

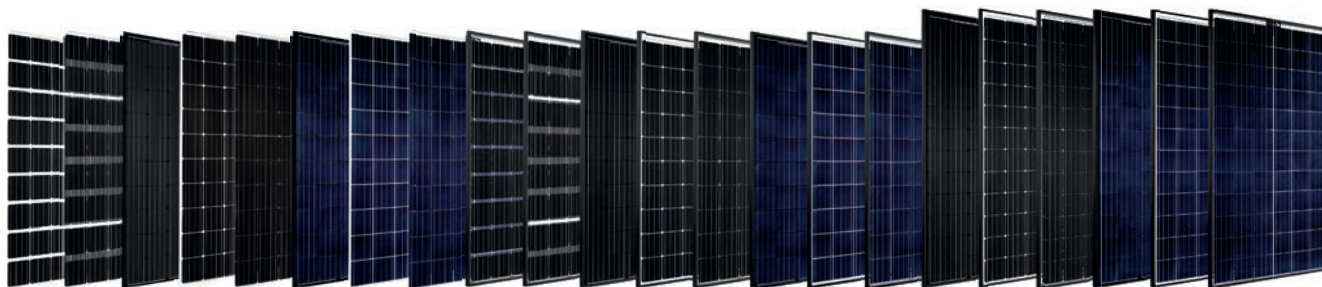


EXCELLENT GLASS/GLASS MODULE

BUILT FOR GENERATIONS

BEAUTIFUL COMBINATION

MORE POWER, HIGH RELIABILITY AND AESTHETICS



The new glass/glass modules deliver a guaranteed additional yield of 25 % and 60 % additional yield over the entire product lifetime. The modules of the Excellent Glass/Glass series are significantly more robust against all loads and environmental influences. The result: more reliability from day 1 on.

And these modules are attractive too: The design is highly sophisticated, making these modules an elegant addition to any building. Furthermore, we guarantee our product's performance with an industry-leading warranty – because it's better to stay on the safe side.

Robust.

Extremely resistant glass/glass composite, particularly suitable for

- snow load zones
- wind load zones
- agriculture and industry (ammonia resistance)
- coastal regions (protection against salt spray)
- desert regions (protection against sand abrasion)

Strong.

Guaranteed performance of 87 % after 30 years of product life backed by linear performance guarantee and thus 25 % guaranteed additional yield* and 60 % additional yield over the entire product life **

Aesthetic.

Highest optical standards

- elegant design in various colour combinations
- possibility of facade integration
- module as roof tile (Solrif system)
- module with higher light transmission (Brilliant series)

More safety.

- more safety through fire behaviour - glass does not burn
- significantly lower risk of electric shock - glass/foil is easier to damage (slot), e.g. during installation

* Compared to a standard glass/foil module under the same conditions, based on the entire warranty period

** Compared to a standard glass/foil module under the same conditions, based on a total product life of the glass/glass module of 40 years.

HIGHEST STABILITY

MODULE CONSTRUCTION WITH ADDITIONAL BACKSIDE GLASS



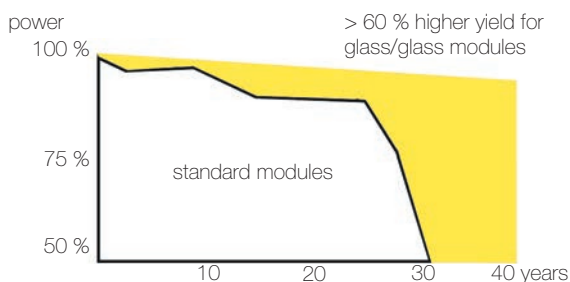
UNRIVALLED STABILITY EVEN UNDER EXTREME CONDITIONS



Load	2,400 PA	5,400 PA	6,000 PA	8,100 PA
Glass/Glass module	100 %	100 %	100 %	100 %
Standard module	100 %	95 %	90 %	0 % (defect)

