

Generate your of tomorrow.

# own energy SOLESY®



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## SOLESY<sup>®</sup> is a world first

Imagine a system that supplies you with electricity and hot water, heats your electric car at the same time, is less dependent on energy suppliers, is CO2-neutral and therefore environmentally friendly. You think this is just wishful thinking? Incorrect!

### SOLESY® - 3 in 1: CO2 neutral heating and power supply

We have succeeded in creating a masterpiece for generating renewable energy that you can use for your own home as well as for your company building. Our **SOLESY**® is an innovative and patented technology that combines photovoltaics, solar thermal and wind power in a new way.

SOLESY® revalues renewable energies again, because with **SOLESY®**, pure solar energy can be used as the main energy source for the first time! Complete heating supply and power generation. The purchase of existing energy suppliers can be reduced to a minimum!

# for the



# environment

SOLESY® is designed to last a lifetime and beyond. In doing so, we are setting a counterpoint to the throwaway and consumer society.



## **SISIAG** Sigmund's Innovation - Sun Induction

**SISI AG** is a real family business. Right from the start, we all worked together with a lot of passion and commitment on the development of **SOLESY**<sup>®</sup>. And now we are in the starting blocks. Our major goal is to grow in order to play a decisive role in shaping the world of tomorrow.

Environmental protection and climate change are the issues of our time. And time flies. Our enthusiasm for the development of an ideal, environmentally friendly and resource-saving heating and power supply technology is based on this awareness and the feeling of having an obligation to our descendants.

## "And the efforts have paid off. Our vision has become reality."



The absolute world novelty of **SISI AG** is protected by patents due to its unique technological position based on the developments required for the product and is therefore protected against imitation in the best possible way.

In the future, further innovations that contribute to economic sustainability should be implemented, supported and promoted by us.

We always focus on people as customers, partners or employees. The maintenance of our network is a personal concern for us and the basis for a trusting and long-term partnership.

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## **SOLESY®** – just awesome

Of course, solar thermal, PV and wind power are not new inventions and have long since established themselves on the market. We have managed to combine the three energy producers in one product - for maximum energy output in the field of renewable energies.

### With SOLESY® you gain regenerative energy with...

- Photovoltaic for power supply
- Solar thermal for space and water heating
- Wind power for power supply

Depending on the respective need, use and energy level, **SOLESY**<sup>®</sup> is geared towards either solar thermal energy or photovoltaics.

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### What advantages does SOLESY<sup>®</sup> offer you? Very easily...

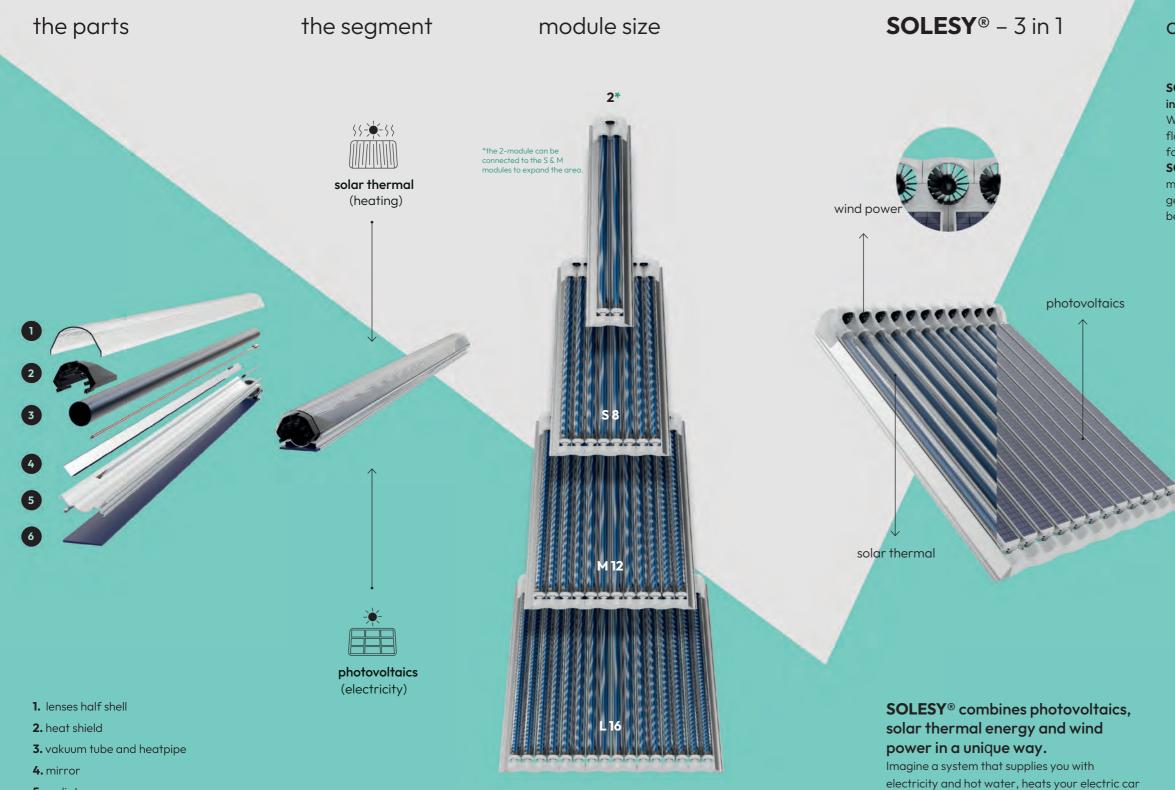
- enormous cost savings more efficiency
- more independence
- 0 % environmental impact

