



# MONOCRYSTALINE 10W SOLAR PANEL



P/No. SPA10

## SPECIFICATIONS

Solar Panel Peak Power	10W (18V)
No Load Voltage	18-23VDC
Load Voltage	12V
Output Current	400-550mAh (max)
Dimensions	330 x 240 x 5mm
Net Weight	381g

## OPERATING INSTRUCTIONS

1. Before connecting the solar panel to any vehicle or battery, first connect it to the cigarette lighter plug. Position and angle the solar panel until the red light on this plug illuminates, indicating there is adequate sun light from its position to provide charge.
2. Solar panel can be mounted to the inside of a windscreen using the supplied suction cups, or slid onto a sun visor and secured in place with the attached elastic. Avoid obscuring the driver's vision.
3. Once in position and showing adequate charge, the panel may be connected to a vehicle using the cigarette lighter plug or directly to a battery using the alligator clips. Note: cigarette lighter socket in vehicle must be "live" (able to supply power with or without ignition on) for the solar panel to charge it in this manner.

## SAFETY & WARNINGS

1. If using the supplied alligator clips for charging, ensure the positive (red) and negative (black) alligator clips are connected to the positive (+) and negative (-) posts of the battery respectively. We recommend connecting these to the battery before plugging the other end of the lead into the solar panel. When disconnecting the solar panel from a battery, disconnect the plug between solar panel and alligator clips first, before removing the clips from the battery.
2. This product provides a relatively small charge designed to top up and extend battery life on the go. We recommend a mains powered charger for instances where faster charging is required.
3. DO NOT attempt to modify the PCB circuit of the solar panel.
4. DO NOT place the product in rain as this could lead to a short circuit and damage the panel or any connected batteries/vehicles.
5. This product features built-in backflow resistance.
6. Avoid scratching the surface of the solar panel with sharp objects.

## FAQ

- Q. Do I need to pull out the cigarette lighter plug at night?
- A. We recommend unplugging at night, as the red power indicator on the plug will stay on, however its consumption is minimal and will not drain the battery, as the PCB circuit will prevent this.
- Q. After a few days of use, it fails to keep the battery charged?
- A. The small portable design produces a small charge current, intended to extend battery life over time. This can take a long time and some batteries that are in poor health may deteriorate their charge faster than the panel can charge them. In this case, it is recommended to use a larger output mains-powered charger or to replace your battery.
- Q. Is it waterproof and can I use it outdoors?
- A. The panel is laminated with high-tech polymer composition material, which is water-resistant, corrosion-resistant, and able to withstand high temperatures. However, the internal PCB circuit itself may be prone to short circuit if exposed to bad weather, in which case we do not recommend direct outdoor exposure.
- Q. Can I drive my car with the alligator clips attached to my battery?
- A. No. We recommend disconnecting or unplugging the panel from your battery or vehicle when starting a vehicle.
- Q. Do I need a charge controller?
- A. For cars, a charge controller is not required due to the low wattage of this panel. Charge controllers are recommended for solar panels greater than 18W.
- Q. Can I use this to recharge a dead car battery and if so how long would it take?
- A. No. This product is designed as a battery maintainer only, such as for vehicles or equipment that are rarely used. The battery must be in usable condition. This solar panel will offset the natural loss of charge in a battery and the small amount of drain that a vehicle may have when switched off, due to ambient power draw such as ECU, security systems, warning L.E.Ds and clocks. An isolation diode contained within the solar panel prevents back-feed drain from a battery.

## INCLUDED IN BOX

- Solar panel
- Alligator clips lead
- Cigarette lighter plug lead
- Suction cups (4)
- Instructions

# **WARRANTY STATEMENT**

## **APPLICABLE ONLY TO PRODUCT SOLD IN AUSTRALIA**

Brown & Watson International Pty Ltd of 1500 Ferntree Gully Road, Knoxfield, Vic., telephone (03) 9730 6000, fax (03) 9730 6050, warrants that all products described in its current catalogue will under normal use and service be free of failures in material and workmanship for a period of one (1) year (unless this period has been extended as indicated elsewhere) from the date of the original purchase by the consumer as marked on the invoice. This warranty does not cover ordinary wear and tear, abuse, alteration of products or damage caused by the consumer.

To make a warranty claim the consumer must deliver the product at their cost to the original place of purchase or to any other place which may be nominated by either BWI or the retailer from where the product was bought in order that a warranty assessment may be performed. The consumer must also deliver the original invoice evidencing the date and place of purchase together with an explanation in writing as to the nature of the claim.

In the event that the claim is determined to be for a minor failure of the product then BWI reserves the right to repair or replace it at its discretion. In the event that a major failure is determined the consumer will be entitled to a replacement or a refund as well as compensation for any other reasonably foreseeable loss or damage.

This warranty is in addition to any other rights or remedies that the consumer may have under State or Federal legislation.

## **IMPORTANT NOTE**

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

### **Distributed by**

#### **AUSTRALIA**

**Brown & Watson International Pty Ltd**

Knoxfield, Victoria 3180

Telephone (03) 9730 6000

Facsimile (03) 9730 6050

National Toll Free 1800 113 443

#### **NEW ZEALAND**

**Griffiths Equipment Ltd.**

19 Bell Avenue,

Mount Wellington,

Auckland 1060, New Zealand

Telephone (09) 525 4575

Facsimile (09) 579 1192

IS455  
Issue 2 11/11/22