FlexSolar FLS-P0-050050-1

FlexSolar 6W Mini USB Solar Panel User Manual

MODEL: FLS-P0-050050-1

1. INTRODUCTION

Thank you for choosing the FlexSolar 6W Mini USB Solar Panel. This product is designed to provide a portable and efficient power source for various small electronic devices using solar energy. Its compact size, durable construction, and high conversion efficiency make it ideal for outdoor use.

This manual provides essential information for the proper setup, operation, and maintenance of your solar panel. Please read it thoroughly before use.
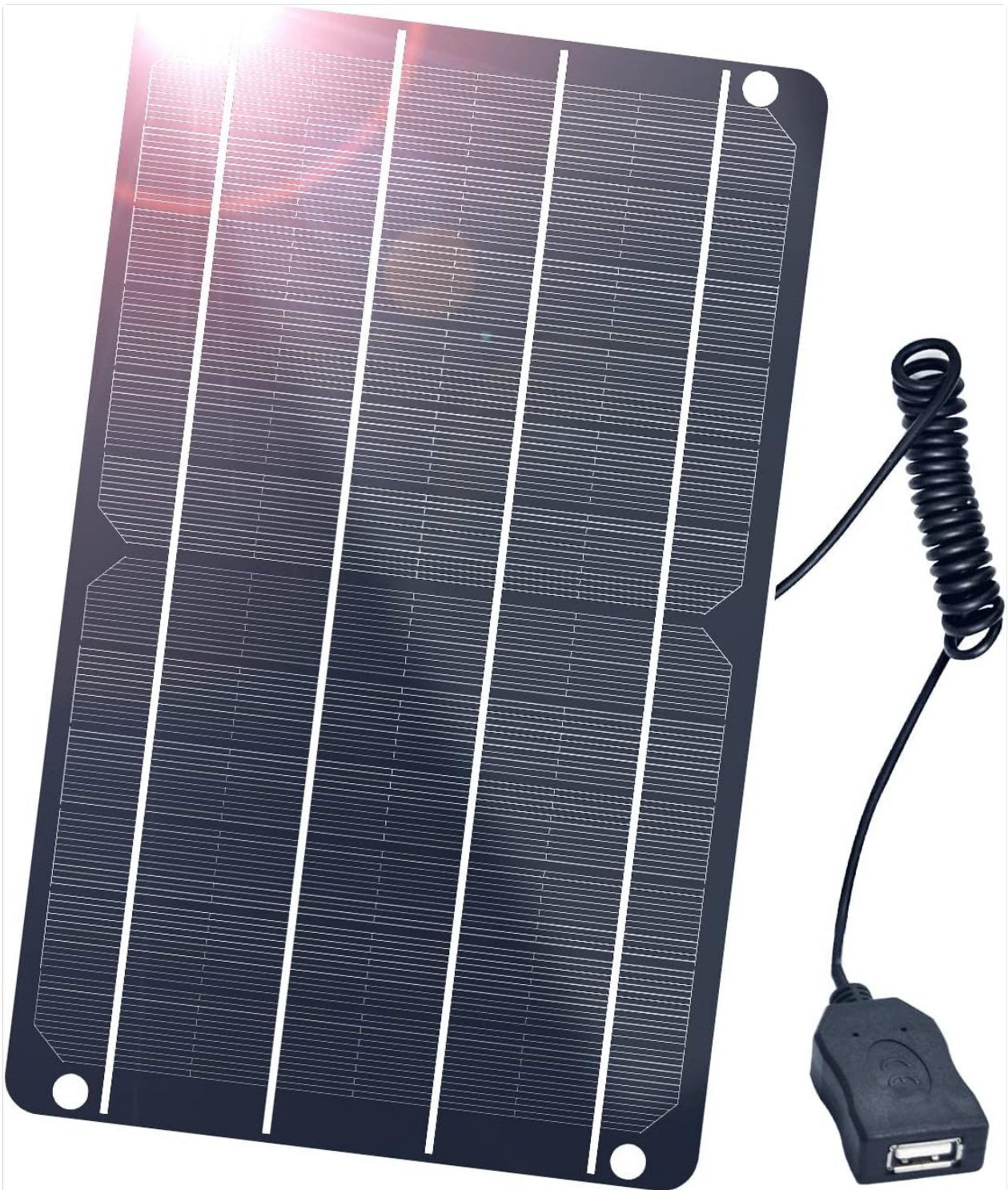
Figure 1: FlexSolar 6W Mini USB Solar Panel

2. SAFETY INFORMATION

- This solar panel does not store electricity. It generates power only when exposed to sufficient sunlight.
- For optimal performance, ensure the panel receives direct sunlight. Cloud cover or obstructions will reduce charging efficiency.
- Use this panel with low-power equipment as its maximum output is 6W.
- Do not attempt to disassemble or modify the solar panel. This may void the warranty and pose safety risks.
- Keep the panel away from fire, water, and corrosive substances.
- The product holds CE, FCC, Rosh, and PEC certifications, ensuring compliance with safety and environmental standards.

