

# Single crystal double-sided PERC module





#### **Overview**

#### What are PERC solar panels?

One option that outstands from the rest is the Passivated Emitter and Rear Contact (PERC) solar technology which allows for the creation of PERC solar panels. The PERC solar panel is a highly efficient and improved type of PV technology that uses Crystalline Silicon (c-Si) and fixes some inconveniences of this traditional technology.

What is the difference between PERC and n-type solar cells?

The back side of the PERC double-sided process requires laser grooving, which weakens its own mechanical properties, increases the probability of cracks and debris during the application of the power station, and seriously affects the reliability of the solar modules; while the N-type solar cell is not used in the current technology.

Can bifacial PERC solar panels be combined?

The good news for the solar industry, is that bifacial and PERC technologies can be combined, to create bifacial PERC PV cells. These new and innovative solar cells can deliver up to 18% more power than monofacial solar cells. Understanding how PERC solar panel technology works, is key to understanding the pros and cons of different applications.

How are PERC solar cells made?

Poly PERC solar cells are manufactured by blending or melting different silicon fragments together, while mono PERC solar cells are manufactured using a single silicon crystal, free from grain limits (2D defects).

What is the difference between PERC and IBC solar cells?

Efficiency for IBC solar cells is higher in general, but the highest recorded efficiency for both technologies is similar. The highest efficiency for PERC solar cells was recorded at 25.0%, while IBC solar cells achieved a 25.4%



conversion efficiency. The biggest downside for IBC technology is that it has a higher cost than PERC solar panels.

What is the difference between PERC & poly C-Si solar panels?

Poly c-Si solar cells with 18.46% efficiency get an increased efficiency of 18.61% when manufactured with PERC technology, the difference is even more notorious with mono c-Si solar cells. A traditional mono c-Si panel has a 19.55% efficiency, but this efficiency increases by 0.86% to achieve 20.41% for mono PERC solar panels.



### Single crystal double-sided PERC module



### <u>Multi Scene High Conversion Perc182 Doublesided Single ...</u>

Cell size: 182\*95mm Type: PERC, Half Cell, Bifacial, Double-glass, All Black Panel Dimensions: 2278 x1134 x 30 mm Panel Efficiency: 21.3% Warranty: 30 years Weight:

32.3 kg Front Glass: ...

#### **Product Information**

### All Black Glass Perc Material Technology 430w 435w 440w Longi ...

All Black Glass Perc Material Technology 430w 435w 440w Longi A Gradehimo6 Single Crystal Pv Solar Panel, Find Complete Details about All Black Glass Perc Material Technology 430w ...

#### **Product Information**



#### <u>Premium Monocrystalline Silicon PERC Modules</u> <u>at Factory ...</u>

Compared with double-sided solar cell modules, the single-sided structure can reduce reflection loss and improve photoelectric conversion efficiency.PERC technology: PERC technology is a

Product Information

#### Brief description of PERC battery-industrynews , Large Power

The double-sided PERC battery not only broadens the application scenario of PERC battery, but also obtains higher power generation gain. The power generation of a large ...







### A Complete Guide to PERC Solar Panels (vs. Other Techs)

The double-sided solar modules can be divided into P-type double-sided and N-type double-sided according to the different crystalline silicon substrates. ...

**Product Information** 

## Double sided double glass half sheet multi main grid 78 piece ...

By using multi main grid high-efficiency PERC cells combined with cell half cutting technology, the product has higher output power and effectively reduces the cost of single watt systems; ...



#### **Product Information**



### 530W-550W Double Glass PV Modules PERC 182mm ...

The module adopts 182\*182mm high-power single crystal PERC cell and 0.32mm diameter round tinned copper tape, which increases the light refraction on the ...



#### **PERC PV Cells and Components**

At present, the double-sided rate of the double-sided PERC battery is about 75%, and the double-sided PERC battery not only broadens the application scenario of the PERC battery, but also

**Product Information** 





### Low Cost Pv Solar Panel Perc Single-sided 585w Solar Single Crystal

Low Cost Pv Solar Panel Perc Single-sided 585w Solar Single Crystal Photovoltaic Panel, Find Complete Details about Low Cost Pv Solar Panel Perc Single-sided 585w Solar Single Crystal ...

Product Information



In this article, we will do a deep and detailed analysis of what is a PERC solar panel, how it compares to older and other advanced technologies, as well as the different ...

Product Information





### Perc And Bifacial Power Generation Technology 430w 435w ...

Perc And Bifacial Power Generation Technology 430w 435w 440w Longi A Gradehimo6 Single Crystal Pv Solar Panel, Find Complete Details about Perc And Bifacial Power Generation ...



#### Longji Le Ye announced single-sided doublesided PERC battery ...

In order to adapt to the leader's plan and to meet the growing market demand for efficient products, Long Ji Le Ye in Shanghai SNEC 2017 to introduce Hi-MO2 single crystal ...

**Product Information** 





### Multi Scene High Conversion Perc182 Double-sided Single Crystal ...

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#### **Product Information**

## The successful combination of double-sided solar cells and solar

The SL-X series uses double-glass solar cells to effectively increase the power generation per unit solar panel and can control the area of the solar panel within a safe range without affecting the ...







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### High cost performance PV solar panel perc single-sided 600W ...

High Cost Performance Pv Solar Panel Perc Singlesided 600w Solar Single Crystal Photovoltaic Panel, Find Complete Details about High Cost Performance Pv Solar Panel Perc Single-sided ...

**Product Information** 

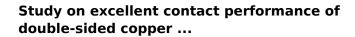




### PV double-sided technology comparison, P-type vs. N-type, ...

The double-sided solar modules can be divided into P-type double-sided and N-type double-sided according to the different crystalline silicon substrates. Currently, the mass-produced double

**Product Information** 



3 Results and discussion The plating process of the double-sided solar cell needs to contact the solar cell in an electrical way to distribute the plating current. For single-sided solar ...

**Product Information** 





#### New technology PV solar panel perc singlesided 595W solar single

New Technology Pv Solar Panel Perc Single-sided 595w Solar Single Crystal Photovoltaic Panel, Find Complete Details about New Technology Pv Solar Panel Perc Single-sided 595w Solar ...



#### <u>Comparison Analysis of Advantages and</u> <u>Disadvantages of ...</u>

For PV power plants, the use of PERC singlecrystal double-sided components still has significant reliability risks, which is a huge test for ensuring the profitability of power plants.

Product Information





### 530W-550W Double Glass PV Modules PERC 182mm 144 cells

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**Product Information** 

#### **Contact Us**

For catalog requests, pricing, or partnerships, please visit: https://les-jardins-de-wasquehal.fr