ecoCalm KP-EFKP-EF23126

ecoCalm 6-inch Solar Powered Fan with Battery and Adjustable Thermostat - Instruction Manual

Model: KP-EFKP-EF23126
Brand: ecoCalm

1. Product Overview

The ecoCalm 6-inch Solar Powered Fan is designed to provide efficient ventilation for various outdoor structures such as chicken coops, greenhouses, sheds, and garages. This system features a bifacial solar panel for enhanced power generation and a built-in 4400mAh rechargeable battery, ensuring continuous operation day and night. An intelligent temperature control system allows for automatic fan activation based on user-defined temperature settings, optimizing air circulation and maintaining desired environmental conditions.

- **Solar Air Conditioner with Battery:** Equipped with a double-sided solar panel and a 4400mAh rechargeable battery, providing up to 8 hours of night-time operation after a full charge. The system intelligently switches power sources based on sunlight availability.
- **Adjustable Temperature Control:** The battery box integrates an intelligent thermostat, allowing users to set specific ambient temperatures for automatic fan activation and deactivation.
- **Bifacial Solar Panel:** The 12W transparent rear panel generates power from both sides (up to 20W total), increasing power generation efficiency by up to 130%. This supports both fan operation and battery charging.
- **Waterproof Design:** Features IP44 waterproof fan blades and a 14.8ft long cable with a waterproof plug, ensuring durability and reliable performance in harsh outdoor environments.
- **Higher Airflow:** Enhanced blade design and engineered motor deliver 120CFM airflow, suitable for spaces up to 320 ft^3.