BEST YIELD STABILITY EVEN UNDER EXTREME CONDITIONS

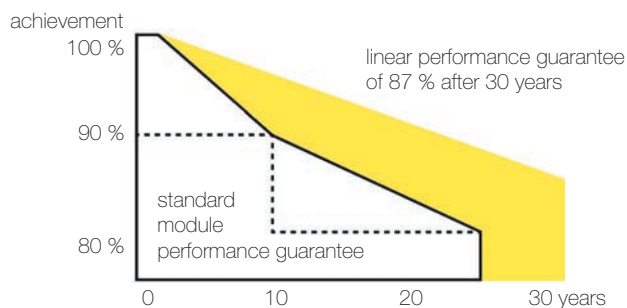
Moisture, cold temperatures and other harsh weather and environmental conditions can dramatically affect the performance of your modules. Sonnenstromfabrik glass/glass modules show magnificent performance, even under the most extreme conditions, ensuring stable yields over the long-term. Over its entire service life of 40 years, the module generates an additional yield of over 60 % compared to industry standards.



MORE SAFETY

25 % GUARANTEED ADDITIONAL YIELD

Guaranteed performance of 87 % after 30 years of product life, backed by linear performance guarantee. This corresponds to a guaranteed additional yield of 25 % compared to industry standards.



QUALITY THAT PAYS OFF

ADVANTAGES OF EXCELLENT GLASS/GLASS MODULES

The new generation of glass/glass modules from Sonnenstromfabrik raises the bar for solar modules. This technology ensures optimum resistance against fire and scratching, enables the module to withstand heavy loading and offers better protection against temperature fluctuations, moisture and other environmental conditions. Thanks to these advantages, modules of Sonnenstromfabrik Excellent Glass/Glass series have a product lifetime of more than 40 years. This means that you profit from maximum yield stability over a period of time that far exceeds the lifetime of standard modules.



25 % guaranteed additional yield, 60 % additional yield over product lifetime

Solar cells in neutral phase are especially protected against tensile and compressive loads. This extreme stability, even under high mechanical stress, guarantees a maximum product lifetime, protection against micro-cracks of the cell and the associated drop in performance.



Aesthetic and versatile applications

Whether upright or horizontal – with Sonnenstromfabrik glass/glass modules, installation is always quick and easy. Additional option for use as a waterproof roof tile (Integration series).

Additional option for installation in facades with laminate systems (Frameless series).

Additional option for overhead installation in combination with targeted control of light transmission (Brilliant series).



Suitable for the extreme environmental conditions

Protection against ammonia: especially in agriculture and industrial plants, glass/foil modules are easily damaged on the plastic rear side and the aging process is accelerated. This effect does not occur with glass/glass modules.

Protection against salt spray in coastal regions: with glass/foil modules, the plastic rear side is attacked by salt spray and the aging process is accelerated. Salt mist is no problem for glass/glass modules.

Protection against abrasion in desert regions: with glass/foil modules, the plastic rear side is destroyed by sand abrasion, the aging process of the module is extremely accelerated. This is no problem for glass/glass modules.



Perfect for snow and wind load zones

Sonnenstromfabrik glass/glass modules offer a higher resistance thanks to the strong connection between the two glass layers. The use of the second glass sheet gives the glass/glass modules a torsional rigidity and stability that cannot be achieved by glass/foil modules. The result: excellent suitability for all snow and wind load zones. Our modules are tested to 8,100 Pa.



Anti-reflective glass

Together with the PID-free high-performance cells, the anti-reflective solar glass ensures excellent performance with up to 5 % more yield and optimum light output of the glass/glass modules even in low light conditions.



Sustainable

The production of the modules has been certified to the lowest carbon exhaust. Solar modules from Sonnenstromfabrik are taken back after use and recycled according to the latest standards.

