

EF ECOFLOW EF-SG-M100

EF ECOFLOW 100W 12V Rigid Solar Panel User Manual (2-Pack)

Model: EF-SG-M100

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your EF ECOFLOW 100W 12V Rigid Solar Panels. Please read this manual thoroughly before installation and operation. Retain this document for future reference.

The EF ECOFLOW 100W Rigid Solar Panels are designed for high efficiency and durability, featuring monocrystalline PV modules and IP68 waterproofing. They are suitable for various applications, including RVs, marine setups, farm batteries, and integration with EF ECOFLOW Power Kits and ecosystems.



Image: Two EF ECOFLOW 100W Rigid Solar Panels.

2. WHAT'S IN THE Box

Verify that all items are present upon unpacking:

- 2 x 100W Rigid Solar Panels
- User Manual
- Warranty Card

Note: Mounting accessories and charging cables (e.g., solar to XT60) are sold separately and are not included in this package.

What's in the box?



1. 2 x 100W Rigid Solar Panel

2. User Manual and Warranty Card

*The solar to XT60 charging cable is included in EcoFlow portable solar panels.

Image: Contents of the product package.

3. KEY FEATURES

- **High Efficiency:** Achieves up to 23% conversion efficiency with high-purity monocrystalline silicon cells, optimizing power generation even in less ideal conditions.
- **All-Weather Durability:** IP68 waterproofing ensures the panels are dustproof, debris-proof, and resistant to heavy rain and wind.
- **Robust Construction:** Built with multiple layers including highly protective lamination, tempered glass, EVA film, monocrystalline solar cells, a high weatherproof backsheet, and an anodized aluminum frame for longevity.
- **Easy Integration:** Designed for seamless compatibility with EF ECOFLOW Power Kits and other ecosystem components.

HIGH EFFICIENCY

With high-purity silicon, you'll get 23% conversion efficiency.



Image: Solar panels demonstrating high efficiency.

ALL WEATHER READY

IP68 rating makes it dirt, dust, debris and even waterproof.

