battery status, real-time electricity rates, and financial savings.

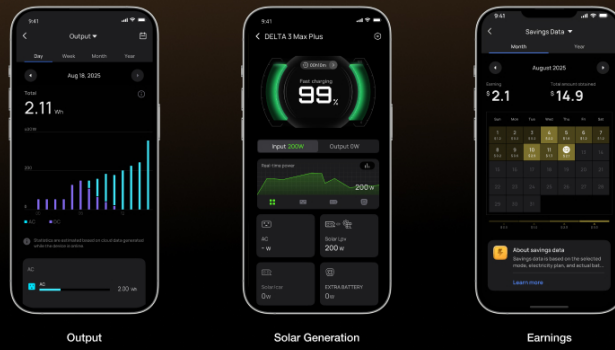


Image 3.1: Connecting the solar panel to the DELTA 3 Ultra Plus for solar charging, illustrating an outdoor setup.

3.3 Home Connection Options

The DELTA 3 Ultra Plus offers two primary methods for home integration:

- **Manual Transfer Switch:** Allows seamless switching between grid power and the DELTA 3 Ultra Plus to meet diverse energy needs.
- **Inlet Box:** Connect the built-in AC socket with an Inlet Box to power your home appliances directly.



Image 3.2: Visual representation of connecting the power station to a home using either a manual transfer switch or an inlet box.

4. OPERATING INSTRUCTIONS

4.1 Powering On/Off

Press and hold the main power button for 3 seconds to turn the unit on or off. The LCD screen will illuminate, displaying battery status and output information.

4.2 AC Output

To use the AC outlets:

1. Ensure the DELTA 3 Ultra Plus is powered on.
2. Press the AC ON/OFF button to activate the AC output. The AC indicator on the screen will light up.
3. Plug your devices into the available AC outlets. The unit provides 4 x 120V, 20A AC outputs and 1 x TT-30 RV Port (120V, 30A).
4. To turn off AC output, press the AC ON/OFF button again.

WEATHERPROOF & DURABLE

With an IP68 waterproof rating, the 400W is protected against debris, dirt, and rain, making it ideal for off-grid life, camping and RV adventures.

IP68
waterproof



Image 4.1: Front panel of the DELTA 3 Ultra Plus, detailing the various output ports including AC, USB-A, and USB-C.

4.3 DC and USB Output

To use DC or USB ports:

1. Ensure the DELTA 3 Ultra Plus is powered on.
2. Press the DC ON/OFF button (if applicable) to activate DC output.
3. Plug your devices into the USB-A (18W), USB-C (140W, 45W), or 12V cigarette lighter port.
4. To turn off DC/USB output, press the corresponding ON/OFF button.

Video 4.2: Official product video from EcoFlow Inc. demonstrating the DELTA 3 Ultra Plus in various usage scenarios, including powering home appliances and charging devices. This video highlights the product's versatility and ease of use.

4.4 Smart App Features

The EcoFlow app provides enhanced control and monitoring capabilities:

- **Smart Remote Switching:** Reduce waste and increase runtime for essential devices by remotely managing power output.

- **Smart Power Reserve:** Set a desired battery threshold to automatically shed non-essential loads during outages.
- **AI Mode:** Optimize charging during low-cost periods and use during peak times to save on electricity bills.
- **Self-Powered:** Store solar energy to reduce grid dependency and lower electricity costs.
- **Deeper Insights:** Monitor energy usage, savings, and solar generation with an intuitive dashboard, tracking battery status, real-time electricity rates, and financial savings.

