

## 100W FOLDABLE SOLAR PANEL MODEL NO: SFP1

PART NO: 6487078

# OPERATING & MAINTENANCE



ORIGINAL INSTRUCTIONS

DL1124

## INTRODUCTION

Thank you for purchasing this CLARKE Foldable Solar Panel. Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service. Please keep these instructions in a safe place for future reference.

## **ENVIRONMENTAL RECYCLING POLICY**

Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

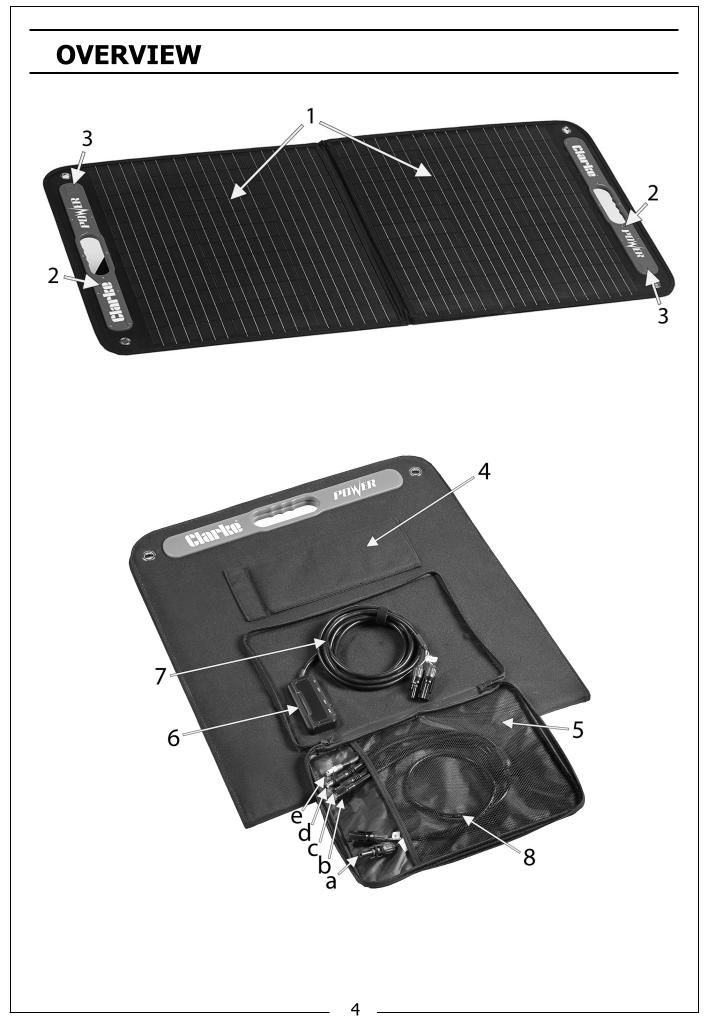
In effect, this means that this product must not be disposed of with general household waste but in accordance with the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

## SAFETY SYMBOLS SHOWN ON THE PRODUCT

(iii)	Read this instruction manual and the manual for the device being charged before use		DO NOT incinerate
	Warning: Battery Charging		Harmful to aquatic life
4	Warning: Risk of electrical shock if not used correctly	Ť	Protect from rain/ water
	Keep out of reach of children		

### **GENERAL HAZARDS & SAFETY**

- Keep your solar panel, junction box & cables away from any liquids at all times.
- Keep the solar panel and junction box clean at all times (**ALWAYS** check connectors to ensure they're free of grit before plugging them in).
- This appliance is **NOT** intended to be used by people (including children) with reduced physical or mental capabilities, or those who are under the influence of drugs or alcohol.
- **DO NOT** use the solar panel to charge non-rechargeable batteries. Doing so may result in harm to the user and/or damage the solar panel and controller. Only use the provided solar panel, regulator and adaptors/ wiring provided in the kit.
- Explosive gases. The battery/power bank should be mounted in a wellventilated area, as far as possible from any ignition sources.
- **DO NOT** smoke or have a naked flame in the vicinity of the battery/power bank under charge.
- **NEVER** tamper with or pull any component of the solar panel, junction box or wiring apart. If you do so, you will void the warranty.
- **DO NOT** flex or bend the solar panels.
- **DO NOT** step on or place objects on top of the solar panels.
- **ALWAYS** store the solar panel folded, protected from the weather and with good ventilation.
- Ensure nothing sharp or heavy could potentially damage the solar panel during transport or storage.
- It is recommended to charge the storage battery/power bank that has an input of 18V.
- **DO NOT** charge a battery/power bank without a built-in voltage regulator.
- **DO NOT** place solar panel on your vehicle's bonnet or paintwork during use.