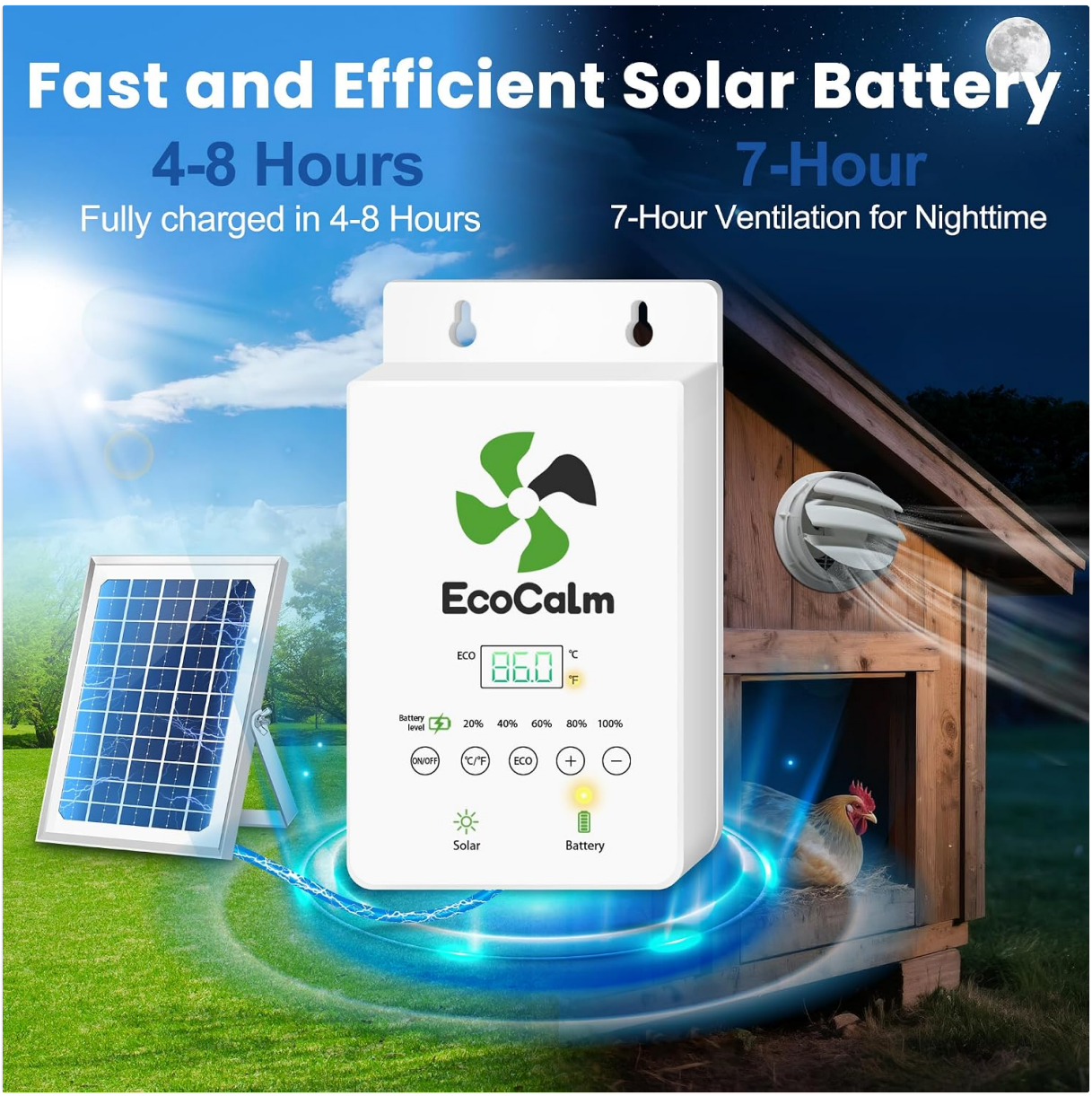

Image: The ecoCalm control unit and solar panel, illustrating the fast and efficient solar battery system for day and night operation.

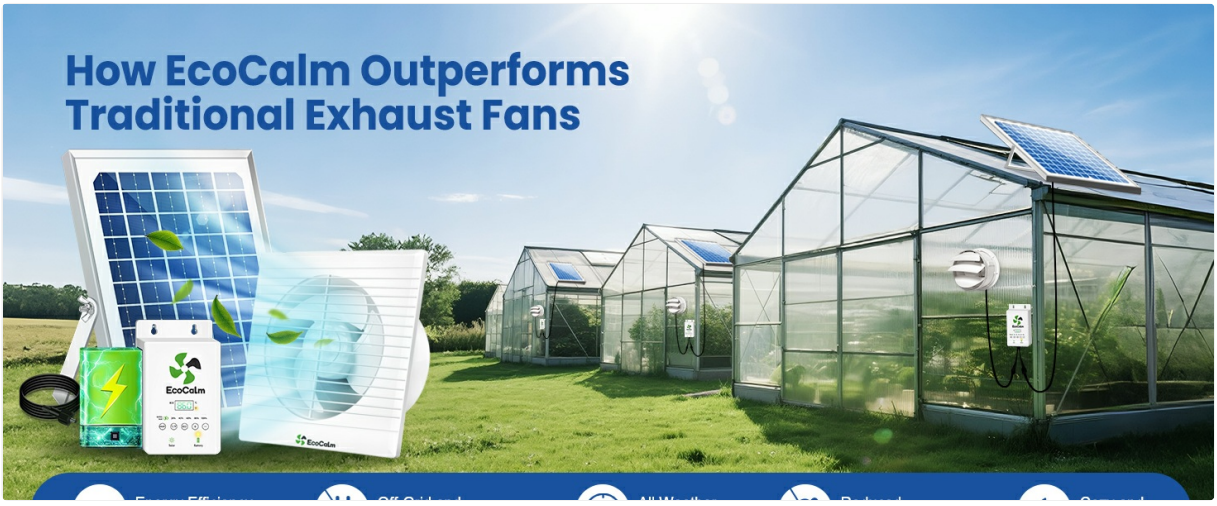

Image: Diagram illustrating the benefits and applications of the ecoCalm solar exhaust fan, including energy efficiency, off-grid use, and all-weather ventilation.

2. Package Contents

Please verify that all components are present in the package before proceeding with installation.

- Solar Panel (Bifacial, 12W)
- Exhaust Fan (6-inch, IP44 Waterproof)
- Solar Powerbank (Control Unit with 4400mAh Battery)
- User Manual
- Screw Set & 3M Stickers for mounting

Image: A visual representation of all included accessories: solar panel, exhaust fan, solar power bank, manual, and mounting hardware.

3. Safety Information

Read all instructions carefully before installation and operation. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Ensure all electrical connections are secure and waterproof, especially for outdoor installations.
- Do not attempt to modify or repair the unit. Contact qualified personnel for service.
- Keep children and pets away from the fan blades during operation.
- Mount the solar panel in a location with adequate sunlight exposure, but ensure it is securely fastened to prevent dislodgement by wind or other elements.
- Avoid placing the fan in areas where it may be submerged in water.

4. Setup and Installation

Follow these steps for proper installation of your ecoCalm Solar Powered Fan.