Regardless of whether you use SOLESY® for your own home or company building.

## more benefits

- $\cdot$  you don't have to worry about cleaning, because the rotating wiping brushes, which are attached between the segments, permanentlyclean the PV and solar modules. SOLESY® ofenergy, because energy losses are caused by impurities such as pollen and
- generate energy perfectly, because the rotation of **SOLESY**<sup>®</sup> keeps the power elements snow-free.

## everything at a glance



- 5. radiator
- 6. photovoltaics

6

7

at the same time, is less dependent on energy

suppliers, is CO2-neutral and therefore environmentally friendly. With **SOLESY®** we have succeeded in creating a masterpiece for generating renewable energy that you can use for your own home as well as for your company

building.



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## application

SOLESY® can be installed anywhere. Whether pitched roof, flat roof or even facades. SOLESY® is for the maximum power generation given area been developed.

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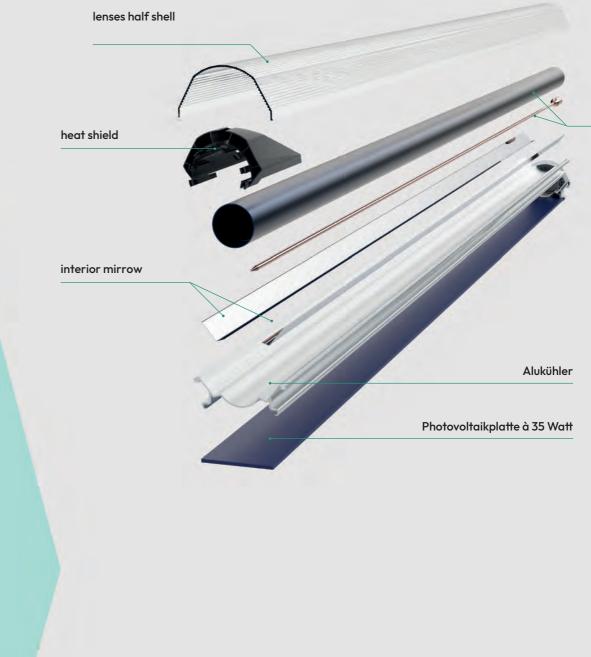
## module structure Modular arrangement – easy to expand

The combination of all components makes the SOLESY® segment so unique. It is designed for efficiency, flexibility and durability and is state -of-the-art.

**SOLESY**<sup>®</sup> consists of individual segments that form a module when lined up. Several modules connected together result in the entire system. Each group of 4 segments is electronically monitored for performance and the PV modules are also individually protected against shading.

