### THE GENERATIONAL MODULES.



Vision. YIELD GUARANTEED FOR DECADES.



#### **SOLARWATT VISION.**

# INDESTRUCTIBLE, HIGH YIELDING, PROFITABLE.

We at SOLARWATT are convinced: glass-glass modules are the future. Back in 1998 we brought the first glass-glass module onto the market and have since then switched our module production completely over to glass-glass.

In 2016 SOLARWATT became the world's first company to offer a 300 watt peak glass-glass module. SOLARWATT now sells glass-glass modules almost exclusively and is the market leader in Germany and Europe.





### Polycrystalline photovoltaic modules The reliable glass-glass modules at favourable prices

The polycrystalline modules from SOLARWATT are distinguishable by their extreme durability and light weight. This is made possible by using 2mm thin glass. Besides this they offer the highest degree of yield reliability – assured through the 30 year product and performance guarantee as well as SOLARWATT FullCoverage which is free of charge for 5 years.

#### Monocrystalline photovoltaic modules Glass-glass modules for a higher standard at respectable prices

The high-performance solar cells of the monocrystalline glass-glass modules provide both the highest yields and yield reliability. The modules are visually appealing—your photovoltaic system will be an eye-catcher. Although only 2mm thick, the special hardened glass lends the modules outstanding stability, longevity and durability against extreme weather phenomena such as strong rain or hail. And, of course, with the monocrystalline module series you also get a 30 year product and performance guarantee as well as SOLARWATT FullCoverage free of charge for 5 years.

### HIGHEST QUALITY. FROM THE MARKET LEADER.

Nowhere else you can find this exceptional combinations of advantages:

- · significantly higher yields
- · generation-spanning service life
- highest yield reliability
- maximum robustness
- 30 year guarantee

SOLARWATT Vision modules thereby unite the best quality with the highest cost efficiency.





#### Style glass-glass modules Visual eye-catcher with the highest yields

The style module series combines the outstanding product characteristics of the SOLARWATT glass-glass series with attractive design elements. The glass-glass modules Vision 60M style and Vision 60P style are each fitted with a black frame which enhances the color of the modules. Your photovoltaic system will be a visual feature of your home.

The modules meet the highest quality standards and are set apart by their extreme longevity, the highest yields and extraordinary yield reliability. They are particularly durable and safe from environmental influences. Optimum cell protection reliably prevents the development of "snails" and discolorations – your module will still look top notch in 30 years.

### High power glass-glass modules The top models with the best performance

The highest standards of quality for the glass-glass modules from SOLARWATT culminate in the high power modules – with peak performances of over 300 Wp. The modules deliver maximum yield with the highest yield reliability – an investment in your energy future. Glass-glass modules – thanks to the double layer of glass – offer first rate conditions for the ultra-modern but extremely sensitive high performance PERC cells used.

# GLASS-GLASS TECHNOLOGY. THE GENERATIONAL MODULES.

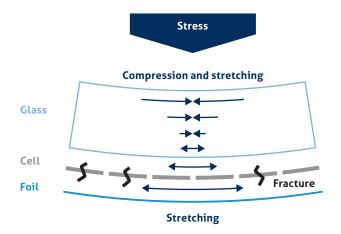
The core product advantage of Vision modules is in the material properties themselves: glass does not age. Therefore glass-glass modules will last several generations with no difficulty. The outer glass layer reliably prevents the penetration of moisture or oxygen. On top of that, the cells are safeguarded against salt spray, ammonia and sandstorms. No wonder then that the modern but sensitive high performance PERC cells are usable longterm only inside glass-glass modules.

For SOLARWATT glass-glass modules, the use of glass as both upper and lower side guarantees optimum cell protection: cell fracture and hotspots are prevented. Glass lends the modules enormous resistance to extreme environmental conditions.

Incidentally: SOLARWATT glass-glass modules are so far the only ones to have successfully passed the "large hailstone test" with 45mm hailstones based on IEC61215.

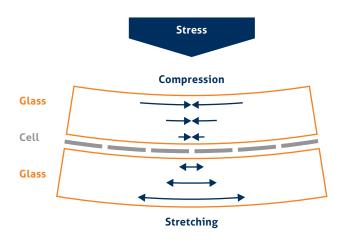
#### VISION MODULES PROVIDE OPTIMUM PROTECTION FOR THE VALUABLE SOLAR CELLS

#### Glass-foil module



When glass-foil modules are stressed, cell fractures occur which permanently reduce the yield of the photovoltaic module.