4.1 Solar Panel Installation

1. Choose a location for the solar panel that receives maximum direct sunlight throughout the day.
2. Attach the provided mounting brackets to the solar panel using the included screws.
3. Securely mount the solar panel to a stable surface (e.g., roof, wall, or stand) using appropriate fasteners. Adjust the angle to optimize sun exposure.

4.2 Fan Installation

1. Determine the desired location for the exhaust fan (e.g., window opening, wall cutout). Ensure sufficient space for the 6-inch fan and its housing.

2. If installing in a wall, carefully cut a 6-inch diameter hole. For window installation, ensure the window opening can accommodate the fan.
3. Insert the fan into the opening, ensuring the anti-backflow valve is oriented correctly to prevent air re-entry when the fan is off.
4. Secure the fan using the provided screws or 3M adhesive stickers.
5. Connect the fan cable to the solar power bank.

4.3 Connecting the System

1. Connect the solar panel cable to the designated 'Solar' input on the ecoCalm power bank.
2. Connect the fan cable to the designated 'Fan' output on the ecoCalm power bank.
3. Ensure all connections are tight and waterproof.

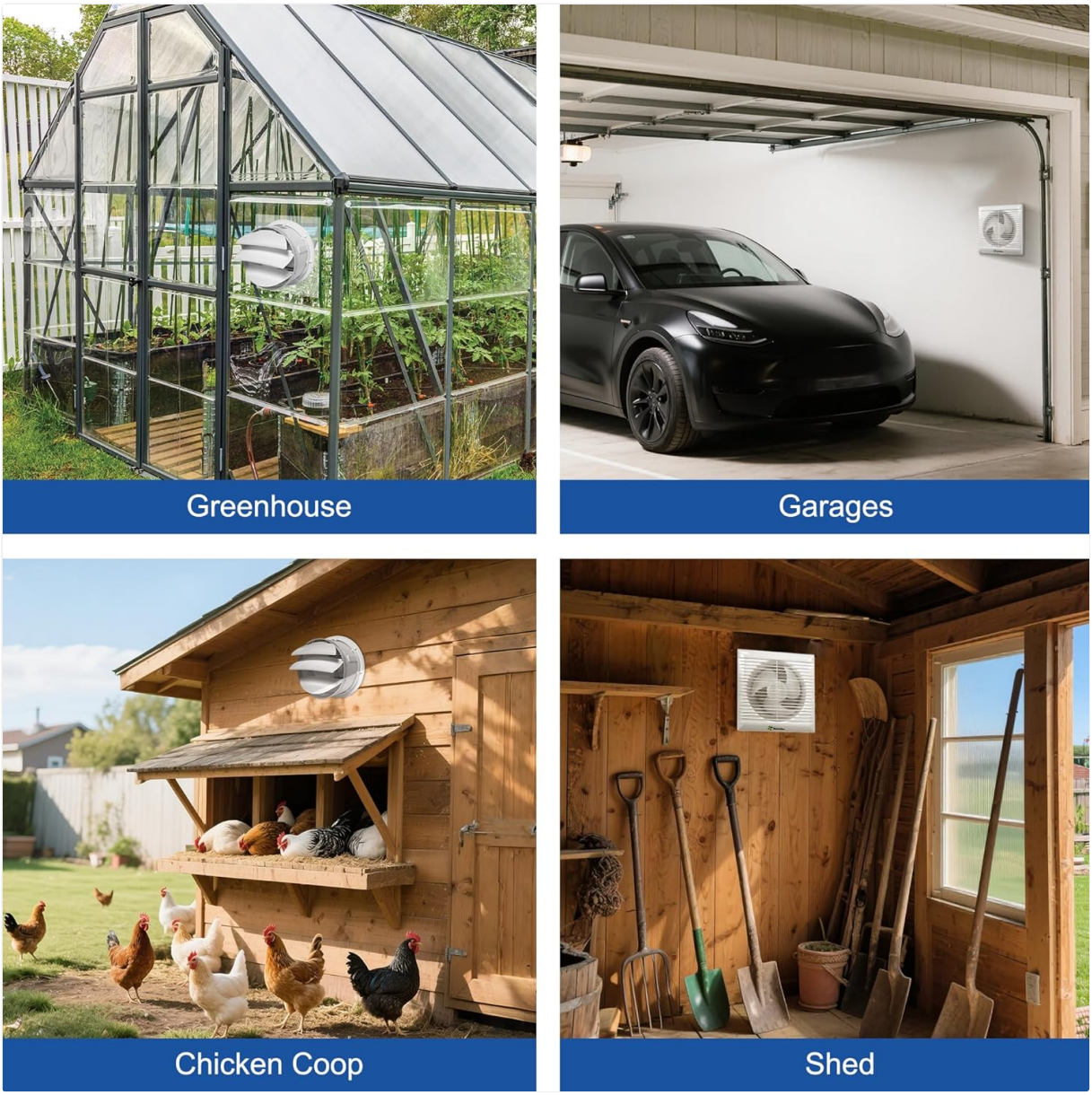

Image: Detailed dimensions of the solar panel, control unit, and exhaust fan, along with a visual guide for component assembly.

Video: An overview of the ecoCalm Solar Powered Fan with Battery, demonstrating its components and basic setup.

5. Operating Instructions

The ecoCalm control unit provides intuitive operation for your solar fan.

5.1 Power On/Off

- To turn the fan ON/OFF, press and hold the 'ON/OFF' button on the control unit for 2 seconds.

5.2 Temperature Display (Celsius/Fahrenheit)

- Tap the '°C/°F' button to switch the temperature display between Celsius and Fahrenheit.

5.3 ECO Mode (Automatic Temperature Control)

- Tap the 'ECO' button to activate ECO mode. In this mode, the fan will automatically turn on and off based on your set temperature preferences.

5.4 Setting ON/OFF Temperatures

1. Press and hold the 'ECO' button for 3 seconds to enter temperature setting mode. 'P1' will appear, indicating the ON-temperature setting.
2. Use the '+' or '-' buttons to adjust your preferred ON-temperature. Tap 'ECO' to confirm.
3. After confirming P1, 'P2' will appear, indicating the OFF-temperature setting.
4. Use the '+' or '-' buttons to adjust your preferred OFF-temperature. Tap 'ECO' to confirm and exit the setting mode.

5.5 Battery and Solar Indicators

- The control unit displays the battery level (20%, 40%, 60%, 80%, 100%).
- A 'Solar' indicator light illuminates when the solar panel is actively charging the battery or powering the fan.
- A 'Battery' indicator light illuminates when the fan is running on battery power.