IP68
RATING

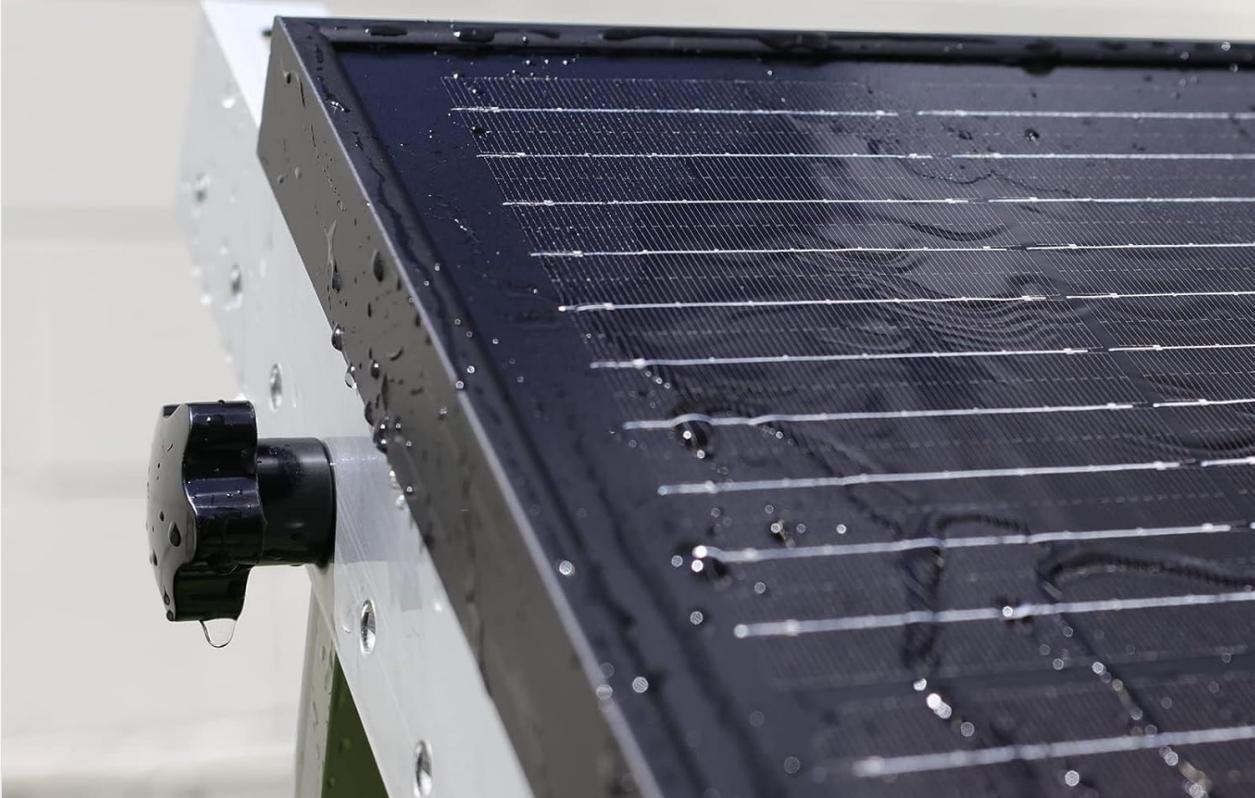


Image: Solar panel with water droplets, illustrating IP68 rating.

BUIL TO LAST & PREMIUM QUALITY

Highly Protective Lamination
and Tempered Glass

EVA Film

Monocrystalline Solar Cell

EVA Film

High Weatherproof
Backsheet

Anodized Aluminum

Image: Internal structure and quality materials of the solar panel.

4. SETUP AND INSTALLATION

The EF ECOFLOW 100W Rigid Solar Panels are designed for straightforward installation. They feature pre-drilled holes for easy mounting.

4.1 Mounting

- 1. Choose a Location:** Select a location that receives maximum direct sunlight throughout the day. Consider surfaces like RV rooftops, marine vessels, or fixed structures.
- 2. Secure Mounting Brackets:** Use appropriate mounting brackets (sold separately) such as Z-brackets or adjustable tilt mounting brackets. Align the brackets with the pre-drilled holes on the solar panel frame.
- 3. Fasten Panels:** Securely fasten the panels to your chosen surface using suitable hardware. Ensure all connections are tight to prevent movement, especially in windy conditions.

Warning: Ensure the mounting surface is structurally sound to support the weight of the panels and withstand environmental factors. Consult a professional if unsure.

EASY SET UP

Securing Adjustable Tilt Mounting Brackets and Z-Brackets.



Image: Details of mounting holes for easy setup.

FIX TO YOUR ENVIRONMENT

RVs, roofs, boats, tiny houses & more.



Image: Examples of solar panel installations in various environments.

4.2 Electrical Connection

- 1. Identify Connectors:** Each solar panel is equipped with standard MC4 connectors.
- 2. Connect to Power System:** Connect the solar panels to your EF ECOFLOW Power Kit or other compatible solar charge controller/battery system using appropriate solar cables (sold separately). Ensure correct polarity (+ to + and - to -) to avoid damage.
- 3. Series or Parallel:** Depending on your power system's requirements, you may connect multiple panels in series or parallel. Refer to your power system's manual for specific wiring diagrams and voltage/current limits.