MORE VARIETY

THE NEW MODULE GENERATION



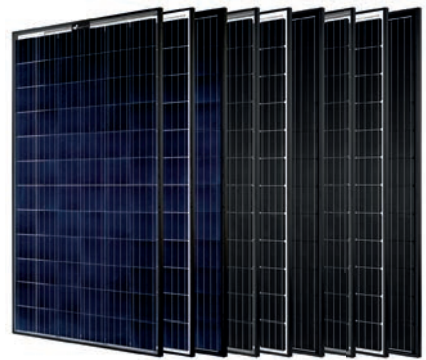
Glass/Glass Modules

materials
cells
Wp

2 x 2 mm glass/glass laminate
60 cells: poly | mono | mono perc | perc bifacial
275 – 320 Wp

backside
frame
CO₂ certificate

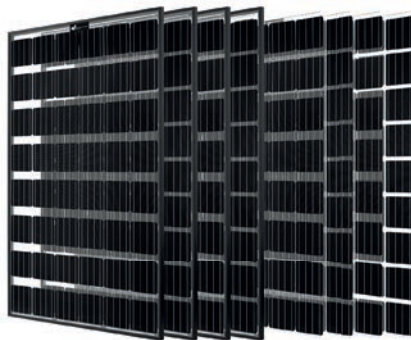
transparent | white | black
35 mm black anodized | frameless
optional



Glass/Glass Modules XL

2 x 2 mm glass/glass laminate
72 cells: poly | mono | mono perc
330 – 385 Wp

transparent | white | black
35 mm black anodized
optional



Brilliant Glass/Glass Modules

materials
cells
Wp

2 x 2 mm glass/glass laminate
mono | mono perc | perc bifacial
225 – 285 Wp

backside
frame
CO₂ certificate

transparent, light diffusion: 19 % | 27 % | 51 %
35 mm black anodized | frameless
optional



Integration Modules

2 x 2 mm glass/glass laminate
60 cells: mono | mono perc
285 – 320 Wp

black
Solrif black



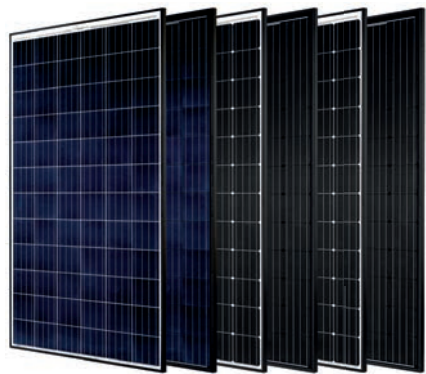
Glass/Foil Modules

materials
cells
Wp

3,2 mm glass/foil laminate
60 cells: poly | mono | mono perc
275 – 320 Wp

backside
frame
CO₂ certificate

white | black
35 mm black anodized
optional



Glass/Foil Modules XL

3,2 mm glass/foil laminate
72 cellen: poly | mono | mono perc
330 – 385 Wp

white | black
35 mm black anodized
optional

QUALITY AND PERFORMANCE
MADE IN GERMANY



We secure your investments

We only distribute photovoltaics modules made in our German module production facility. The long-term experience of Sonnenstromfabrik is reflected in the extraordinary high quality and reliability of our photovoltaics modules.

Made in Germany

Our products and services undergo extensive quality testing. All products can be supplied with German certificate of origin issued by the chamber of commerce.

Highest Yields

Our modules regularly deliver higher than expected yields – tested and confirmed numerous times.

Broad product portfolio

Thanks to the unique production footprint, Sonnenstromfabrik can offer a broad portfolio: glass/glass / glass/foil, Poly / Mono / Perc, 60 cells / 72 cells, several color combinations.

Glass/glass competence

Glass/glass modules are produced with an innovative production technology specially developed by Sonnenstromfabrik.

Certified CO₂ footprint

The production of modules has been audited for lowest CO₂ footprint. When solar modules are removed from service, Sonnenstromfabrik takes them back and recycles them according to the latest standards.

Guarantee terms

Up to 30 years product and performance guarantee give ideal protection for your investment. In cooperation with Ergo, Sonnenstromfabrik provides an optional Total Care insurance and protects your system for 5 years not only against theft and weather damages, but also compensates for performance loss due to product damages.