**GOLABS SF100**

# GOLABS SF100 Portable Solar Panel User Manual

Model: SF100

## INTRODUCTION

The GOLABS SF100 Portable Solar Panel is a high-efficiency monocrystalline solar charger designed for outdoor use, camping, RVs, and off-grid power needs. It features multiple output ports, including Type-C, DC 18V, and QC3.0 USB, making it compatible with various power stations and devices. Its foldable design and adjustable kickstand ensure portability and ease of use.
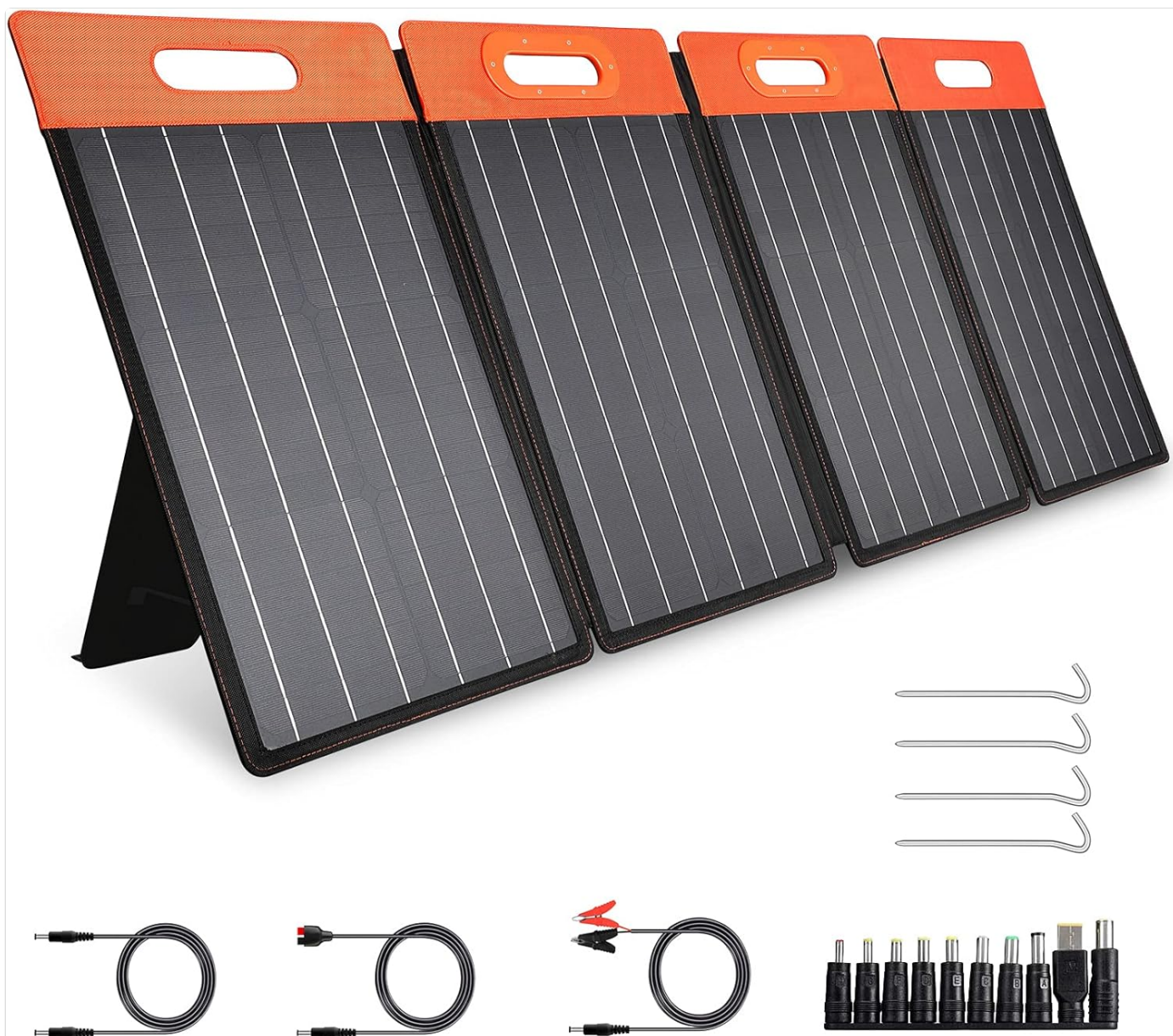
Image: The GOLABS SF100 Portable Solar Panel unfolded, showcasing its four panels, along with various cables and connectors included in the package.