5. OPERATING INSTRUCTIONS

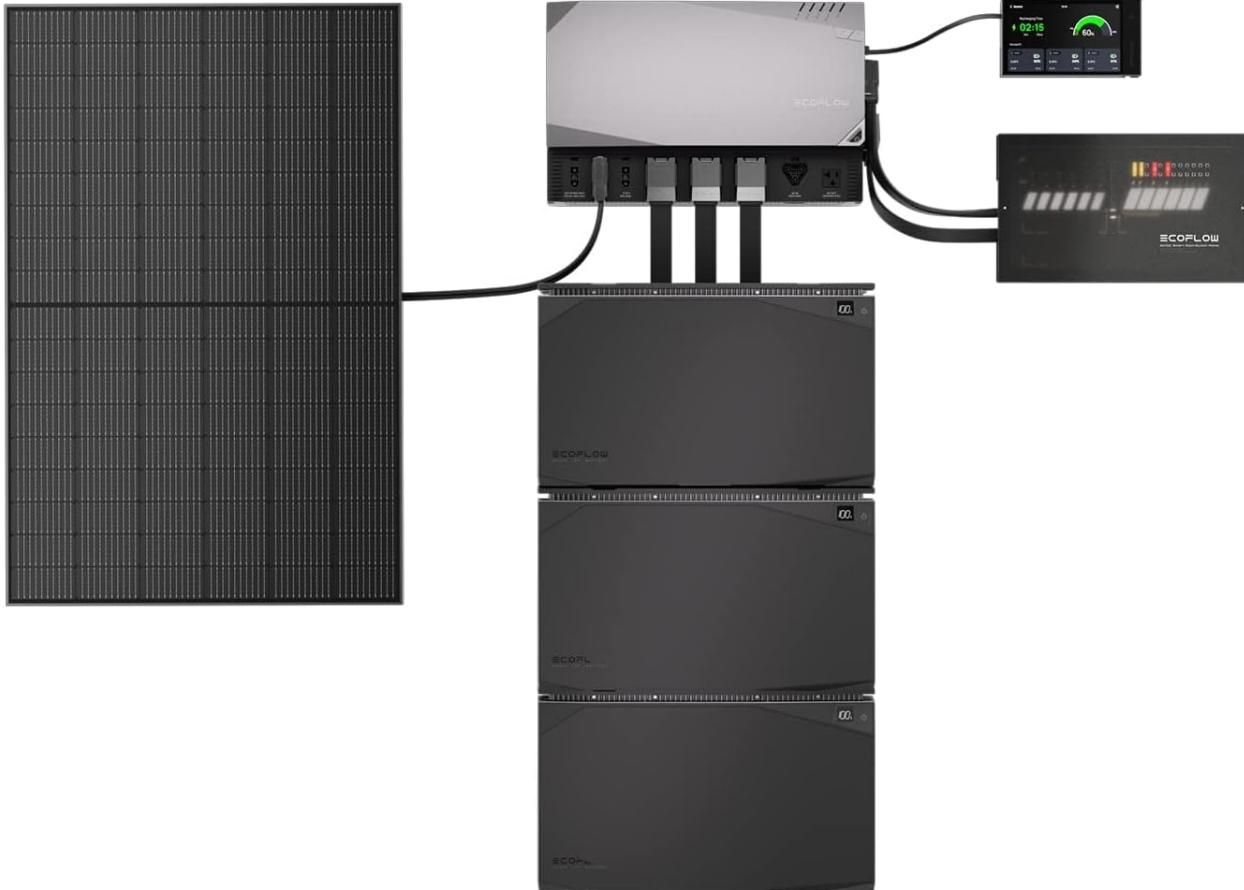
Once installed and connected, your EF ECOFLOW 100W Rigid Solar Panels will begin generating electricity when exposed to sunlight.

- 1. Sunlight Exposure:** Position the panels to receive maximum direct sunlight. Any shading, even partial, can significantly reduce power output.
- 2. Monitoring:** If connected to an EF ECOFLOW Power Kit or a smart charge controller, monitor the input

power and battery charging status via the device's display or app.

3. **Optimal Angle:** For fixed installations, consider the optimal tilt angle for your geographic location to maximize annual energy harvest. Adjustable tilt brackets can help achieve this.

IDEAL FOR ECOFLOW POWER KITS



*Power Kits components sold separately.

Image: Solar panel integrated with an EF ECOFLOW Power Kit.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your solar panels.

- **Cleaning:** Periodically clean the surface of the solar panels with a soft cloth and mild, non-abrasive cleaner to remove dust, dirt, bird droppings, or other debris. Ensure the panels are cool before cleaning.
- **Inspection:** Regularly inspect the panels for any physical damage, such as cracks in the glass, loose frames, or damaged cables. Check electrical connections for corrosion or looseness.
- **Shading:** Ensure no new obstructions (e.g., growing trees, new structures) are casting shadows on the panels.

7. TROUBLESHOOTING

If you encounter issues with your solar panels, consider the following common troubleshooting steps:

- **No Power Output:**

- Check for sufficient sunlight exposure.
- Verify all electrical connections are secure and correctly polarized.
- Inspect cables for damage.
- Ensure the solar charge controller or power station is functioning correctly.

- **Low Power Output:**

- Clean the panel surface if dirty.
- Check for partial shading from nearby objects.
- Verify the panel's angle is optimized for the current sun position.
- Consider ambient temperature; extreme heat can slightly reduce efficiency.

- **Physical Damage:** If the panel glass is cracked or the frame is bent, contact customer support. Do not attempt to repair damaged panels yourself.