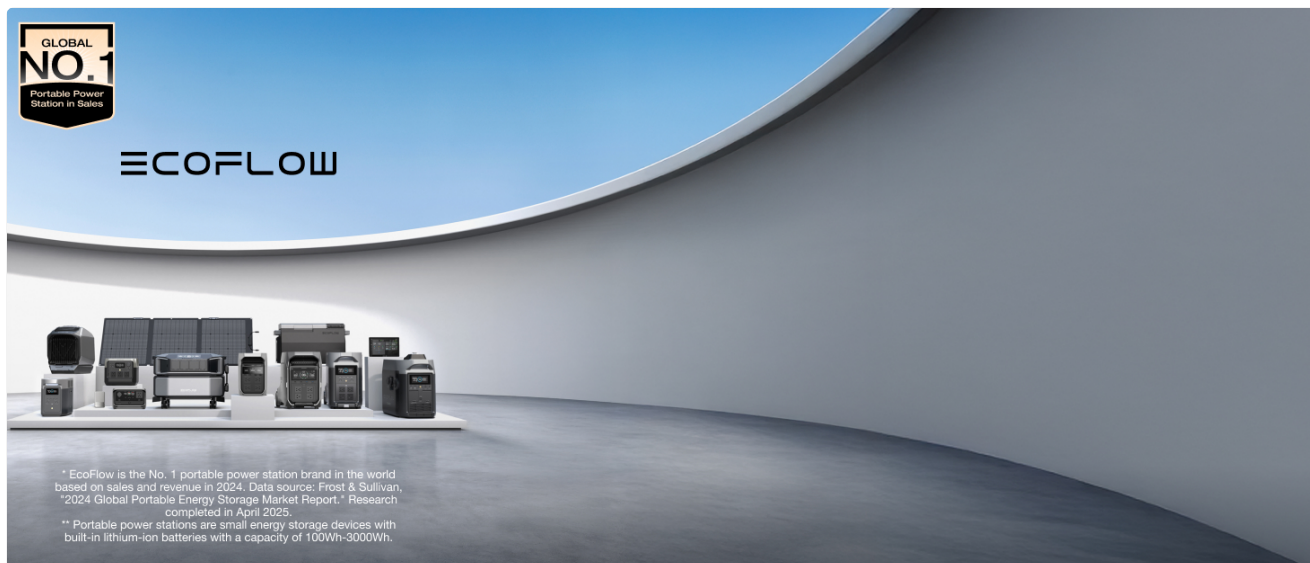


Image 4.3: The EcoFlow app interface demonstrating smart remote switching and power reserve functionalities for optimized energy management.

5. MAINTENANCE

5.1 General Care

- Keep the power station and solar panels clean and dry. Use a soft, dry cloth for cleaning.
- Avoid exposing the unit to extreme temperatures or direct sunlight for prolonged periods when not in use.
- Ensure proper ventilation around the unit during operation and charging.

5.2 Battery Longevity

The DELTA 3 Ultra Plus is designed for 10 years of daily use thanks to its LiFePO4 battery. To maximize battery lifespan:

- Store the unit in a cool, dry place when not in use.
- For long-term storage, maintain a charge level between 30% and 80%.
- Avoid fully discharging the battery frequently.



Image 5.1: The advanced Smart Battery Management System (BMS) ensures 24/7 protection and extends battery life by monitoring various parameters.

6. TROUBLESHOOTING

If you encounter issues with your DELTA 3 Ultra Plus, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not power on	Low battery, power button not pressed correctly	Charge the unit. Press and hold the power button for 3 seconds.
AC output not working	AC output not activated, overload, low battery	Press AC ON/OFF button. Reduce load. Charge the unit.
Solar charging not working	Insufficient sunlight, incorrect panel connection, damaged cable/panel	Ensure direct sunlight. Check cable connections. Inspect panels/cables for damage.
Unit displays an error code	Internal fault, specific issue	Refer to the full user manual for specific error code meanings and solutions. Contact customer support if the issue persists.

For more detailed troubleshooting, please consult the comprehensive user manual provided with your product or visit the official EF ECOFLOW support website.

7. SPECIFICATIONS

Key technical specifications for the EF ECOFLOW DELTA 3 Ultra Plus Portable Power Station and 400W Solar Panels:

Feature	Specification
Brand	EF ECOFLOW
Model Name	DELTA 3 Ultra Plus with 2x400W Solar Panels
Model Number	EF-DL-H02-3UP
Battery Type	LiFePO4
Battery Capacity	3072Wh (Expandable to 11kWh)
AC Output Power	3600W (7200W Surge)
Total AC Outlets	4 x 120V, 20A AC Outlets + 1 x TT-30 RV Port (120V, 30A)
USB-C Output	1 x 140W Max, 2 x 45W Max
USB-A Output	1 x 18W Max
DC Output	12V Cigarette Lighter Port, Anderson Port (12V, 30A)
AC Charging Input	1800W (0-80% in 89 mins)
Solar Charging Input	1600W (0-80% in 101 mins with 400W panels)
UPS Function	<10ms Auto-Switch
Noise Level	25dB (under 600W load)
Product Dimensions	24.1"L x 12.9"W x 15.6"H

Feature	Specification
Solar Panel Rated Power	400W per panel
Solar Panel Efficiency	22.40%
Solar Panel Waterproof Rating	IP68



Image 7.1: Detailed specifications for the 400W Portable Solar Panel, including its construction and electrical characteristics.

8. WARRANTY AND SUPPORT

8.1 Warranty Information

The EF ECOFLOW DELTA 3 Ultra Plus Portable Power Station comes with a **5-year manufacturer warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

8.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact EF ECOFLOW customer support through their official website or the contact information provided in your product packaging. You can also find additional resources and FAQs online.

Online Resources: Visit the [EcoFlow Inc. Brand Store](#) for product information and support.