3. Package Contents

Verify that all items are present in your package:

- 1x FlexSolar 6W Mini USB Solar Panel
- 1x User Manual (this document)
- 2x Carabiners
- 1x USB to Micro-USB adapter
- 1x USB to USB-C adapter
- 1x USB to DC adapter
- Mounting screws and wall anchors
- Adjustable bracket for mounting

Video 1: Unboxing and package contents for a similar solar panel, showing accessories.

4. Setup and Installation

4.1 Attaching the Adjustable Bracket

1. Locate the threaded insert on the back of the solar panel.
2. Screw the adjustable bracket onto the threaded insert until secure.
3. Adjust the angle of the bracket to optimize sun exposure after mounting.

4.2 Mounting the Solar Panel

The solar panel can be mounted on a wall or other suitable surface using the provided bracket and hardware. It can also be attached to a backpack using the carabiners for portable charging.
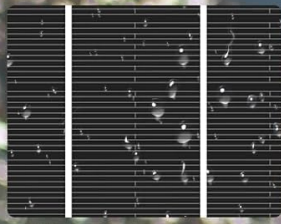
- **Wall Installation:** Choose a location that receives maximum direct sunlight throughout the day. Mark the drilling points using the bracket as a template. Drill pilot holes, insert wall anchors, and secure the bracket with screws. Attach the solar panel to the bracket.
- **Portable Use:** Use the included carabiners to attach the solar panel to a backpack or other gear, ensuring the panel faces the sun.
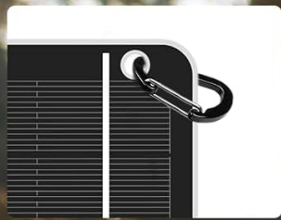
Figure 2: Solar panel providing power to an outdoor security camera.

Figure 3: Solar panel attached to a backpack for portable charging.

Video 2: Overview of the 6W USB Mini Solar Panel and its features.
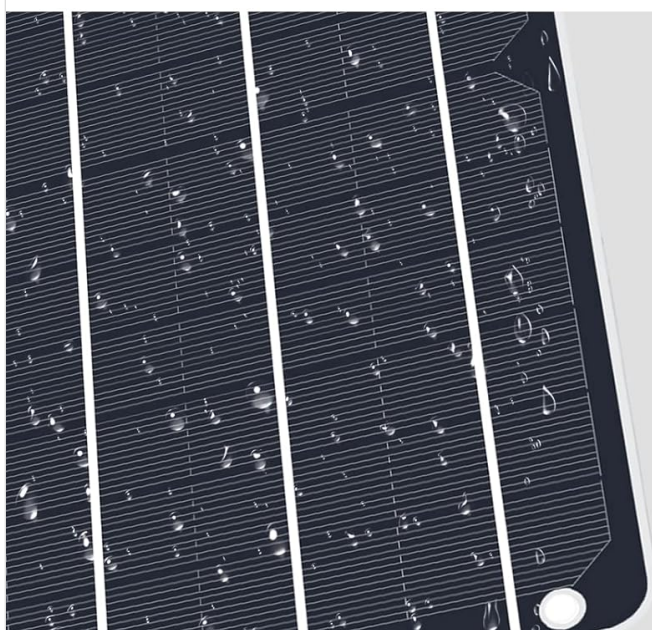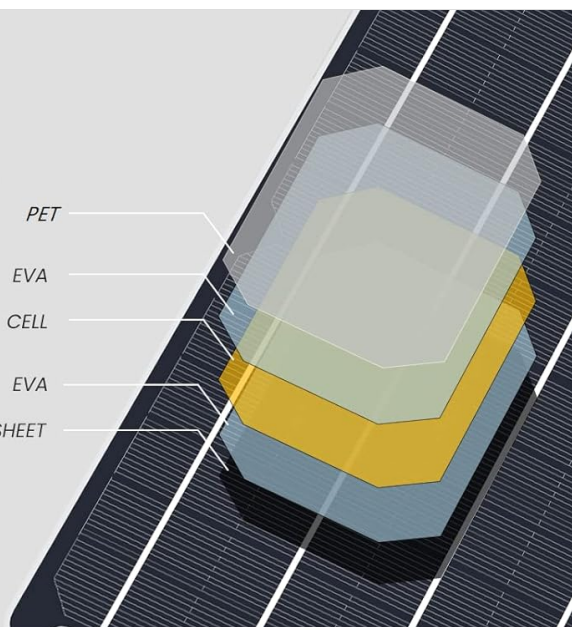
5. OPERATION