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## **OVERVIEW LIST**

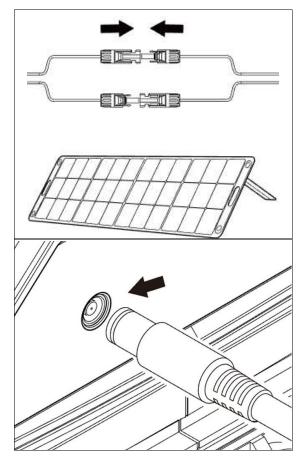
NO	DESCRIPTION	NO	DESCRIPTION
1	PET Solar Panel (x2)	8	4 Way Connection Cable
2	Carrying Handles (x2)	8a	MC4 Solar Panel Connector
3	Magnetic Catches (x2)	8b	DC5525 Connector
4	Support Arms (x2)	8c	DC5521 Connector
5	Storage Pocket	8d	DC7909 Connector
6	Multifunction Junction Box (2 x USB, 1 x USB-C, 1 x DC Ports)	8e	XT60 Connector
7	Hardwired MC4 Connection Cable		

## **CHARGING THE BATTERY/POWER BANK**

The battery power of a power station will be consumed during use. You can charge the power station as follows:

#### **CHARGING BATTERY/POWER STATION**

- 1. Connect the battery/power stations 4 way MC4 charging cable to the solar panels hardwired MC4 cable connection.
- 2. Open the solar panel so the active cells are facing towards the sun, using the support arms if needed.
- 3. Insert the appropriate DC plug (DC7909 shown) into the charging port of the battery/power station.
- 4. The battery/power station should automatically start charging.



#### **CHARGING OTHER APPLIANCES**

The solar panel has a multifunction junction box with the following cable connection ports:

- 2 x Standard USB ports
- 1 x USB-C port
- 1 x Female DC port
- 1. Connect the appropriate charging cable to one of the above ports.
- 2. Open the solar panel so that the active cells are facing towards the sun, using the support arms if needed.
- 3. Attach the device that needs charging to the charging cable.
- 4. The device should automatically start charging.



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## **STORAGE & MAINTENANCE**

- 1. Store the solar panel at an ambient temperature of 10°C to 30°C, away from water, heat and other metal objects.
- 2. For safety reasons, **DO NOT** store the product in an ambient temperature above 45°C or below -10°C for extended periods of time.
- 3. To clean, wipe surfaces with a clean damp cloth and wipe dry. **DO NOT** use any chemical or abrasive cleaning solutions or materials.

## **CLARKE POWER STATIONS**

CLARKE Portable Power Stations are sold separately, as follows:

- 1. PPS600 (8877140) 600W Portable Power Station.
  - 1 x AC 230V Outlet Socket
  - 2 x USB-A (DC 5V/3.1A) Sockets
  - 1 x DC 12V Car Type Socket
  - 1 x DC USB-C (PD 60W) Socket
  - 1 x 3.5V, 2W LED Worklight
- 2. PPS1200 (8877145) 1200W Portable Power Station.
  - 2 x AC 230V Outlet Socket
  - 2 x USB-A (QC3.0/18W) Sockets
  - 2 x USB-A (DC 5V/3.1A) Sockets
  - 1 x DC 12V Car Type Socket
  - 2 x DC USB-C (PD 60W & PD 100W) Sockets
  - 2 x DC (6.5mm x 1.4mm) Sockets
  - 1 x 3.5V, 2W LED Worklight

