

Back gain of double-glass modules





Overview

What is the bifaciality of a double glass module?

Bifaciality: The bifaciality of double glass modules produces a gain of around 10-11% compared to the power measured on the front panel alone, for TOPCon type modules under so-called BNPI (bifacial nameplate irradiance) test conditions.

What is a double glass module?

In contrast, double glass modules replace the polymer layer with another glass sheet, creating a robust sandwich structure. At IBC SOLAR, we use 2,0 mm x 2,0 mm glass layers, whereas some other market offerings use thinner 1,6 mm x 1,6 mm layers. This ensures greater durability and longevity.

Does a glass/glass bifacial module have more optical gain?

Incorporating both, the IR reflective coating and the white reflective coating-3, into the half-cut cell module with 3mm cell-gap and 5mm string-gap, the optimized glass/glass bifacial module has about 4% more optical gain, as compared to a standard glass/glass bifacial module without any coating (Fig. 14). Fig. 12.

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.



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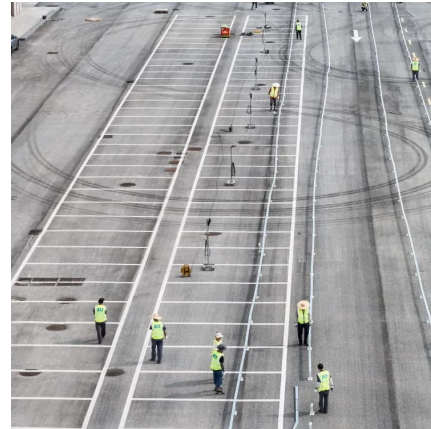


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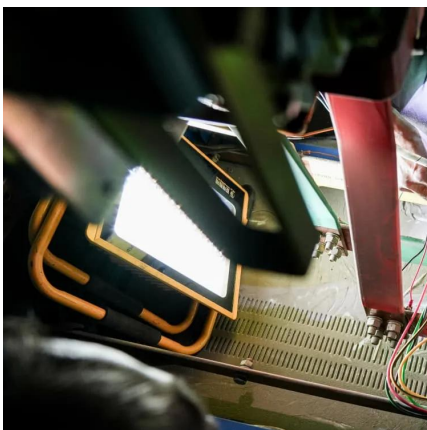
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