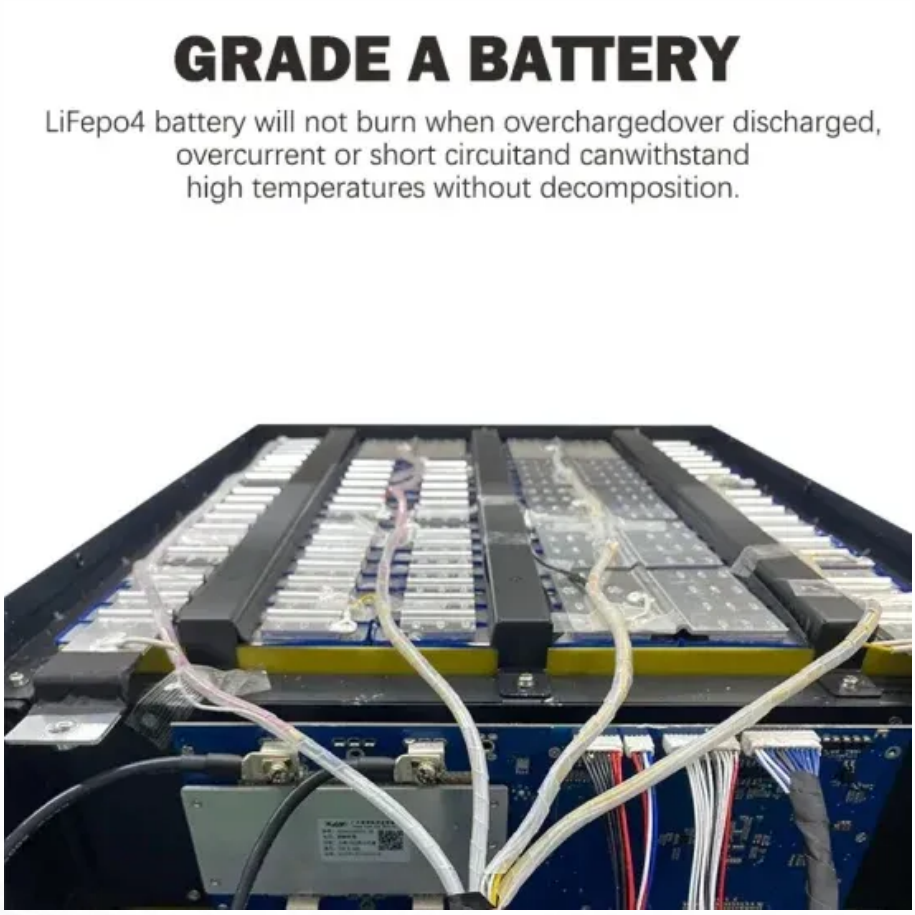
SolarTech Power Solutions

Double-glass thin-film photovoltaic modules



Overview

What is double glass photovoltaic module?

Preface To further extend the s rvice life of photovoltaic modules, double glass photovoltaic module has cently been develop d and st died in the PV community. Double lass module contains two sheets of glass, whereby the back sheet is made of heat strengthened (semi-tempered) glass to substitute the traditional polymer backsheet.

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.

Are double glass PV modules safe?

Double glass PV modules is an area of significant investigation by many companies and institutes in recent years, for example Dupont, Trina, Apollon, SERIS, MIT, Meyer Burger and Talesun. According to the literature, double glass also has some potential risks besides the abovementioned advantages.

Are double-glass PV modules durable?

Double-glass PV modules are emerging as a technology which can deliver excellent performance and excellent durability at a competitive cost. In this paper a glass–glass module technology that uses liquid silicone encapsulation

is described. The combination of the glass–glass structure and silicone is shown to lead to exceptional durability.

Why is white double glass PV module more powerful than transparent?

Due to the high reflectance of white EVA, the power of white double glass module is higher than that of transparent double glass module by 2-4%. Double glass PV modules is an area of significant investigation by many companies and institutes in recent years, for example Dupont, Trina, Apollon, SERIS, MIT, Meyer Burger and Talesun.

Double-glass thin-film photovoltaic modules

Influence of the temperature on the intrinsic parameters of thin-film

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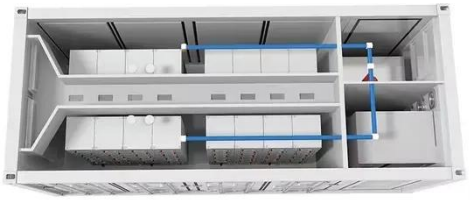

Inventions, innovations, and new technologies: Flexible and ...

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Materials selection

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encapsulation materials for ...

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CdTe thin-film photovoltaics

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