



WE LIGHT UP
YOUR FUTURE
MODULES BUILT
FOR ETERNITY

MADE IN GERMANY

SONNENSTROMFABRIK THE HIGH TECH COMPANY

Sonnenstromfabrik has acquired production facilities of former Centrosolar Group in 2014 and today runs the fab with focus on: glass/glass modules, high performance modules, carbon footprint modules, standard modules, OEM products.

The fab located in Germany is one of the most modern and efficient module production facilities in Europe:

Capacity
325 MWp

Uptime
> 90 %

Claim Rate
0,02 % over
25 years history

In-time Delivery
99,5 %

Total Invest
30 Mio. EUR
100 % Equity

Major Shareholder
90 % Pari Holding GmbH



SONNENSTROMFABRIK STRONG BACKBONE



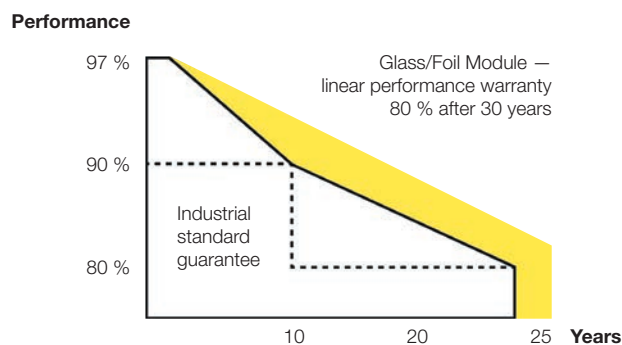
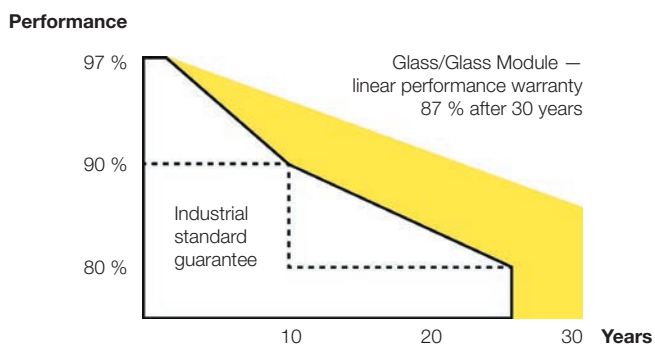
Sonnenstromfabrik ist a subsidiary of Pari Group — a diversified group of none-consolidated enterprises controlled by the Guido Krass family.

In total the group employs 3000 specialists in global growth markets and realizes a top line of 600 Mio. EUR.

Pari Group business activities cover the segments Health Care, Green Tech & Renewables and Technology.

Vision of Pari Group
„To be profitable and make the world a little bit cleaner so that our children can be proud of our new technologies to produce renewable energy and increase the energy efficiency in our day-to-day life.“

WE SECURE YOUR INVESTMENT



	Product warranty	Performance warranty	Performance warranty after 1 year	Performance warranty max	Max annual performance loss starting year 2	Total Care
Excellent	20 years	linear	97 %	30 years, 87 %	0,35 %	yes, optional
Glass/Glass	12 years	linear	97 %	26 years, 80 %	0,68 %	yes, optional
Excellent						

A BROAD VARIETY THE NEW MODULE GENERATION



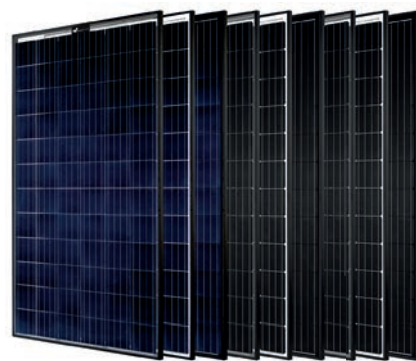
Glass/Glass Modules

Materials
Cells
Wp

2 x 2 mm glass/glass laminate
60 cells: poly | mono | mono perc | perc bifacial
275 – 325 Wp