#### **SOLARWATT Vision**



With glass-glass modules the cells are only bent along the neutral axis and not stretched or compressed. This prevents cell fracture.



### THE MOST ADVANCED FEATURES. AS YET UNRIVALLED EFFICIENCY.

For its Vision modules, SOLARWATT purposely uses 2mm thick, thermally hardened glass on both sides. This means that more light can penetrate – your benefit: higher yield.

Another advantage of the thin front glass is better cooling. Because solar cells deliver more energy at lower temperatures, this effect also pays out in higher yields.

Through the specific use of glass with anti-glare finishing, the yield increases – by up to an additional 4.5%.

#### Made in Germany – with conviction.

SOLARWATT is "Made in Germany". And that means 100 %: for over 20 years every SOLARWATT component has been produced in Germany.

The development is also homegrown. With two locations in Germany and subsideries in France, the Netherlands, Spain, Italy and Australia the SOLARWATT Group employs more than 300 people.



## YOUR ENERGY FUTURE? GUARANTEED FOR 30 YEARS.

#### All-round protection with SOLARWATT guarantee

We offer you the best guarantee conditions on the market:

- unique 30 year product and performance guarantee
- at least 87% of original performance by end of guarantee period
- · transportation costs for replacement parts covered
- and much more

Over the average market guarantee period, SOLARWATT guarantees you 35% more performance from your Vision modules – you profit from the best.

#### **SOLARWATT FullCoverage**

With our glass-glass modules you receive FullCoverage insurance free of charge. This insures you for 5 years against:

- Damage from extreme weather
- Theft
- Yield losses
- and much more

Detailed information about our guarantees and FullCoverage insurance is available on our homepage or from your expert installer.











#### See for yourself. Vision offers you:

- highest yields
- longest lifespan
- best protection

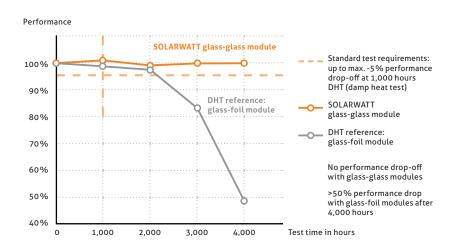
#### **SOLARWATT International**

Maria-Reiche-Straße 2a, 01109 Dresden, Germany +49-351-8895-500, info@solarwatt.com, www.solarwatt.com

05.2017

## THE ECONOMIC SHOWDOWN: GLASS-GLASS AGAINST GLASS-FOIL.

#### GLASS-GLASS MODULES PROVIDE CONSTANT PERFORMANCE OVER DECADES



#### 0% drop in performance with glass-glass modules from SOLARWATT

With glass-foil modules, massive cell damage occurs from environmental stresses.

As the DHT (Damp Heat Test) demonstrates, the SOLARWATT glass-glass modules exhibit no loss of performance even after 4,000 hours under test conditions. With the glass-foil modules on the other hand, a performance drop of more than 50% is registered.

Damp Heat Test: Within the scope of this test, performance of photovoltaic modules is measured at least 1,000 hours at 85 °C and relative air humidity of 85%.

#### You know it: those who buy cheap, buy twice.

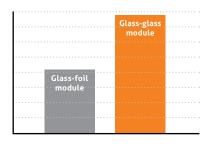
In considering the economics of glass-glass in comparison to glass-foil modules, many consumers will only look at the ratio of investment costs to the annual yield (€/kWh). The ratio of investment costs to the total yield (€/kWh lifetime performance) is, however, much more important.

Glass-glass modules are indeed more expensive than conventional glass-foil modules but they last roughly twice as long and are considerably more efficient. This means that with SOLARWATT, when compared to conventional modules at almost the same price over the entire service life, you will produce twice as much solar energy.

Additionally, glass-foil modules typically have to be replaced after 25 years – making a renewed investment in modules and installation necessary. Thus the marginally higher investment in glass-glass modules pays off significantly over the lifetime of your whole photovoltaic system.

With glass-glass modules you receive more than double the lifetime performance in kWh than with glass-foil modules.

#### KILOWATT HOURS OF LIFETIME PERFORMANCE PER EURO INVESTED



# PROFITABLE. DEPENDABLE. INDESTRUCTIBLE.

www.solarwatt.com