FlexSolar LXX-C100CA

FlexSolar 100W Portable Solar Panel User Manual

Model: LXX-C100CA

1. INTRODUCTION

Thank you for choosing the FlexSolar 100W Portable Solar Panel. This manual provides essential information for the safe and efficient operation of your solar panel. Please read it thoroughly before use and retain it for future reference.

This portable solar panel is designed to provide clean, renewable energy for charging various electronic devices and power stations, making it ideal for outdoor activities, camping, and emergency backup power.

2. SAFETY INFORMATION

- Do not attempt to disassemble, repair, or modify the solar panel.
- Avoid exposing the solar panel to fire, heat sources, or corrosive substances.
- Ensure all connections are secure before use.
- Do not immerse the junction box in water, as it is not waterproof. The solar panel itself is IP65 rated for water and dust resistance.
- Handle the panel with care to prevent physical damage.
- Keep out of reach of children.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- 1 x FlexSolar 100W Portable Solar Panel
- 1 x 118" (3M) DC Cable
- 1 x 10-in-1 Interchangeable DC Connectors
- 1 x 11.8" (0.3M) DC5521 Cable for Alligator Clip
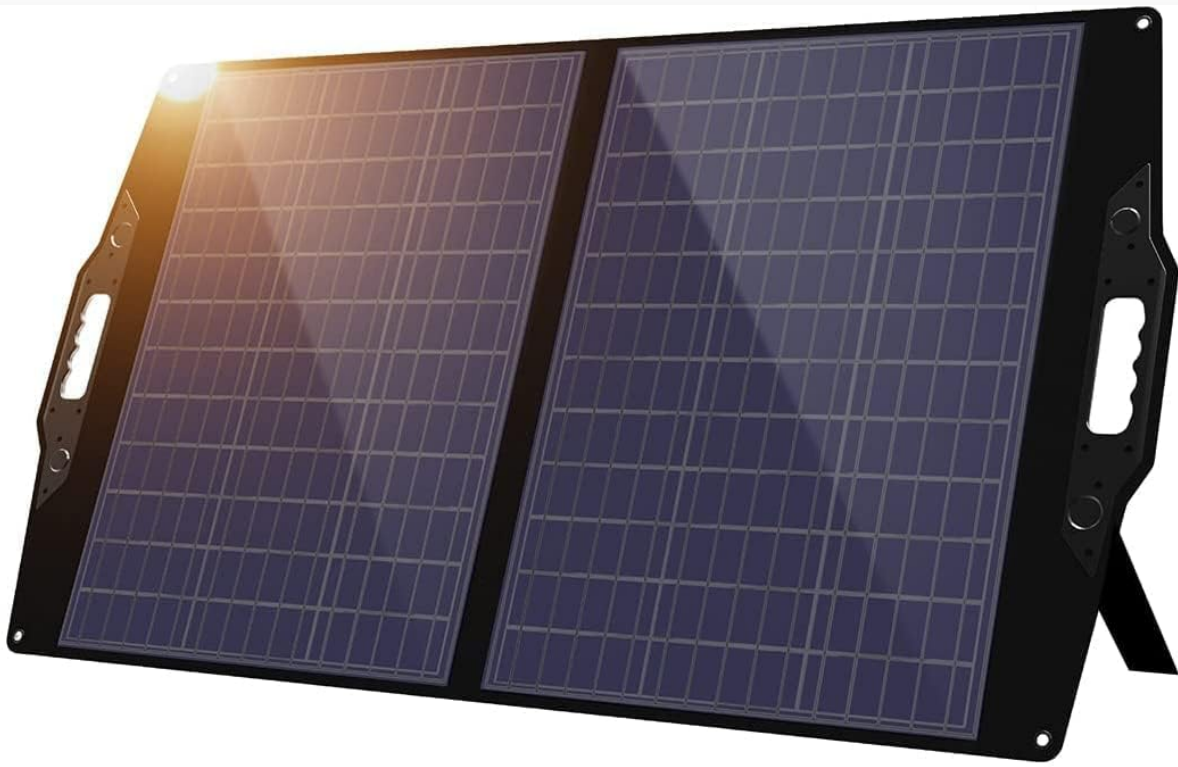- 1 x User Manual (This document)

Image: FlexSolar 100W Portable Solar Panel with its accessories, including the DC cable, 10-in-1 DC connectors, and alligator clip cable.

4. PRODUCT OVERVIEW

The FlexSolar 100W Portable Solar Panel features a foldable design for easy transport and storage. It includes multiple output ports for versatile charging.

Image: The FlexSolar 100W Portable Solar Panel connected to a portable power station, demonstrating its primary use case.

Key Features:

- **High Conversion Efficiency:** Converts up to 24% of solar energy into free power.

- **Multi-functional Outputs:** Includes USB-A, QC3.0 USB-A, PD 60W USB-C, and DC ports.

