

Manuals.plus /

› ECO-WORTHY /

› ECO-WORTHY 260 Watt Flexible Solar Panel Kit User Manual

## ECO-WORTHY EPV-260-60F

# ECO-WORTHY 260 Watt Flexible Solar Panel Kit

User Manual - Model: EPV-260-60F

## 1. PRODUCT OVERVIEW

The ECO-WORTHY 260 Watt Flexible Solar Panel Kit is designed to provide efficient and reliable power for various applications, including RVs, boats, tents, and off-grid systems. This kit includes two 130W flexible solar panels and a 30A PWM charge controller, offering a lightweight, durable, and easy-to-install solution for your energy needs.

Key features include:

- **High Efficiency:** Converts 30% more electricity compared to standard 100W panels, capable of generating up to 520 Wh per day with 4 hours of full sunlight.
- **Flexible and Thin Design:** Ultra-thin at only 2mm, these panels can conform to curved surfaces and are less prone to breakage than traditional rigid panels.
- **Anti-Reflux Protection:** Integrated blocking diodes prevent battery discharge at night, protecting the circuit board from current feedback.
- **Advanced Charge Controller:** The 30A PWM charge controller is compatible with lead-acid, gel, and lithium phosphate batteries, featuring dual USB outputs for charging mobile devices, and multiple protections (short-circuit, open-circuit, reverse, overload).



Image 1.1: Overview of the ECO-WORTHY 260 Watt Flexible Solar Panel Kit, showing two flexible solar panels, a charge controller, and various cables.

## 2. WHAT'S IN THE BOX

Your ECO-WORTHY 260 Watt Flexible Solar Panel Kit includes the following components:

- 2 x 130W Flexible Solar Panels
- 1 x 30A PWM Charge Controller
- 1 x Pair of 5m Solar Cables
- 1 x Pair of Y-Branch Connectors

## 3. SETUP AND INSTALLATION

The flexible design of these solar panels allows for versatile installation on various surfaces, including curved roofs of RVs and boats. Ensure the installation area is clean and dry before proceeding.

### 3.1 Panel Placement

Choose a location that receives maximum direct sunlight throughout the day. The flexible panels can be mounted using adhesive or by hanging them with hooks, depending on your application.

# EASILY INSTALLED

Hung with hooks or fixed to the surface with adhesive



Image 3.1: Examples of flexible solar panel installation, showing adhesive mounting on a roof and hanging on a vehicle side.

# FIT ALL KINDS OF SURFACE/ROOFS



Image 3.2: The flexible solar panels are suitable for various surfaces and roofs, including RVs, boats, and temporary setups.

## 3.2 Wiring Diagram

Follow the diagram below for correct wiring of the solar panels to the charge controller and battery. Ensure all connections are secure and properly insulated.

1. Connect the battery to the charge controller first.
2. Connect the solar panels to the charge controller.
3. Connect your load (e.g., lights, devices) to the charge controller's load terminals (if applicable).