5.1 Connecting Devices

The FlexSolar 6W Mini USB Solar Panel features a standard USB-A output port. Use the appropriate adapter (Micro-USB, USB-C, or DC) to connect your device to the solar panel.

PET+EVA+cell+EVA+ Backplane third

Generation ETFE lamination technology, 97% light transmission rate

PET
EVA
CELL
EVA
BACKSHEET

IP67 WATERPROOF

No dust void, easy to clean and dirt resistant

Figure 4: Wide compatibility with various small electronic devices.

5.2 Charging Process

- Place the solar panel in direct sunlight.
- Connect your device using the USB cable and appropriate adapter.
- The device should begin charging automatically.
- Note that the maximum output power of 6W is achieved under sufficient sunlight. Charging speed will vary based on sunlight intensity.

Figure 5: Smartwatch charging using the solar panel.

Figure 6: Solar panel powering a small water pump.

Figure 7: Solar panel powering a fan for a pet house.

Video 3: Demonstration of the 6W Mini USB Solar Panel powering a fan.

6. MAINTENANCE

The FlexSolar 6W Mini USB Solar Panel is designed for durability and minimal maintenance.

- **Cleaning:** The IP67 waterproof rating and PET laminations make the panel easy to clean. Wipe the surface with a soft, damp cloth to remove dust or debris. Avoid abrasive cleaners.

- **Durability:** The PET material and robust construction ensure resistance to high temperatures and wear, contributing to a longer lifespan.

WIDELY COMPATIBLE

The solar panel did not have a rechargeable battery with it,so it can't store power/electricity.

Because our solar panel recharging is affected by various factors such as sunlight intensity at different times,

temperature,angle,position and is there a cover.The best charging effect can be achieved under full direct sunlight.
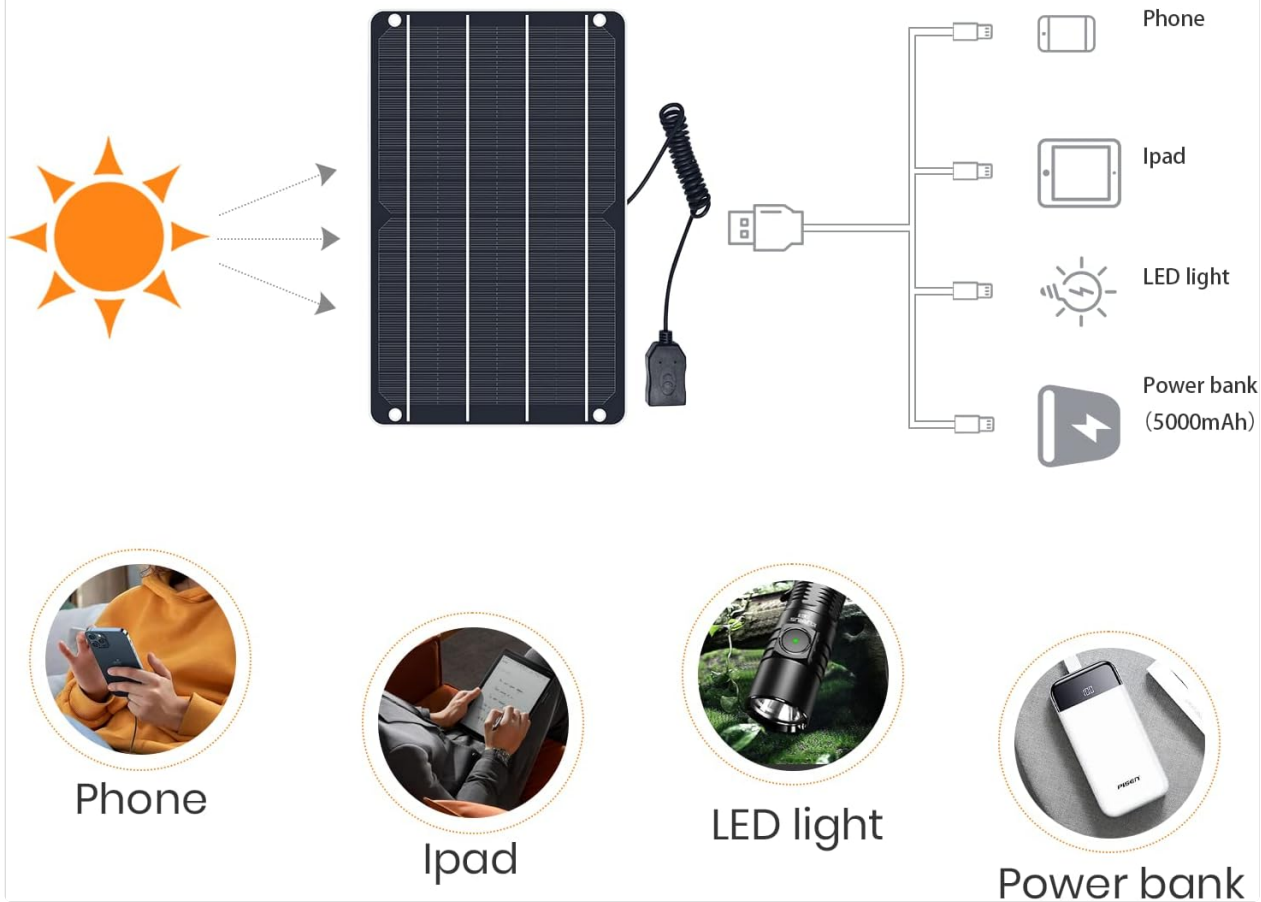