711

## this is how a segment is constructed





vakuum tube and heatpipe -with heater core

## the segment

We designed the SOLESY® segment so that solar thermal is attached on one side and PV on the other. Turning spindles can be used to choose between PV and solar thermal energy. The rotation is so quiet that you don't hear it. (In normal operation below 10 decibels up to 28 decibels, with maximum power development, e.g. when de-icing.)

Solar thermal (heat)

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## components explained in detail

heat shield

The heating screen prevents the power elements from fogging up and also ensures a much longer service life for the vacuum tube.

### How does he do that?

Due to the temperature difference in the cavity of the segment and the surrounding outside air of the half-shell, condensation occurs and the power elements fog up. The heating screen creates a thermal convection (= heat flow) through the heat development and transports the heat generated in the cavity, with a chimney effect, to the outside and thus vents the cavity of the segment. This also has the advantage that the segment is always vented quickly and the vacuum is protected from rapid diffusion of the hydrogen. This at least doubles the life of the vacuum tube.

"SOLESY® can thus generate the entire main energy." (80-100% of the energy requirement)



Photovoltaic (electricity)



## lenses half shell

The half-shell with prisms and lenses ensures that the light rays are bundled into the center of the energy field of the vacuum tube with every alignment and rotation. (CSP - Concentrated solar power)

With the half-shell, the efficiency of the vacuum tubes can be increased by 40% and the vacuum is maintained for longer. In addition to the increase in performance and the weather protection, the service life is also increased for our desired longevity.

## vakuum tube & heat pipe with finned heat exchanger

You won't find the vacuum tube collectors with heating lance and lamella heat exchanger in any other solar thermal system either! The vacuum tubes are designed in such a way that they are perfectly insulated by the enclosed vacuum and thus retain heat better when the outside temperature is low. The additional lamellar heat exchanger is also a world first in the field of solar thermal energy. This increases the efficiency of heat transfer.

### Good to know:

Conventional solar modules cannot be switched off. That is why the high performance of the evacuated tube collectors is not required across the board. If the heat is too high, the system stagnates and stops generating energy. With **SOLESY®** it is different and unique! Our solar panels turn off by going into PV mode. The system effectively produces the required energy while preventing the system from overheating and stopping energy generation. Preventing stagnation prolongs the Significant service life of all system-relevant components.

Now, for the first time, the high efficiency of solar thermal energy can be used on a large scale and **SOLESY**<sup>®</sup> can be used as a CO2neutral heating and power supply.

### Additional cooling:

Heat can also be used for more effective air conditioning than electricity. The heat is evaporated in a special air conditioner, resulting in cold. Such air conditioners are cheaper than conventional electric powered units and there is no fan noise. **SOLESY**®

is already designed for such devices as standard and can also be expanded with an air conditioner at any time. So you can not only heat but also air-condition.

## interior mirror

Built-in mirror surfaces also ensure that every sun or light beam is bundled or reflected exactly in the middle of the energy field of the vacuum tube, even in diffuse light (clouds, fog, precipitation). In this way, the maximum amount of solar power can be used and the maximum amount of energy can be generated.

## radiator

The photovoltaic panels are not attached to a frame, as is usually the case, but are pushed into the aluminum cooler with 3 contact surfaces for cold transmission. Because the main task of the aluminum cooler is to cool the PV cells. So that the PV achieves a higher degree of efficiency even at higher temperatures.

### How does this work?

When the photovoltaic panels are heated, the temperature difference in the aluminum cooler causes condensation, which in turn cools down the photovoltaic panels. This increases the efficiency of the photovoltaic cells even at higher outside temperatures.

### Good to know:

Hot photovoltaic cells produce less power. You can see this clearly when you compare the summer months with the spring and autumn months.



Despite fewer hours of sunshine in spring and autumn, the output tends to be higher than in summer.

The special angular shape of the aluminum cooler also serves as a snow shovel: the system can also generate energy properly when it's snowing, because the rotation keeps the power elements snow-free.