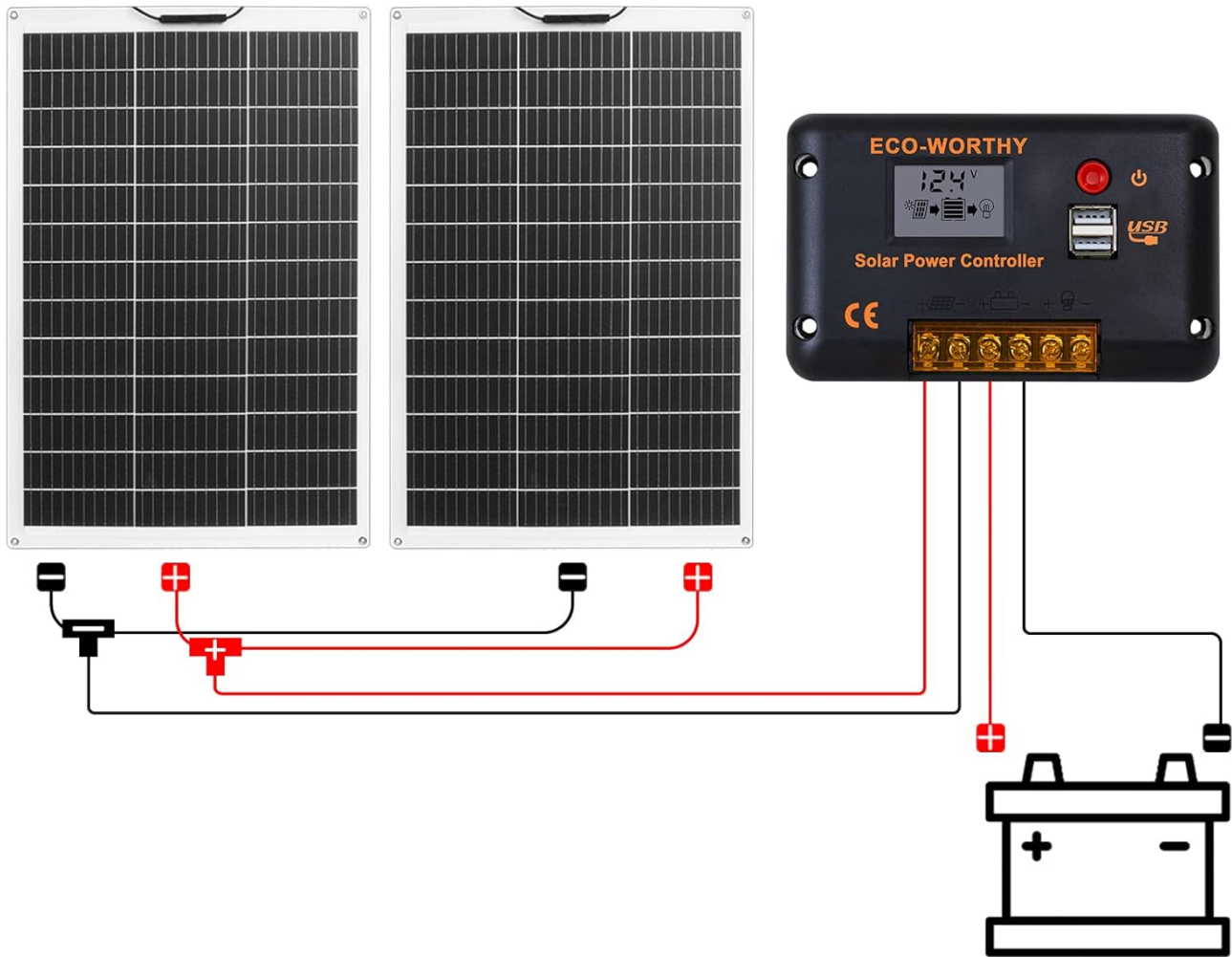


Image 3.3: Wiring diagram illustrating the connection from solar panels to the charge controller and then to the battery.

**Important:** Always connect the battery to the charge controller before connecting the solar panels to prevent damage to the controller. Disconnect in reverse order.

## 4. OPERATING INSTRUCTIONS

Once installed, the solar panel kit will begin generating power when exposed to sunlight. The 30A PWM charge controller manages the charging process and protects your battery.

### 4.1 Power Generation

Under optimal conditions (4 hours of full sunlight), this 260W kit can generate approximately 1.04 kWh per day. The actual output may vary based on weather conditions, panel orientation, and shading.

# GENERATE 1.04KWH/DAY

Under 4 hours full sunshine(130W\*2Pcs)



Image 4.1: An RV equipped with multiple flexible solar panels, demonstrating the system's capacity to generate power.

## 4.2 Charge Controller Functions

The 30A PWM charge controller features a display that shows real-time system status, including battery voltage and charging current. It also provides:

- **Cell Phone Charge:** Two USB outputs allow direct charging of mobile devices.
- **Battery Protection:** Comprehensive protection against short-circuit, open-circuit, reverse polarity, and overload.
- **One Button Switch:** Simple control for managing the load output.

# MULTIPLE PROTECTION



Cell Phone  
Charge



Real Time  
Display



Battery  
Protection



One Button  
Switch

Image 4.2: Close-up of the ECO-WORTHY Solar Power Controller, highlighting its display, USB charging ports, and protection features.

## 5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your solar panel kit.

- **Cleaning:** Periodically clean the surface of the solar panels with a soft, damp cloth to remove dust, dirt, and debris. Avoid abrasive materials or harsh chemicals.
- **Connections:** Inspect all wiring connections regularly to ensure they are tight and free from corrosion.
- **Shading:** Minimize shading on the panels from trees, buildings, or other obstructions, as even partial shading can significantly reduce power output.
- **Waterproof Design:** The panels feature an IP65 junction box, designed to operate well in wet environments. However, avoid submerging the panels.

