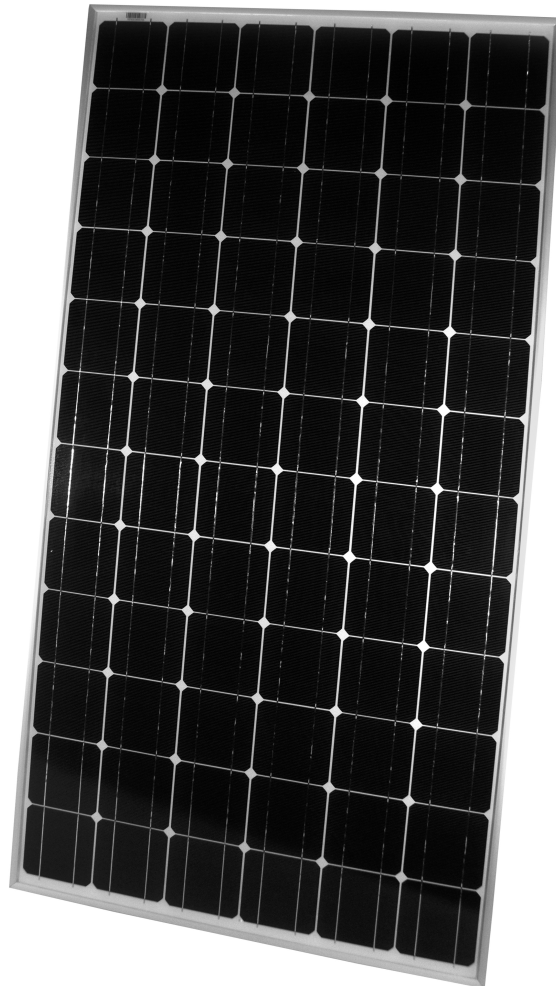




## **180 WATT SOLAR PANEL**



## **Installation Guide**

Congratulations on your Sunforce solar product purchase. This product is designed to the highest technical specifications and standards. It will supply years of maintenance free use. Please read these instructions thoroughly prior to installation, then store in a safe place for future reference. If at any time you are unclear about this product, or require further assistance please do not hesitate to contact our trained professionals operating the customer support line 1-888-478-6435 or email to [info@sunforceproducts.com](mailto:info@sunforceproducts.com)

## **SPECIFICATIONS**

Max Power: 180 Watts  
Open Circuit Volts: 43.20 Volts  
Short Circuit Current: 5.5 Amps  
Max Power Volts: 35.20 Volts  
Max Power Current: 5.10 Volts  
Max System Voltage: 1000 Volts DC

## **PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION**

### **NOTE:**

- Avoid Electrical Hazards when installing, wiring, operating, and maintaining your Solar Module. The solar module included generates DC electricity when exposed to sunlight or other light sources.
- Observe proper polarity throughout entire power cable wiring route.
- Work Safely. Do not wear jewelry when working with electrical or mechanical equipment. Use extreme caution when on ladders or on roof.
- All connections to the power grid must be completed by a certified technician.

## **LOCATION**

Choose an appropriate location that provides the most direct sunlight and can support the solar panel, and is free from shade. Be aware of surrounding objects; although an object seems far from the mounting location it may still obscure the sun from the panel. The ideal year round position for a solar panel in the Northern Hemisphere is facing due south tilted at an angle equal to your latitude. For most North American locations any angle between 30 and 50 degrees is suitable. Note: Mounting a solar panel vertically will optimize low winter sun position but is not beneficial in the summer months.

## **INSTALLATION**

All Solar Panels must be grounded by electrical connection of the panel frames to ground. For multi panel systems grounding must take into account the ability to remove an individual panel, without compromising the overall grounding system. Installation for wiring shall be in accordance with the National Electrical Code (NEC). Any grounding method shall comply with the NEC, article 250. The ground wire must not be smaller than No.14 AWG (2.1 mm<sup>2</sup>), and should be sized according to the NEC. Hardware used must be compatible with the mounting structure material to avoid galvanic corrosion.

## **MAINTENANCE INSTRUCTIONS:**

Cleaning of the glass may be performed by the user, utilizing a clean damp cloth. Any other maintenance to the unit should be performed by qualified service personnel or contact our experienced customer service team.

## **WARRANTY**

The solar panel is covered by a Twenty five year limited warranty of 80% of power output, and must be tested under optimal conditions. This product is warranted from defects in materials and workmanship for a period of two years from date of purchase.

This warranty does not apply in the event of misuse or abuse and or repairs and alterations.

**For more information or technical support**

**1-888-478-6435**

**[www.sunforceproducts.com](http://www.sunforceproducts.com)**

**[info@sunforceproducts.com](mailto:info@sunforceproducts.com)**

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