

SolarInvert Energy Solutions

Benefits of double-glass modules



Overview

Compared with traditional monocrystalline silicon photovoltaic modules, double-glass double-sided modules have the advantages of a long life cycle, low attenuation rate, weather resistance, better fire resistance, better heat dissipation, good insulation, easy cleaning and higher power generation efficiency. 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.

What is the thickness of a glass module?

The thickness of the front glass generally used for this type of structure is 3.2 mm. 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.

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 noticeable 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.

Benefits of double-glass modules



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single glass versions. Firstly, their durability is considerably higher, as they ...

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Glass/Backsheet or Bi-glass TOPCon ?

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What is the difference between double glass ...

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glass layer is used on the back of the modules instead of the traditional polymer backsheet. Double glass ...

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Are Double-Glass Photovoltaic Modules Good Exploring

Key Advantages of Double-Glass PV Modules Weather Resistance: With no backsheet to degrade, these modules withstand extreme temperatures, humidity, and UV exposure. Higher ...

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Double the strengths, double the benefits

Feb 21, 2025 · Key Advantages of double glass modules. Material resilience: Glass



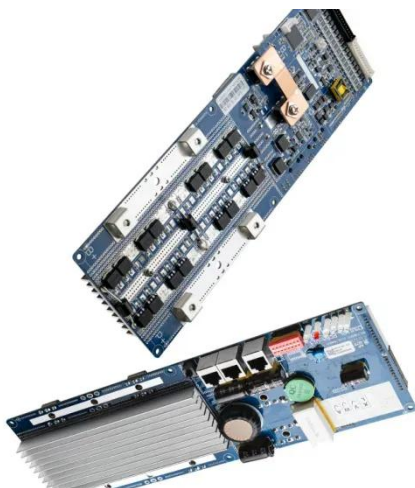
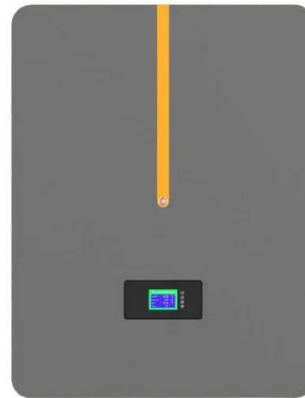
inherently resists aging, ensuring that modules maintain performance ...

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Single Vs. Double Glass Solar Panels

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8 Must-Know Advantages of Bifacial Solar Panels ...

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Glass-Glass Solar Panel Technology

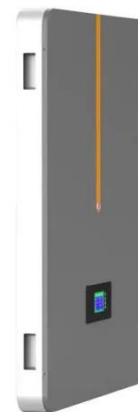
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What's the advantage and disadvantage of double-glass

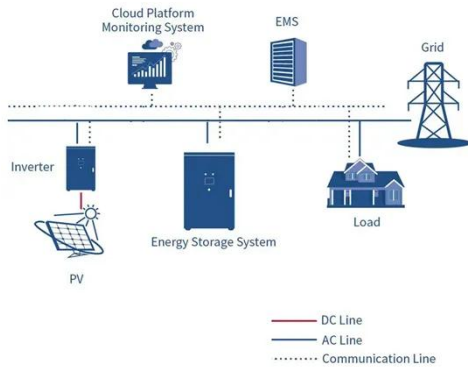
Sep 16, 2023 · Additionally, double-glass photovoltaic modules are heavier than single-glass modules, which can be a disadvantage for applications with weight restrictions. Advantages of ...

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