- **Wide Compatibility:** Compatible with various power stations (e.g., Jackery, Bluetti, Anker) and devices (laptops, iPads, phones).

- **Portable & Foldable Design:** Equipped with adjustable kickstands and a TPE rubber handle for easy setup and transport.

- **Durable & Weather-Resistant:** IP65 waterproof and dustproof (panel only, junction box is not waterproof).

- **Smart IC Chip Technology:** Automatically detects connected devices for optimized charging.

Attention: the solar panel does not store power, but it will charge devices directly from sunlight.

USB-C 5V-3A / 12V-3A / 20V-3A (MAX)

QC3.0 5V-3A 12V-1.5A (MAX)

DC 20-28V 100W (MAX)

USB 5V-3A (MAX)

Image: A detailed view of the solar panel's output ports, including USB-C, QC3.0 USB-A, and standard USB-A, shown charging a tablet and smartphone.

5. SETUP

1. **Unfold the Solar Panel:** Carefully unfold the FlexSolar 100W panel completely.

2. **Position the Panel:** Deploy the adjustable kickstands on the back of the panel. Angle the panel directly towards the sun to maximize solar exposure. For optimal performance, ensure no shadows fall on the panel surface.

3. **Connect Devices:**
   - For power stations: Use the provided DC cable and the appropriate 10-in-1 DC connector to connect the solar panel to your power station's DC input port.
   - For USB devices (phones, tablets, power banks): Connect your device's USB cable directly to the USB-A, QC3.0 USB-A, or USB-C (PD 60W) ports on the solar panel's junction box.
   - For 12V batteries: Use the provided DC5521 cable with alligator clips to connect to your battery terminals. Ensure correct polarity (red to positive, black to negative).

4. **Verify Charging:** Once connected, the LED indicator on the junction box will illuminate, indicating that charging is active. Monitor your device's charging status.

Image: The FlexSolar 100W Portable Solar Panel unfolded and supported by its integrated kickstands, ready for solar charging.

Image: A person carrying the folded FlexSolar 100W Portable Solar Panel by its handle, demonstrating its portability.

6. OPERATING INSTRUCTIONS

For optimal charging performance, ensure the solar panel receives direct sunlight. The charging efficiency will vary depending on weather conditions, sunlight intensity, and the angle of the panel.

Charging Tips:

- **Direct Sunlight:** Position the panel to face the sun directly. Adjust its angle periodically throughout the day as the sun moves.

- **Avoid Shadows:** Even partial shading can significantly reduce the panel's output. Ensure no trees, buildings, or other objects cast shadows on the panel.

- **Clean Surface:** Keep the solar panel surface clean from dust, dirt, and debris. A clean panel ensures maximum light absorption.

- **Temperature:** While the panel is designed to operate in various temperatures, extreme heat can slightly reduce efficiency. Ensure adequate ventilation around the panel.

Image: The FlexSolar 100W Portable Solar Panel deployed outdoors, capturing sunlight for charging.

Video Demonstration:

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Video: A demonstration of the FlexSolar panel charging a portable DVD player and a power bank. This video illustrates the panel's functionality in real-world conditions, including charging under partially cloudy skies.

7. MAINTENANCE

- **Cleaning:** Regularly wipe the solar panel surface with a soft, damp cloth to remove dust, dirt, or debris. Do not use harsh chemicals or abrasive materials.

- **Storage:** When not in use, fold the solar panel and store it in a cool, dry place away from direct sunlight and extreme temperatures.

- **Inspection:** Periodically inspect the cables and connectors for any signs of wear or damage. Replace any damaged components immediately.

- **Water Exposure:** While the panel is IP65 rated, avoid prolonged exposure to heavy rain or submersion. Ensure the junction box remains dry.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No charging output / Low charging speed	Insufficient sunlight or cloudy weather. Panel is shaded. Incorrect panel angle. Dirty panel surface. Loose or incorrect cable connection. Device not compatible or requires higher power.	Move panel to direct sunlight. Remove any obstructions causing shade. Adjust panel angle towards the sun. Clean the panel surface. Check all cable connections and ensure correct adapters are used. Verify device power requirements against panel output specifications.
LED indicator not lit	No sunlight or very low light conditions. No device connected or device not drawing power. Faulty cable or port.	Ensure panel is in direct sunlight. Connect a device that requires charging. Try a different cable or port.

