

[Manuals.plus](#) /

> [Aqiila](#) /

> Aqiila Sunbird P100 Foldable Solar Panel User Manual

Aqiila 406004

Aqiila Sunbird P100 Foldable Solar Panel User Manual

Model: Sunbird P100 (100W)

1. INTRODUCTION

The Aqiila Sunbird P100 is a 100W foldable solar panel designed for portable power generation. It features efficient ETFE technology, multiple output ports, and a durable, weather-resistant construction, making it suitable for various outdoor and off-grid applications. This manual provides essential information for the safe and effective use of your solar panel.

Efficient ETFE technology

ETFE

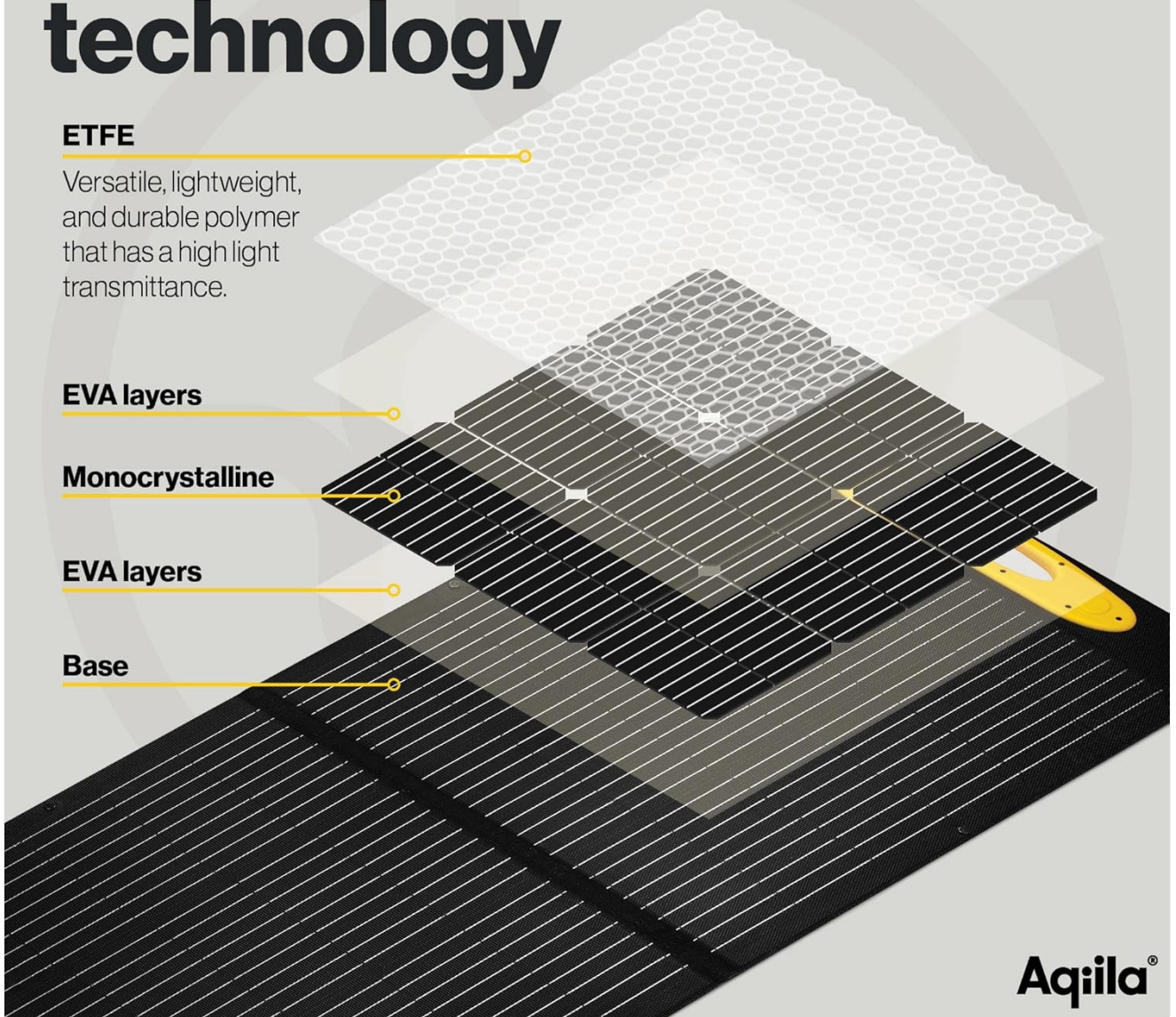
Versatile, lightweight, and durable polymer that has a high light transmittance.

EVA layers

Monocrystalline

EVA layers

Base



Aquila®

Image: Efficient ETFE Technology. This diagram illustrates the construction of the solar panel, highlighting the ETFE (Ethylene Tetrafluoroethylene) outer layer, EVA (Ethylene-vinyl acetate) layers, and monocrystalline solar cells. ETFE is a versatile, lightweight, and durable polymer known for its high light transmittance, contributing to the panel's efficiency.

Designed to endure unpredictable weather conditions

IP65

Dust & Waterproof

Aquila®

Image: Weather Resistance. The image shows the Aquila Sunbird P100 solar panel in a rainy outdoor environment, emphasizing its IP65 dust and waterproof rating. This design ensures the panel can withstand unpredictable weather conditions, making it reliable for outdoor use.

Designed for easy portability anywhere



Image: Easy Portability. This image depicts the Aqila Sunbird P100 solar panel and a portable power station in a vast outdoor setting, illustrating its lightweight design (4.2kg / 9.24 pounds) for easy transport and use anywhere.