# PRODUCT OVERVIEW

## Key Features

- **High Conversion Rate:** Utilizes monocrystalline silicon cells for up to 23% efficiency.
- **Portable and Foldable Design:** Compact when folded (23.1"L x 14.5"W x 1.18"H) and lightweight (11.48 pounds) for easy transport.
- **Multiple Output Ports:** Equipped with DC 100W/18V, PD 45W USB-C, QC3.0 USB-A, and standard USB-A 5V/2.4A ports for versatile charging.
- **Adjustable Kickstand:** Integrated kickstand allows for optimal angle adjustment towards the sun.
- **Durable Construction:** IPX4 splash-proof rating, suitable for outdoor conditions.
- **Comprehensive Accessories:** Includes DC to DC cable, DC to Anderson cable, and 10 connectors for broad compatibility.

# GOLABS 100W Solar Panel

## 100W
high power

## 23% 🔋
high conversion



**Monocrystalline**    **High conversion**    **Long lasting**

Image: The GOLABS 100W Solar Panel in an outdoor setting, emphasizing its 100W high power output and 23% high conversion efficiency, along with icons for monocrystalline, high conversion, and long-lasting features.

# Multiple Output Charging Ports

1. DC output port : 100W/18V
2. PD45W output port : 5V⎓3A  9V⎓3A, 12V⎓3A, 15V⎓3A, 20V⎓2.25A
3. USB-A (QC3.0) : 5V⎓2.4A  9V⎓2A  12V⎓1.5A
4. USB-A : 5V⎓2.4A
5. MC4 : 100W/18V

## IPX 4 Waterproof

☆ Please do not rinse with water or immerse in water

☆ Please do not let water get inside the pouch

Image: A detailed view of the GOLABS SF100's multiple output charging ports, including DC, PD USB-C, QC3.0 USB-A, and standard USB-A, along with an illustration of its IPX4 splash-proof design.

## SETUP

1. **Unpack the Panel:** Carefully remove the solar panel and all accessories from its packaging.

2. **Unfold the Panel:** Lay the folded solar panel on a flat surface and unfold it completely.

3. **Position the Kickstand:** Extend the integrated kickstand(s) on the back of the panel to support it at an angle.

4. **Orient Towards the Sun:** Adjust the panel's angle and direction to face the sun directly for maximum efficiency. Ensure no shadows are cast on the panel surface.

5. **Connect Devices:** Open the zippered pouch on the back of the panel to access the output ports and cables. Select the appropriate cable and connector for your device or power station (e.g., DC to DC, DC to Anderson, USB-C, USB-A).

6. **Secure the Panel (Optional):** Use the included fixed pegs to secure the panel to the ground, especially in windy conditions, by inserting them through the eyelets.

Image: The GOLABS SF100 highlighting its foldable nature, integrated handle for portability, universal MC4 cables for connectivity, and the stable triangular support provided by its kickstand.

## OPERATING INSTRUCTIONS

### Charging Devices

The GOLABS SF100 can charge various devices directly or through a compatible power station.