9. SPECIFICATIONS

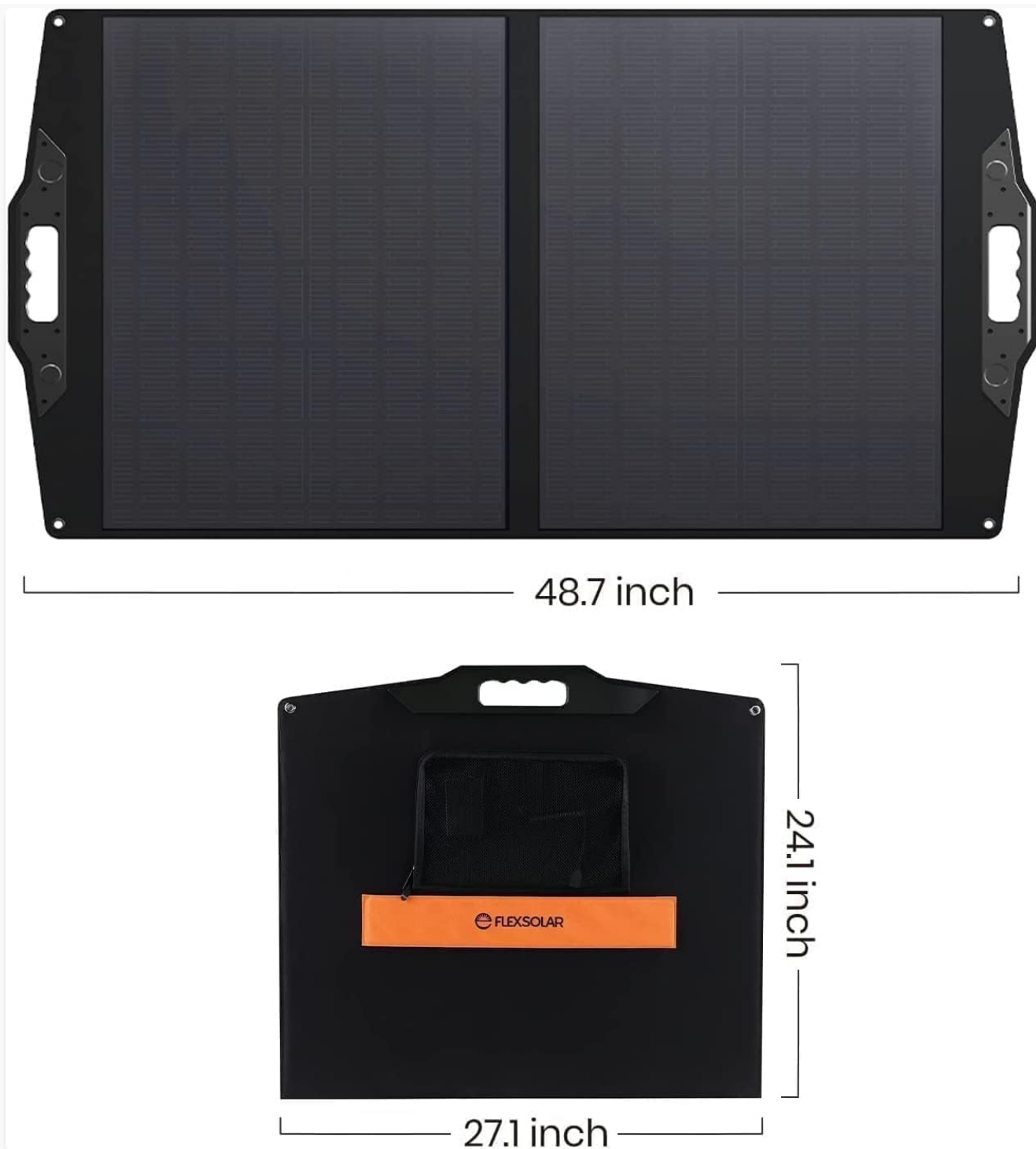| Feature	Detail
Model Number	LXX-C100CA
Power Output	100W (Max)
Conversion Efficiency	Up to 24%
Output Ports	DC: 20-28V, 100W (Max) USB-C: 5V-3A / 12V-3A / 20V-3A (PD 60W Max) USB-A (QC3.0): 5V-3A / 12V-1.5A (Max) USB-A: 5V-3A (Max)
Material	Monocrystalline, PET Lamination
Waterproof Rating	IP65 (Panel only, junction box not waterproof)
Folded Dimensions	27.1 x 24.1 x 1.4 inches (68.8 x 61.2 x 3.5 cm)
Unfolded Dimensions	48.7 x 24.1 x 0.2 inches (123.7 x 61.2 x 0.5 cm)
Weight	11.2 lbs (5.1 kg)
Compatible Devices	Power stations, laptops, iPads, smartphones, power banks, 12V batteries

Image: Diagram showing the unfolded and folded dimensions of the FlexSolar 100W Portable Solar Panel.

10. WARRANTY AND SUPPORT

FlexSolar products come with a standard warranty. Please refer to the warranty card included in your package or visit the official FlexSolar website for detailed warranty terms and conditions.

Customer Service:

If you encounter any issues or have questions regarding your FlexSolar 100W Portable Solar Panel, please contact our customer support team. We are committed to providing prompt and helpful assistance.

Contact information can typically be found on the product packaging, the included user manual, or the official FlexSolar website. Please have your model number (LXX-C100CA) and purchase details ready when contacting support.

For general inquiries or to explore other FlexSolar products, visit:FlexSolar Brand Store on Amazon