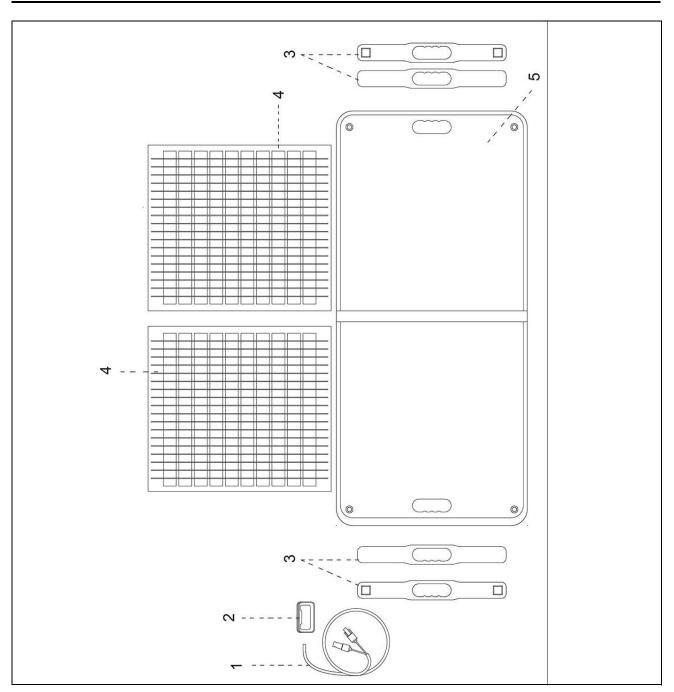


## SPECIFICATIONS

Item	Specification
Model	SFP1
Part Number	6487078
Weight	4.2kg
Size (D x W x H)	Open: 580mm x 1250mm x 50mm
	Closed: 580mm x 625mm x 50mm
Solar Cell Type	Monocrystaline
Solar Cell Quantity	72
Solar Cell Orientation (Optimal Tilt Angle)	Winter: Location Latitude + 15° Summer: Location Latitude - 15°
Application Class	Class A
Maximum Power	100W
Power Tolerance	±5%
Optimum Operating Voltage	18V
Optimum Operating Current	5.56A
Open Circuit Voltage	21.6V
Short Circuit Voltage	5.88A
Module Efficiency	22%
Maximum System Voltage	1000 VDC (IEC/600 VDC) (UL)
Maximum Series Fuse Rating	10A
Output Connector Types	2 x USB, 1 x USB-C Type, 1 x DC
Operating Temperature Range	-40°C - 85°C / -40°F - 185°F
Nominal Operating Cell Temperature	45°C (±2°C)
Temperature Coefficient of Pmax	-0.38%/°C
Insulation Protection Class	Class III
Ingress Protection Rating (IP)	IP20

Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice.

## DIAGRAM



NO	DESCRIPTION	NO	DESCRIPTION
1	Hardwired Connection Cable (with MC4 Connectors)	4	Polyethylene Terephthalate (PET) Solar Panels (x2)
2	Multifunction Junction Box (with 2 x USB, 1 x USB-C & 1 x DC Ports)	5	Sewn Cloth Cover with Storage Pocket and Support Arms
3	Plastic Handles with Magnetic Catches	6	4 Way Connection Cable (Not Shown)

## **DECLARATIONS OF CONFORMITY - UKCA**

JK	<b>Cap</b> kd <sup>®</sup>
	INTERNATIONAL
	Hemnall Street, Epping, Essex, CM16 4LG
	DECLARATION OF CONFORMITY
This i	s an important document and should be retained.
We hereby declare that th	nis product(s) complies with the following legislation:
The Electromagnet	tic Compatibility Regulations 2016
The Restriction of t Regulations 2012	the Use of Certain Hazardous Substances in Electrical and Electronic Equipment
The following standards I	have been applied to the product(s):
EN IEC 61000-4-3:	:2020, EN IEC 55014-1:2021, EN IEC 55014-2:2021, EN 61000-4-2:2009
The technical documentatic aforementioned legislation authorities.	on required to demonstrate that the product(s) meet(s) the requirement(s) of the has been compiled and is available for inspection by the relevant enforcement
	The UKCA mark was first applied in: 2024
Product Description:	Solar Panel
Model Number(s):	SFP1
Serial/Batch Number:	Refer to product/packaging label
Date of Issue:	27/09/2024
Signed:	J.A Clarke
	Director

Parts & Service: 020 8988 7400 / E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

## **DECLARATIONS OF CONFORMITY - CE**

CE .	R B B B B B B B B B B B B B B B B B B B
	DECLARATION OF CONFORMITY
This is	s an important document and should be retained.
We hereby declare that th	is product(s) complies with the following legislation:
2014/30/EU	Electromagnetic Compatibility Directive
2011/65/EU	Restriction of Hazardous Substances (RoHS) Directive
The following standards I	nave been applied to the product(s):
EN IEC 61000-4-3:	2020, EN IEC 55014-1:2021, EN IEC 55014-2:2021, EN 61000-4-2:2009
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SFP1 CE Clarke DOC 092724	Page 1 of 1