- **Direct Charging (USB Ports):** For smartphones, tablets, and other USB-powered devices, connect them directly to the QC3.0 USB-A, standard USB-A, or PD 45W USB-C ports.
- **Charging Power Stations (DC/MC4):** Use the DC output port or MC4 connectors with the provided cables (DC to DC, DC to Anderson) to charge compatible portable power stations. Ensure the voltage and connector type match your power station's input requirements.
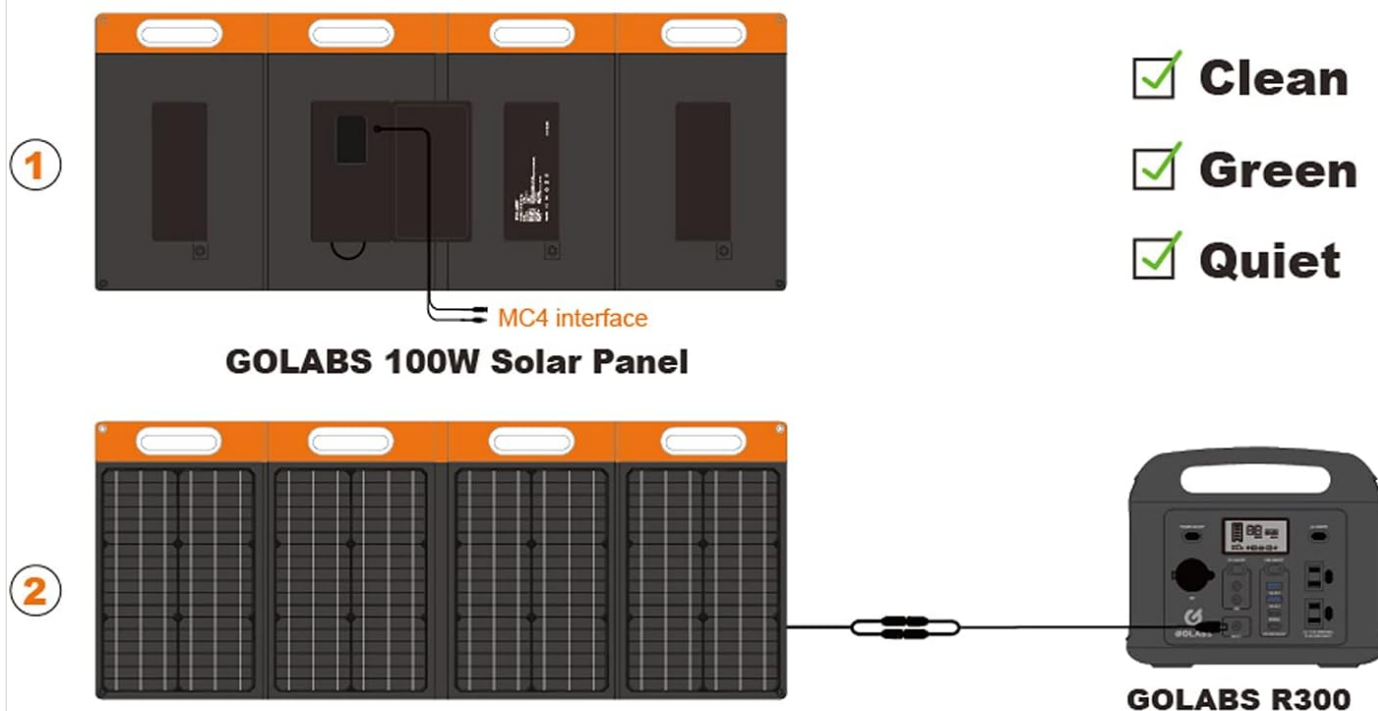
### Maximizing Charging Efficiency

- **Direct Sunlight:** Always place the solar panel in direct sunlight. Any shading, even partial, can significantly reduce

output.

- **Optimal Angle:** Adjust the kickstand to ensure the panel is perpendicular to the sun's rays. The sun's position changes throughout the day, so periodic adjustments may be necessary.
- **Clean Surface:** Keep the solar panel surface clean from dust, dirt, leaves, or other obstructions.
- **Avoid Overheating:** While designed for outdoor use, prolonged exposure to extreme heat can affect performance. Ensure adequate airflow around the panel.