# WATERPROOF

Well operate in a wet environment



**IP65**  
Junction Box

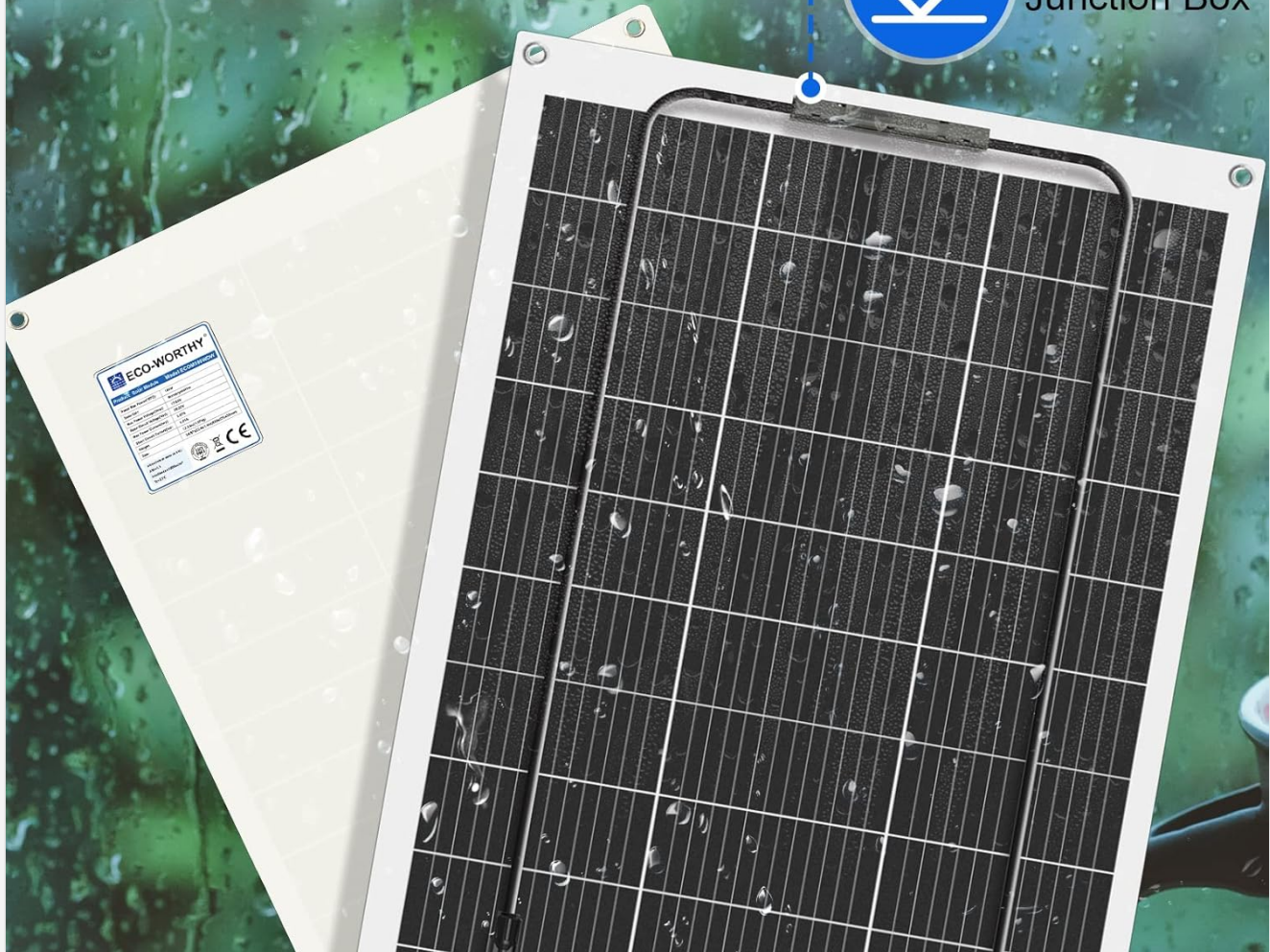


Image 5.1: The flexible solar panel with water droplets, illustrating its waterproof design (IP65 junction box).

## 6. TROUBLESHOOTING

Problem	Possible Cause	Solution
No power output from panels	Insufficient sunlight; Shading; Loose connections; Damaged panel.	Ensure panels are in direct sunlight; Remove any shading; Check all wiring connections; Inspect panels for visible damage.
Battery not charging	Incorrect wiring; Faulty charge controller; Battery issue; Overload.	Verify wiring according to diagram; Check charge controller display for error codes; Test battery health; Reduce load on the system.
Charge controller display is off	No power from battery or solar panels; Controller malfunction.	Ensure battery is connected and has sufficient voltage; Check solar panel input; Contact support if issue persists.