8. SPECIFICATIONS

Specification	Value
Brand	EF ECOFLOW
Model Number	EF-SG-M100
Material	Monocrystalline Silicon
Product Dimensions (single panel)	38.6" L x 23.1" W x 1.2" H (approx. 98cm L x 58.7cm W x 3cm H)
Item Weight (single panel)	13.7 Pounds (approx. 6.2 kg)
Efficiency	23%
Maximum Power	100 Watts
Maximum Voltage	12 Volts
AC Adapter Current	45 Amps
Waterproofing Rating	IP68
UPC	842783117489

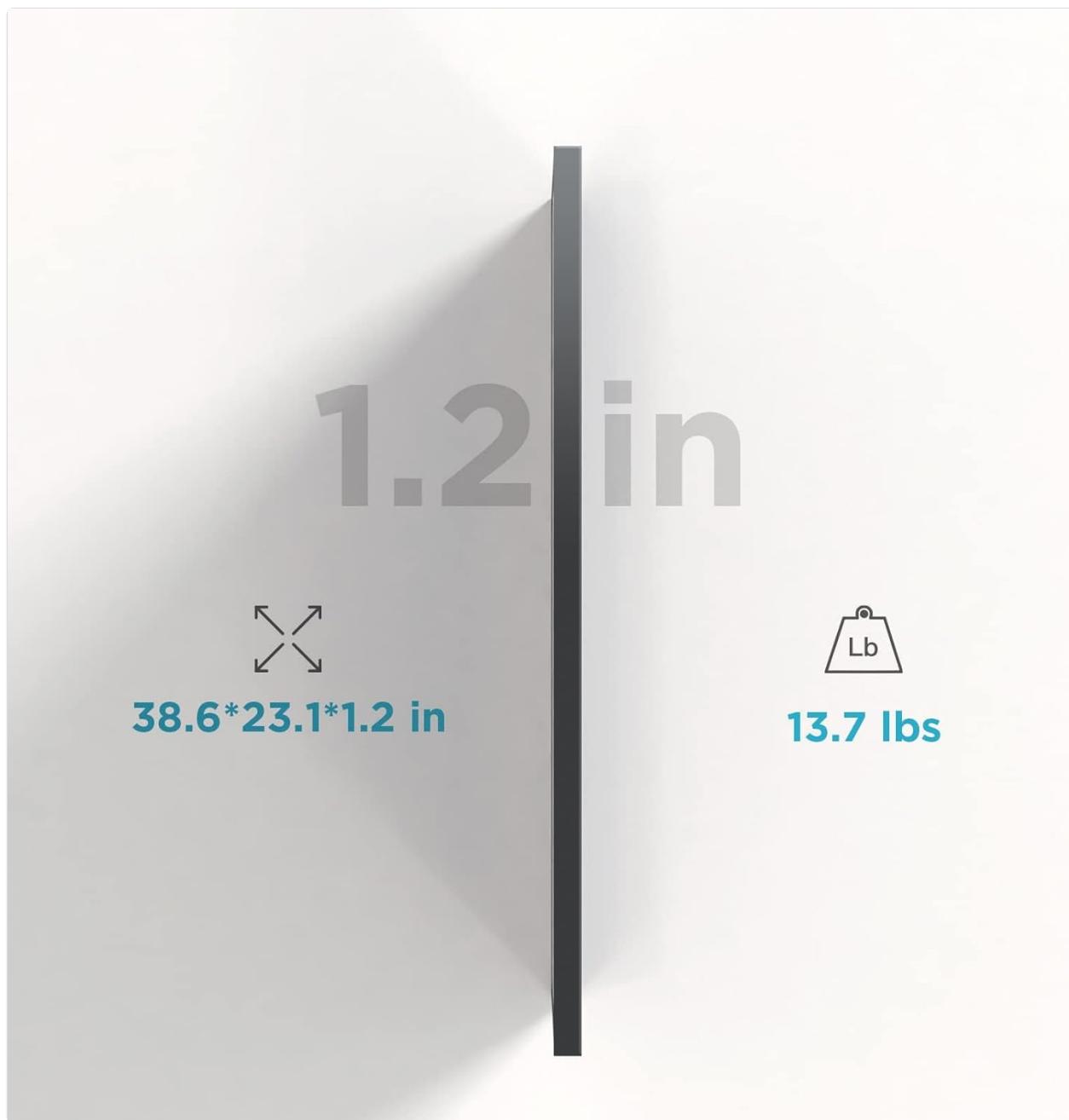


Image: Solar panel dimensions and weight.

9. WARRANTY AND SUPPORT

Your EF ECOFLOW 100W Rigid Solar Panels come with a warranty. Please refer to the included Warranty Card for detailed terms and conditions, including warranty period and coverage.

For technical support, troubleshooting assistance, or warranty claims, please contact EF ECOFLOW customer service. Contact information can typically be found on the Warranty Card or the official EF ECOFLOW website.

Online Resources: For additional information, FAQs, and product updates, visit the official EF ECOFLOW website.

Related Documents - EF-SG-M100