Backside
Frame
Optional

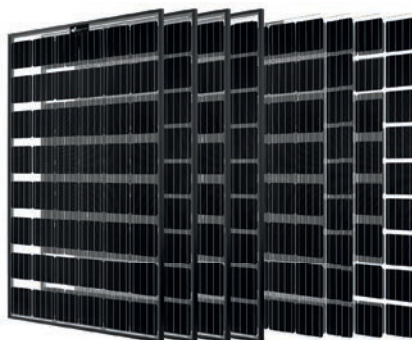
transparent | white | black
35 mm anodized black | frameless
CO₂ footprint



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 schwarz eloxiert
CO₂ footprint



Brilliant Glass/Glass Modules

Materials
Cells
Wp

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

Backside
Frame
Optional

transparent, light diffusion: 19% | 27% | 51%
35 mm anodized black | frameless
CO₂ footprint



Integration Modules

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

black
Solrif black



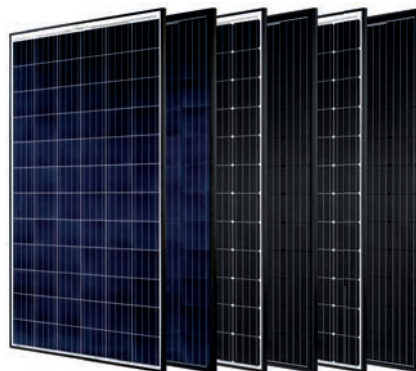
Glass/Foil Modules

Materials
Cells
Wp

3,2 mm glass/foil laminate
60 cells: poly | mono | mono perc
275 – 325 Wp

Backside
Frame
Optional

white | black
35 mm anodized black | frameless
CO₂ footprint

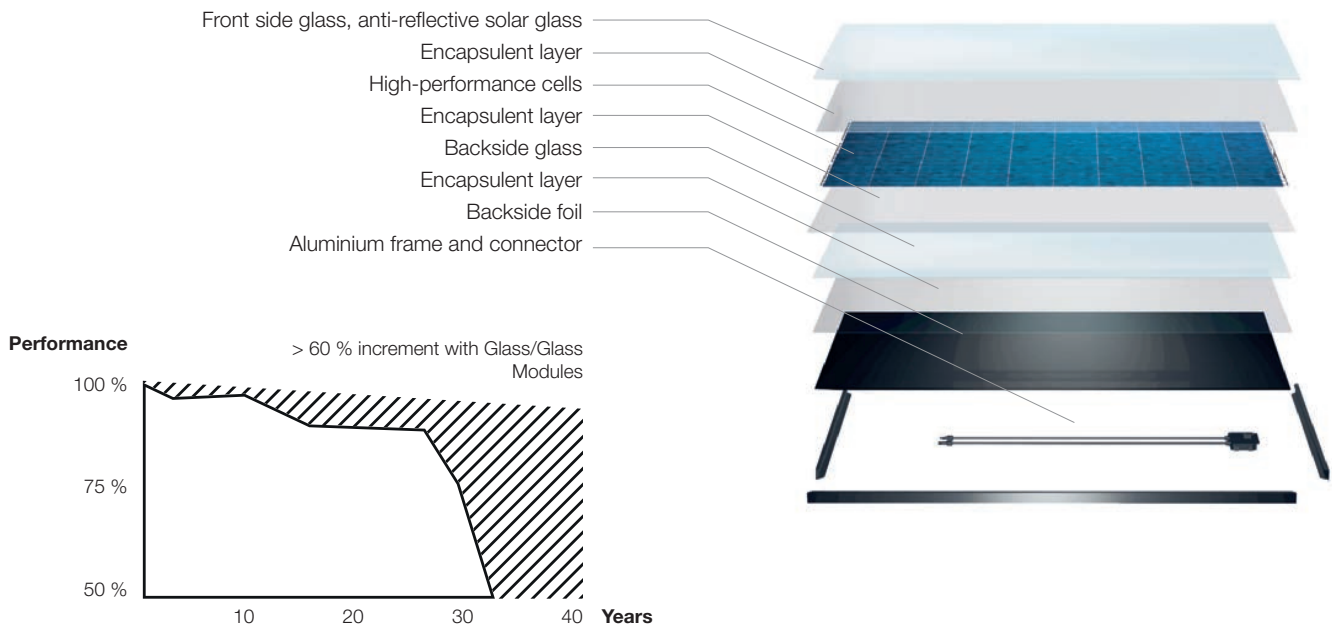


Glass/Foil Modules XL

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

white | black
35 mm anodized black
CO₂ footprint

EXCELLENT GLASS/GLASS – NEW STANDARDS IN DURABILITY AND ENDURABILITY



Moisture, cold temperatures and other harsh weather and environmental conditions can dramatically affect the performance of your modules. Sonnenstromfabrik Excellent Glass/Glass modules show excellent performance, even under the most extreme conditions, ensuring stable yields over the long-term.

While product lifetime of glass/foil laminates is limited to 23–30 years, glass-glass laminates have a lifetime beyond 40 years. Furthermore the performance loss of glass-glass modules is dramatically lower than with glass-foil modules.

Conventional modules do have a glass front and a plastic backside. The plastic backside is the weak point of the module with regard to durability. Furthermore, mechanical load results in micro cracks which in turn lead to power loss.

With glass/glass laminates the plastic backside is replaced by a glass-backside, thus the module is significantly stronger than a classical glass-foil laminate, whilst maintaining nearly similar weight.



Compatibility

Whether upright or horizontal — with Sonnenstromfabrik modules, installation is always quick and easy. Of course the solar modules are compatible with the most commercially available mounting systems.



Cells in neutral phase

Solar cells in neutral phase are especially protected against tensile and pressure loads. The modules are extremely stable, even with heavy mechanical loads, guaranteeing a long product lifetime.



Anti reflective glass

The anti-reflective solar glass, together with the PID-free high-performance cells, ensures excellent performance with an up to 4 % increase in yield and optimum light absorption for the Excellent Glass/Glass modules, even in unfavorable lighting conditions.