## 7. SPECIFICATIONS

Specification	Detail
Model Number	EPV-260-60F
Total Power Output	260 Watt (2 x 130W panels)
Panel Dimensions (each)	Approx. 96 cm (L) x 69 cm (W) x 0.2 cm (H)
Panel Thickness	2 mm (0.1 inch)
Material	Flexible Material
Charge Controller	30A PWM (Pulse Width Modulation)
Controller Compatibility	Lead-acid, Gel, Lithium Phosphate Batteries
Waterproof Rating	IP65 (Junction Box)
Country of Origin	China

# EASY TO CARRY AND REMOVE

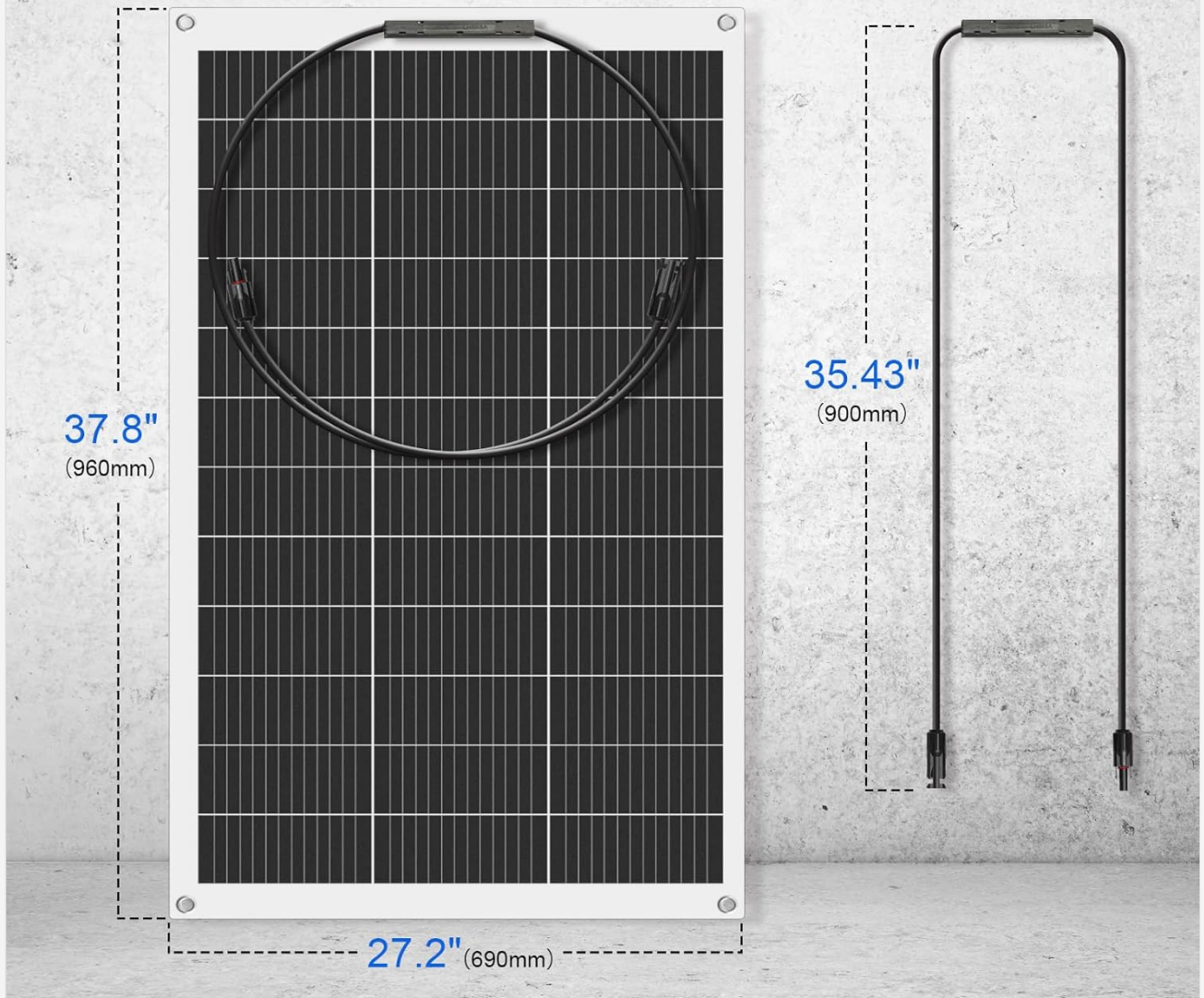


Image 7.1: Dimensions of the flexible solar panel (approx. 960mm x 690mm).

## 8. WARRANTY AND SUPPORT

ECO-WORTHY products are designed for durability and performance. For any issues or support, please refer to the following information:

### 8.1 Return Policy

If you wish to return a product within 30 days of receipt because you have changed your mind, please consult the Amazon return policy page. If you have received a defective or damaged product, please consult the Amazon help page on returns and refunds. For specific information on purchases made through the Marketplace, please consult the Amazon help page.

### 8.2 Manufacturer Information

Manufacturer: ECO-WORTHY

For further assistance, please visit the official ECO-WORTHY store on Amazon or contact their customer service directly.

Visit ECO-WORTHY  
Store