2. SAFETY INSTRUCTIONS

- Do not attempt to disassemble, repair, or modify the solar panel. This may cause damage, electric shock, or fire, and will void the warranty.
- Keep the solar panel away from fire, heat sources, and flammable materials.
- Avoid exposing the solar panel to corrosive substances or liquids.
- Do not step on or place heavy objects on the solar panel.
- Ensure all connections are secure and correct before use. Incorrect connections can damage the panel or connected devices.
- Handle the panel with care to prevent physical damage.
- Keep out of reach of children.

3. SETUP

3.1 Unfolding and Positioning

1. Unfold the Aqila Sunbird P100 solar panel completely.
2. Locate the integrated kickstands on the back of the panel. Extend these kickstands to support the panel at an optimal angle towards the sun.
3. Position the panel in direct sunlight, ensuring no shadows fall on its surface for maximum efficiency. Adjust the angle periodically as the sun moves.
4. For added stability or permanent setup, utilize the corner holes for mounting.



Image: Easy Setup. This image demonstrates the Aqila Sunbird P100 solar panel unfolded and supported by its integrated kickstands. It highlights the panel's dimensions (122cm x 54cm unfolded, 61x54x6.5 cm folded), integrated handles with magnets, and corner holes for mounting, illustrating its user-friendly setup.

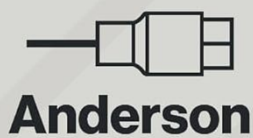
3.2 Connecting to a Power Station

The Sunbird P100 comes with a 3-meter cable and a storage pouch, and is compatible with various power station

input types.

1. Identify the correct input port on your power station.
2. Connect the appropriate adapter (XT60, Anderson, DC7909 (8mm), or DC5521) from the solar panel's cable to your power station's input.
3. Ensure the connection is firm. The power station should indicate that it is receiving a charge.

Suitable for all power stations



3 meter cable & storage pouch



Image: Suitable for All Power Stations. This image displays the Aquila Sunbird P100 solar panel's compatibility with common power station connectors: XT60, Anderson, DC7909 (8mm), and DC5521. It also mentions the included 3-meter cable and storage pouch, indicating broad compatibility and convenience.

Best paired with Aquila Powerbirds



Image: Paired with Aquila Powerbirds. The image shows the Aquila Sunbird P100 solar panel connected to an Aquila Powerbird S1000 portable power station, demonstrating a typical setup for charging a power station using the solar panel.

4. OPERATING INSTRUCTIONS

4.1 Direct Device Charging

The Sunbird P100 features integrated USB output ports for direct charging of small electronic devices.

1. Ensure the solar panel is unfolded and exposed to direct sunlight.
2. Locate the output ports (1x USB-A, 1x USB-C) on the panel.
3. Connect your device (e.g., smartphone, tablet) to the appropriate USB port using a compatible charging cable.
4. The device should begin charging. Charging speed will vary based on sunlight intensity.

Charge devices directly



Image: Charge Devices Directly. This image illustrates the Aqila Sunbird P100 solar panel's capability to directly charge devices. It highlights the 1x USB-A and 1x USB-C output ports (18W total output) and shows a smartphone and tablet being charged, indicating its versatility for personal electronics.

5. MAINTENANCE

5.1 Cleaning

- Regularly inspect the solar panel surface for dirt, dust, leaves, or other debris.
- Clean the panel surface with a soft, damp cloth. For stubborn dirt, use a mild soap solution and rinse thoroughly with clean water.
- Do not use abrasive cleaners, solvents, or harsh chemicals, as these can damage the panel's surface.
- Ensure the panel is dry before folding or storing.

5.2 Storage

- Fold the solar panel carefully and secure it using the integrated magnets.
- Store the panel in a cool, dry place, away from direct sunlight and extreme temperatures.

- Use the provided storage pouch to protect the panel from dust and scratches during transport or storage.

6. TROUBLESHOOTING

6.1 Low or No Power Output

- **Check Sunlight Exposure:** Ensure the panel is in direct, unobstructed sunlight. Shadows, even partial ones, can significantly reduce output.
- **Clean the Panel:** Dust, dirt, or debris on the panel surface can block sunlight. Clean the panel as described in the Maintenance section.
- **Verify Connections:** Ensure all cables are securely connected to both the solar panel and the power station/device.
- **Check for Damage:** Inspect the panel and cables for any visible damage. If damage is found, discontinue use and contact support.
- **Environmental Factors:** Overcast weather, haze, or low sun angles (early morning/late afternoon) will naturally result in lower power output.

6.2 Device Not Charging Directly

- **Check USB Cable:** Ensure the USB cable is functional and correctly connected to both the panel and the device.
- **Device Compatibility:** Confirm your device is compatible with the 18W output provided by the USB ports.
- **Sufficient Sunlight:** Direct charging requires adequate sunlight. If sunlight is weak, charging may be slow or intermittent.

7. SPECIFICATIONS

Feature	Specification
Model	Sunbird P100
Rated Power	100W
Cell Type	Monocrystalline Silicon
Efficiency	High efficiency (ETFE technology)
Output Ports	1x USB-A, 1x USB-C (18W total)
DC Output Connectors	XT60, Anderson, DC7909 (8mm), DC5521
Cable Length	3 meters
Waterproof Rating	IP65 (Dust & Waterproof)
Unfolded Dimensions	122 cm x 54 cm (approx. 48 x 21.3 inches)
Folded Dimensions	61 cm x 54 cm x 6.5 cm (approx. 24 x 21.3 x 2.6 inches)
Item Weight	4.2 kg (9.24 pounds)
Manufacturer Model Number	406004

8. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official Aqila website or contact your retailer. Keep your purchase receipt as proof of purchase for warranty claims.

Online Support: Visit www.aqila.com (example link, replace with actual if available) for FAQs and contact information.