

# 100W 18V SOLAR PANEL

Monocrystalline

#### SUPPORT

If you are experiencing technical problems and cannot find a solution in this manual, please contact ECO-WORTHY for further assistance.

·Call: 1-866 939 8222(US)

+44 20 7570 0328(UK)

+49 693 1090 113(DE)

·Email: customer.service@eco-worthy.com

ECO-WORTHY solar manufacturers and wholesales solar panels and renewableenergy products since 2002. It was founded by several eco-friendly impassionedengineers and had achieved significant progress.

Till now, ECO-WORTHY owns a full series of products. We recommend renewableenergy, solar power and other energy-efficient options which offer many clean, greensolutions for both present and future.

Renewable energy reduces greenhouse gas emissions as well as your energy costs!t benefits both environment and our customers. This is a career we want to pursuitand dedicated to.

# General Information

There is one kind of solar panel that can generate more power than traditional single-sided solar panel, namely the bifacial solar panel.

#### What is bifacial solar panel?

Different from single-sided solar panel that generates power from only one side, the bifacial solar panel transforms sunlight into electricity on both its top and bottom surfaces.

The top of each bifacial solar panel is shielded with protective glass, and the reverse side has a transparent backing, which is distinct from traditional single-sided solar panel.

The junction box, typically installed on the back, is smaller and casts fewer shadows compared to single-sided solar panel.

What will you yield from the new design? Of course more solar power.

#### How does it work?

The upper cells of the bifacial solar panel faces the sun, thus directly collecting the incoming sun rays, absorbing only specific wavelengths. The cells work in a similar way to traditional single-sided solar panel.

Light reflected from the ground passes through the transparent backing. The roof or concrete driveway surface below the panel, finished in white or silver, can get the same performance.

Bifacial solar panel generates more power than single-sided panel installed parallel to a surface such as a roof, as it can capture light at different angles. As sunlight reflects at various angles, bifacial solar panel can catch more light effectively, thus allowing it generate power even on cloudy days.

To optimize the efficiency, a solar tracker bracket and ample space below the bracket for light can make the panel work better.

## **Key Features**



Tolerance: 0+3%



Bypass Diodes Protection



Higher module conversion efficiency (up to 22.98%) benefit from Passivated Emitter Rear Contact (PERC) technology



5400 Pa snow load 2400 Pa wind load



High light transmission Tempered Glass



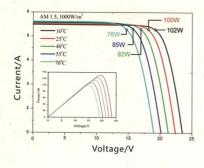
The upgraded version of the solar power generation system can generate electricity on both sides! Efficiency has increased by at least 10%!

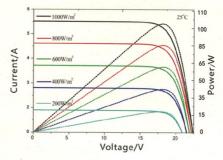
### **Specification**

100W Solar Panel	
Model	ECOM100W
Rated Power (*STC)	100W ±3%
Solar Cell Type	Monocrystalline
Open-Circuit Voltage (Voc)	22.7V ±3%
Short-Circuit Current (Isc)	5.55A ±3%
Max. Power Voltage (Vmp)	19.5V ±3%
Max. Power Current (Imp)	5.13A ±3%
Max. System Voltage	1000V
Max. Series Fuse Rating	10A
Dimension 895*585*35mm/35.24*23.03*1.37in	
Weight	6.6kg/14.55lbs

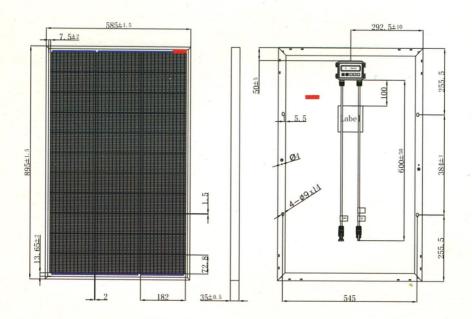
100W Bifacial Solar Panel	
Model	ECOBM100W
Rated Power (*STC)	100W ±3%
Solar Cell Type	Monocrystalline
Open-Circuit Voltage (Voc)	22.7V ±3%
Short-Circuit Current (Isc)	5.55A ±3%
Max. Power Voltage (Vmp)	19.5V ±3%
Max. Power Current (Imp)	5.13A ±3%
Max. System Voltage	1000V
Max. Series Fuse Rating	10A
Dimension 895*585*35mm/35.24*23.03*1.37in	
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# I-V Curves





# **Dimensions**







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www.eco-worthy.com