Bifacial / Biface

200W

Folding Solar Panel
with Stand

Panneau Solaire
Pliant avec Support

Designed for
12V/24V Systems

Conçu Pour les
Systèmes 12V/24V

User Guide

Solar Specs

Lumera Solar – 200W Bifacial Folding Solar Kit

Electrical Specifications

Parameter	Value
Optimum Operating Voltage (Vmp)	40.8V
Optimum Operating Current (Imp)	4.91A
Open-Circuit Voltage (Voc)	48.6V
Short-Circuit Current (Isc)	5.21A
Maximum Series Fuse Rating	15A

Mechanical Specifications

Parameter	Value
Dimensions	990 × 1060 × 70 mm (41.8 × 41.8 × 2.8 in)
Frame Material	Anodized Black Aluminium
Connector Type	MC4 Compatible (Positive/Negative)
Weight	14 kg (30.9 lbs)

Features

- High-efficiency bifacial technology for maximum energy yield.
- Folding design for easy transport and storage.
- Durable anodized black aluminium frame.
- Optimized for residential, commercial, RV, and off-grid applications.
- Quick installation with alligator battery clamps.
- Lightweight and rugged for field use.

Deployment

User Guide: 15A Folding Solar Panel Kit with MPPT Controller and Alligator Clamps

What's Included

- 200W Bifacial Folding Solar Panel
- Integrated MPPT Charge Controller
- Alligator Battery Clamp Cables
- Carrying Case (Optional)
- User Manual
- Quick Start Guide

Quick Start Guide

1. Connect to Battery

- Ensure you are using a 12V or 24V deep-cycle lead acid battery (AGM, GEL, or Lead-Acid type).
- Before connecting, verify the polarity:
  - Red clamp = Positive (+)
  - Black clamp = Negative (−)
- Attach the red alligator clamp to the positive terminal of the battery first.
- Then, attach the black alligator clamp to the negative terminal.

2. Unfold the Solar Panel

- Remove the solar panel from the carrying case.
- Unfold the panel fully and position it so both sides are exposed to sunlight, maximizing bifacial efficiency.
- Adjust the panel's angle toward the sun for optimal results (typically a 30–45° tilt, depending on the season and location).

3. MPPT Charge Controller Setup

- The MPPT controller is pre-configured for both 12V and 24V systems.
- After connecting, the controller will:
  - Automatically detect the battery voltage.
  - Optimize the charging current to maximize power output and protect battery health.
- The system will show the following indicators:
  - **Green light (blinking)**: Indicates normal charging operation.
  - **Red light**: Indicates an error or fault in the system.

4. Monitoring

- Keep an eye on the green or red indicator light to monitor the system's status:
  - **Green LED (blinking)** confirms normal operation and charging.
  - **Red LED** signals an error or fault that needs attention.

5. Packing Up

- Disconnect the black (negative) clamp first.
- Disconnect the red (positive) clamp second.
- Carefully fold the panel along its hinges.
- Store everything in the carrying case.
- Keep the panel clean and dry until the next use.

Safety Tips

- Always connect the battery before positioning the panel.
- Never allow the clamps to short-circuit.
- Protect the system from exposure to rain or moisture unless the kit is specifically rated as waterproof.
- Use only with 12V or 24V lead acid battery systems unless otherwise specified.
- Ensure proper ventilation around both the controller and battery.

Troubleshooting

Issue	Possible Cause	Solution
No charging	Poor sunlight or incorrect connection	Reposition panel, check clamps
Controller error light	Reverse polarity or system fault	Disconnect, check connections, reconnect
Low output	Shade on panel or dirty surface	Clean panel, remove shade

Contact Support

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