

## Advantages of producing double-glass modules







## **Overview**

Why are double glass modules symmetrical?

Mechanical constraints on cells: the fact that the structure of the double glass modules is symmetrical implies that the cells are located on a so-called neutral line, the upper part of the module being in compression during a downward mechanical load and the lower glass surface being in tension.

What is a dual-glass module?

Dual-glass type modules (also called double glass or glass-glass) are made up of two glass surfaces, on the front and on the rear with a thickness of 2.0 mm each. Some manufacturers, in order to reduce the weight of the modules, have opted for a thickness of 1.6 mm. DualSun has chosen to stay with a thickness of 2.0 mm for reasons explained below.

Why should you choose glass in a PV module?

The choice of glass in a PV module has become a key consideration in efforts to improve durability in the face of extreme weather conditions.

What is double glass encapsulation?

Hermetic encapsulation: the double glass modules offer a hermetic structure, resistant to aggressive weather conditions, the main one being moisture penetration highlighted during tests so-called Damp Heat, according to standard IEC 61215-2: 2021 (clause MQT13).

Are bifacial double-glass modules a good choice?

There has been a noteable shift from the initial single-facial single-glass modules to bifacial double-glass modules. Double-glass modules, with their performance in the face of salt mist, high temperatures and high humidity, have won the market's favour. However, this trend is not without its risks.

Can tempered glass be used in solar modules?



The only feasible way for tempered glass to be widely used in solar modules is its application in single-glass modules. The prevailing benchmark for hail resistance, which stipulates that solar modules must be capable of withstanding impacts from hailstones up to 35mm in diameter, may fall short in areas frequently subjected to larger hailstones.



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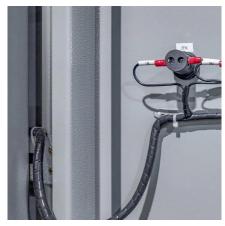


PVB Double Glass Photovoltaic Module Insightful Market ...

Secondly, the inherent advantages of PVB double glass modules - superior durability, enhanced resistance to environmental factors like hail and UV degradation, and improved performance in ...



To summarize the advantages cited above, the choice of a double glass structure means that the photovoltaic cells are better protected from external stress, in particular from the penetration of ...



<u>Double-Glass vs. Traditional Solar Panels: What's the Difference?</u>

Double-glass solar panels offer compelling advantages for projects prioritizing longevity and performance, with their extra cost often justified by superior lifetime value in challenging ...



About the advantages of double-sided doubleglass modules and ...

Solar panels that can generate electricity on both sides are called bifacial modules, and are generally in the form of double-glazing. This



article compiles the advantages of double-sided





What is the Double Glass (Dual Glass) Photovoltaic Solar Panel?

The advantages of Double Glass Solar Modules? Rear Side Module Protection The glass on the back avoids the risks associated with the back film as it is not exposed to moisture, alkalinity, ...

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