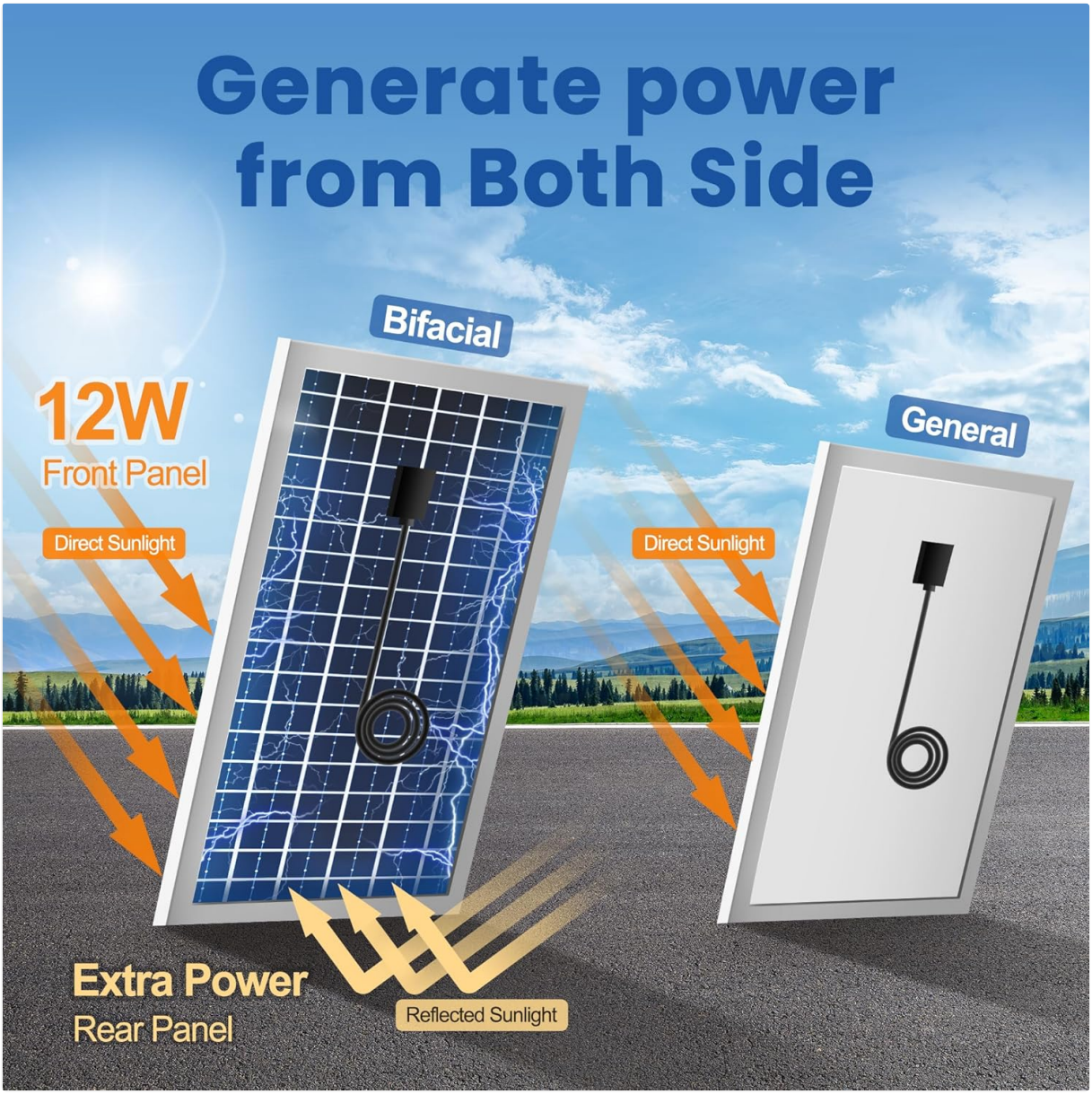

Image: The ecoCalm control unit displaying the adjustable thermostat feature, allowing precise temperature settings for automatic operation.

Video: A demonstration of the ecoCalm Solar Fan's control unit, showing how to power on/off, switch temperature units, and activate ECO mode.

6. Maintenance

Regular maintenance ensures optimal performance and longevity of your ecoCalm Solar Powered Fan.

- **Cleaning the Fan:** Periodically clean the fan blades and grille to remove dust, dirt, and debris. Use a soft, damp cloth. Ensure the fan is off before cleaning.
- **Cleaning the Solar Panel:** Wipe the surface of the solar panel with a soft, damp cloth to remove any accumulated dirt or dust that may reduce efficiency.
- **Checking Connections:** Regularly inspect all cable connections to ensure they are secure and free from damage or corrosion.
- **Winter Care:** In areas with heavy snowfall, clear snow from the solar panel to maintain charging capability.

7. Troubleshooting

If you encounter issues with your ecoCalm Solar Powered Fan, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Fan not turning on	Low battery charge Insufficient sunlight Loose connection Incorrect temperature setting	Allow solar panel to charge battery in direct sunlight Check all cable connections Adjust ON-temperature setting on control unit
Fan not charging	Solar panel obstructed or dirty Insufficient sunlight Faulty solar panel connection	Clean solar panel surface Relocate solar panel to direct sunlight Check solar panel cable connection to power bank
Low airflow	Fan blades or grille obstructed/dirty Low battery power	Clean fan blades and grille Ensure battery is fully charged or solar panel is receiving direct sunlight
Thermostat not responding	Incorrect setting procedure Control unit malfunction	Refer to 'Operating Instructions' for correct temperature setting procedure Contact customer support if issue persists

8. Specifications

Key technical specifications for the ecoCalm 6-inch Solar Powered Fan.

Feature	Specification
Brand	ecoCalm
Model Name	Solar Exhaust Fan
Model Number	KP-EFKP-EF23126
Size	6 Inch
Power Source	Solar Powered
Wattage	12 watts
Air Flow Capacity	120 Cubic Feet Per Minute (CFM)
Battery Capacity	4400mAh
Special Feature	Waterproof (IP44), Adjustable Thermostat, Bifacial Solar Panel
Material	Monocrystalline Silicon (Solar Panel)
Control Method	Push Button
Installation Type	Mounted (Window Mount/Wall Mount)
Item Weight	4.44 pounds (2.02 Kilograms)
Product Dimensions	6 x 6 x 6 inches

9. Warranty and Support

For warranty information or technical support, please refer to the contact details provided with your purchase documentation or visit the official ecoCalm website. Keep your proof of purchase for warranty claims.