Image: A diagram illustrating the connection of the GOLABS 100W Solar Panel to a GOLABS R300 Power Station, emphasizing a clean, green, and quiet solar generator setup. Important note about DC port sizes is included.

## MAINTENANCE

- **Cleaning:** Regularly wipe the solar panel surface with a soft, damp cloth to remove dust and dirt. Do not use harsh chemicals or abrasive materials.
- **Storage:** When not in use, fold the solar panel and store it in a dry, cool place away from direct sunlight and extreme temperatures.
- **Inspection:** Periodically check cables and connectors for any signs of wear, damage, or corrosion. Replace any damaged components immediately.
- **Water Resistance:** The panel is IPX4 splash-proof, meaning it can withstand splashes of water. However, do not

rinse it with water or immerse it. Ensure the back pouch where the ports are located remains closed and dry.
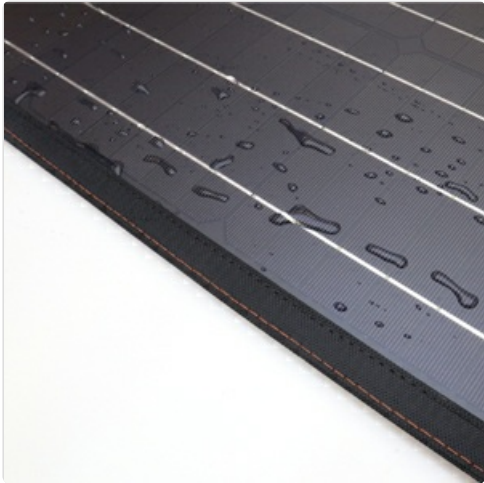


Image: A close-up view of water droplets on the surface of the GOLABS SF100 solar panel, illustrating its splash-proof capability.

## TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|---|---|---|
| No power output / Low power output | Insufficient sunlight or partial shading.<br>Panel surface is dirty.<br>Incorrect connection or incompatible device.<br>Damaged cable or port.<br>Overheating. | Ensure panel is in direct, unobstructed sunlight and adjusted to the optimal angle.<br>Clean the panel surface.<br>Verify correct cable and connector usage; check device compatibility.<br>Inspect cables and ports for damage.<br>Relocate panel to a cooler, well-ventilated area if overheating is suspected. |
| Device not charging | Device requires more power than panel can provide.<br>Device's battery is full.<br>Faulty device. | Check device's power requirements.<br>Confirm device battery status.<br>Test with another device. |

## SPECIFICATIONS

| Attribute | Detail |
|---|---|
| Brand | GOLABS |
| Model | SF100 |
| Material | Monocrystalline Silicon |
| Maximum Power | 100 Watts |
| Efficiency | Up to 23% |
| Product Dimensions (Unfolded) | 58.27"L x 23.1"W x 1.18"H |

| Attribute | Detail |
| --- | --- |
| Product Dimensions (Folded) | 23.1"L x 14.5"W x 1.18"H (estimated from image) |
| Item Weight | 11.48 pounds (5.22 Kilograms) |
| Maximum Voltage | 18 Volts |
| Connector Types | DC-DC, USB (QC3.0, PD 45W USB-C, standard USB-A), MC4 |
| Included Components | 1* GOLABS SF100 100W solar panel, 1* DC to DC cable, 1* DC to Anderson cable, 10* connectors, 4* fixed pegs, 1*User Manual |
| Water Resistance Rating | IPX4 (Splash-proof) |

## WARRANTY AND SUPPORT

GOLABS provides a 12-month warranty for the SF100 Portable Solar Panel. For warranty claims, technical support, or any inquiries, please refer to the contact information provided in the original product packaging or visit the official GOLABS website.

For more information, visit the GOLABS Store on Amazon.