Figure 8: Construction details highlighting PET material and IP67 waterproofing.

7. TROUBLESHOOTING

- **Device not charging:**

  - Ensure the solar panel is in direct, unobstructed sunlight.
  - Check all cable connections to ensure they are secure.
  - Verify that your device is compatible with 5V USB charging and requires less than 6W of power.

- **Slow charging:**

  - Reposition the panel to receive more direct sunlight.
  - Clean the panel surface if it is dirty.
  - Charging speed is directly proportional to sunlight intensity; cloudy conditions will result in slower charging.

8. SPECIFICATIONS

Feature	Specification

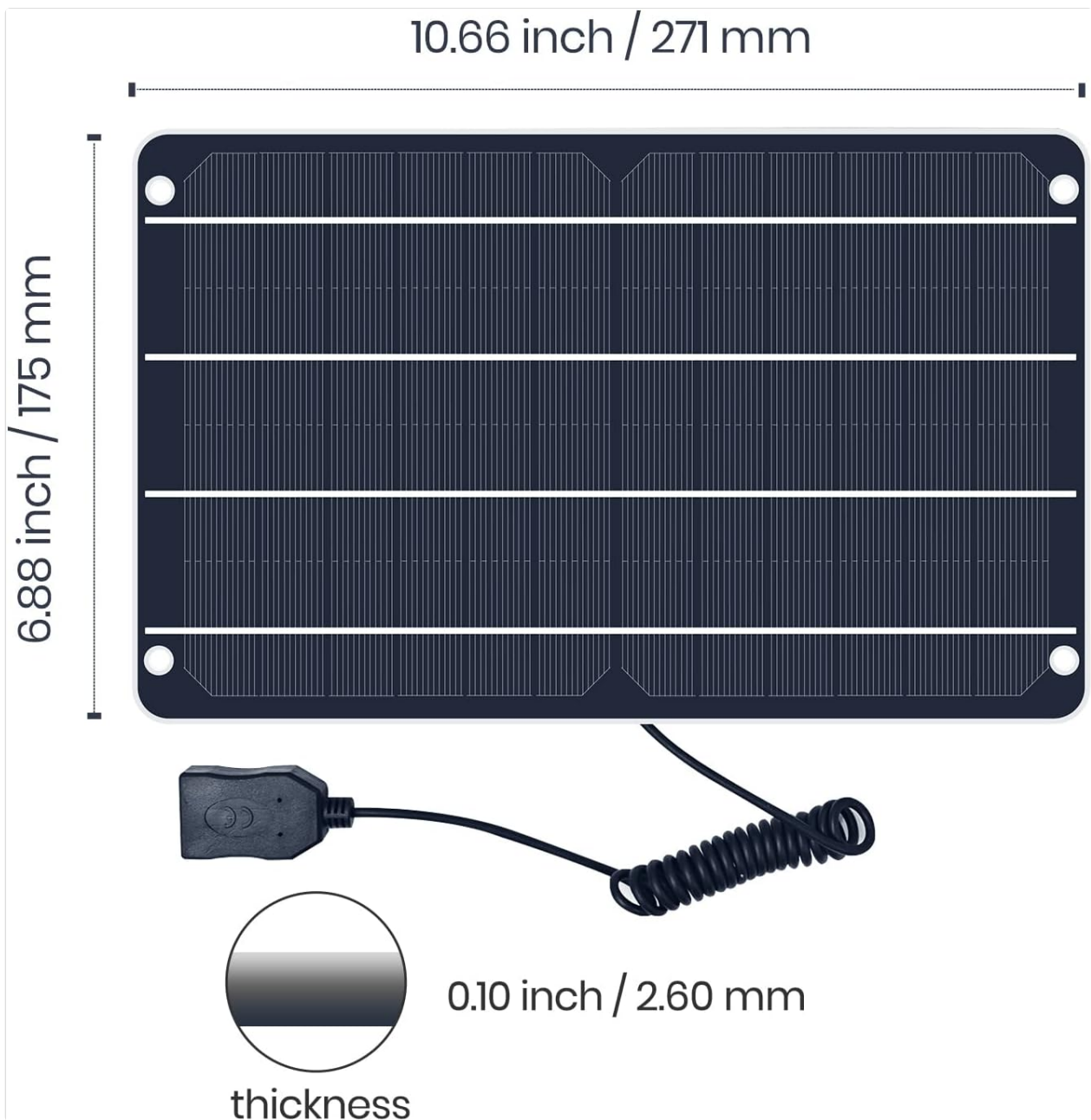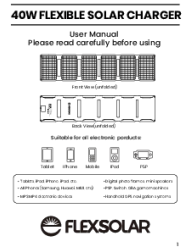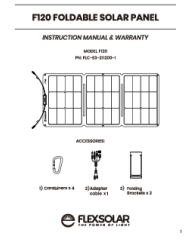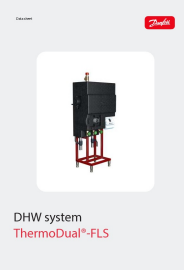| Feature	Specification
Brand	FlexSolar
Model Number	FLS-P0-050050-1
Material	Monocrystalline Silicon, PET
Product Dimensions	10.66in x 6.88in x 0.1in (271mm x 175mm x 2.6mm)
Item Weight	8.1 ounces (230 Grams)
Efficiency	High Efficiency (20% conversion rate)
Maximum Power	6 Watts
Maximum Voltage	5 Volts
Output Voltage	5 Volts
AC Adapter Current	0.57 Amps
Special Feature	Lightweight Design, Waterproof (IP67)

Figure 9: Product dimensions and USB port detail.

9. WARRANTY AND SUPPORT

The FlexSolar 6W Mini USB Solar Panel is manufactured to high-quality standards and comes with relevant certifications (CE, FCC, Rosh, PEC). For any questions, technical support, or warranty claims, please contact FlexSolar customer service through the retailer where the product was purchased.