Glass/glass composite

The yield stability of the glass/glass modules is far higher than that of the standard glass/foil modules because no moisture can penetrate the systems. Unlike our stable glass/glass composite modules, foils age and are at risk of developing scratches or damages as a result of harsh environmental conditions.



A wide selection for every application

Special attention was placed on developing an application-oriented range of products for the modules. The glass/glass module offer the perfect solution for every roof situation: for industrial and private buildings as well as for in-roof or on-roof systems.



Load

Thanks to the stable connection between the solar glass surfaces, Sonnenstromfabrik glass/glass modules offer higher resistance to unfavorable conditions. The second sheet of glass gives the modules a torsional stiffness and stability that cannot be achieved with glass/foil modules. As a result, these modules are ideally suited for all snow and wind or sand load zones.

SUSTAINABILITY MODULES WITH BEST CO₂ FOOTPRINT

Sustainability in module production is a central claim of the module producer Sonnenstromfabrik. Sonnenstromfabrik employs only raw materials with certified low carbon footprint. To secure this, Sonnenstromfabrik has entered several strategic

alliances with key suppliers of low-carbon components.

The production of modules at Sonnenstromfabrik follows the latest methodologies and technologies in order to minimize the CO₂-exhaust.

Sonnenstromfabrik is one of the first enterprises that has minimized its CO₂-balance and has certified this accordingly. Products of Sonnenstromfabrik convince via a CO₂-balance, significantly below values of its competitors.



An internal team of experts continuously improves the carbon balance of Sonnenstromfabrik modules.

SONNENSTROMFABRIK

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.

Total Care

Up to 30 years product and performance warranty give ideal for your investment.

In cooperation with Ergo, Sonnenstromfabrik provides an optional Total Care insurance and protects your system for 5 years against theft, weather damages and also compensates for performance loss due to product damages.

Highest Yields

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

Glass/Glass competency

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

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.

Certified CO₂ footprint


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



Broad product portfolio

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





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