Related Documents - FLS-P0-050050-1

[FlexSolar 40W Flexible Solar Charger User Manual](#)

Comprehensive user manual for the FlexSolar 40W Flexible Solar Charger (Model E40). Includes specifications, operation instructions, maintenance guidelines, and warranty information. Suitable for charging various electronic devices.

[FLEXSOLAR F120 Foldable Solar Panel: Instruction Manual & Warranty](#)

Comprehensive instruction manual and warranty details for the FLEXSOLAR F120 Foldable Solar Panel. Learn about safe operation, installation, specifications, maintenance, and product support.

[FlexSolar 30W Flexible Solar Charger E30 - Efficient Outdoor Power](#)

Discover the FlexSolar 30W Flexible Solar Charger (E30, FLC-E4-200300-2), a lightweight and waterproof power solution for outdoor activities. Featuring high-efficiency monocrystalline solar cells (up to 24%), smart charging, and IP67 durability, it's ideal for camping and emergencies. Includes QC 3.0 and DC ports for charging multiple devices.

[EZBio®pure Flask with VersaCap® and Adapter | Foxx Life Sciences](#)

Foxx Life Sciences offers the EZBio®pure Flask with VersaCap® and Adapter, a single-use bioprocessing solution made from USP Class VI certified Polycarbonate. Features customizable port configurations, sterile assembly, and various sizes for media storage, sampling, and cell culture.

[Danfoss DHW System ThermoDual®-FLS Data Sheet](#)

Technical data sheet for the Danfoss DHW system ThermoDual®-FLS, providing details on features, applications, ordering, specifications, materials, and dimensions for domestic hot water provision.