The special angular shape also serves as a wind deflection channel and is primarily used at night to optimize wind deflection.

## photovoltaic panel

less material, more power



What is special about our PV are the highperformance monocrystalline cells with the solar tracking function. This allows SOLESY® to maintain the maximum output of the photovoltaic cells (the Watt Peak range) for several hours. Compared to conventional systems, SOLESY® can deliver twice to three times the performance with an otherwise unfavorable angle of incidence.

In addition, the **SOLESY®** photovoltaic system is designed as a dual system up to 10 kW with 1500 volts.

SOLESY® thus automatically switches between the two voltage lines - high performance and low performance. This enables the generation of two services.

High performance: The energy output directed towards the sun.

Low performance:

The energy generated from the rest of the side facing away from the sun.

## Our philosophy:

"Not only to achieve maximum performance for a short time, but to provide high performance for as long as possible."

### Solar tracking:

The system always aligns itself perfectly with the sun using the data from the coordinate settings and the data from the controller's own measuring function. On this basis, **SOLESY**® positions itself precisely for maximum performance. Smart, isn't it?

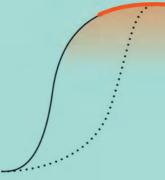
When setting up the system, the coordinates of the house are entered so that the system is always perfectly aligned with the sun using exact calculations.

### Glare:

Solar tracking not only increases performance by avoiding or reducing the reflection of sunlight, it also completely prevents glare. **SOLESY**® therefore always below the permitted glare limits and can be installed anywhere without any worries.

## Longer Watt Peak range

with SOLESY®



**SOLESY**<sup>®</sup> extends the Watt Peak area in the south by an average\* of 10 hours. In the east and west an average of 8 hours.

**Solar thermal:** In the south up to 12 hours. East and West up to 10 hours **Photovoltaic:** In the south up to 8 hours. East and West to 6 hours.



### And what about the scab formation?

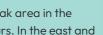
You are probably familiar with the situation: With conventional PV systems, a small formation of a pod from a tree, from a cloud or from a chimney is enough and a large area of power is lost. Different with SOLESY®.

When the energy yield is low, our system also acts intelligently and switches to solar mode, which produces energy more effciently even when there is a load. If there is no need for heating, **SOLESY**<sup>®</sup> stays in PV mode. Because with SOLESY®

each individual segment is protected by its own diodes. This means that even if one segment fails due to procurement, the remaining segments deliver full performance. (Delicate shadow suppression with only 0.3 m<sup>2</sup>)

### Properties formation:

The systems can rotate on any sloping roof in such a way that they do not form their own shells. That is why the PV strips have exactly these optimal.



## wind turbines

The small wind turbines are particularly durable and low-noise brushless blower fans, which also produce electricity as wind generators in the reverse principle. Thanks to the wind turbines, **SOLESY**<sup>®</sup> generates energy even without the sun.

### It works like this:

At the upper part of the segment, in the spaces between the PV and solar elements, blower fans are installed as wind generators with rectifiers, which thus generate electricity. The wind flow on the roof is automatically directed to the wind turbines. The segments can be brought into the solar position at night, which then changes to the wind deflection function. Thanks to the built-in measuring function, the segments automatically align themselves in the wind direction in which the wind generates the most energy.

## head and foot cover

Optical masking and protection function.

### head cover:

The intermediate wind generators are enclosed, stabilized and protected by the head parts. In addition to the protective function, the head parts have the advantage that they direct the wind to the wind turbines. They also protect the internal heat exchangers, which are connected to the ducts.

The headboards are plugged into each other so stably that they can be loaded with up to 120 kg and are therefore designed for service and assembly work.







### foot cover:

The base serves as an optical cover and to protect the underlying stainless steel bearings. The base parts are also designed for service and assembly accessibility and are equipped with hooking eyes for security.

## Intelligent control

**SOLESY**<sup>®</sup> can be controlled automatically and manually.

### Automatic control:

The control is connected to the current power requirements of your house. Energy demand data is retrieved automatically and you get exactly the energy you need.

## The intelligently aligned controller monitors:

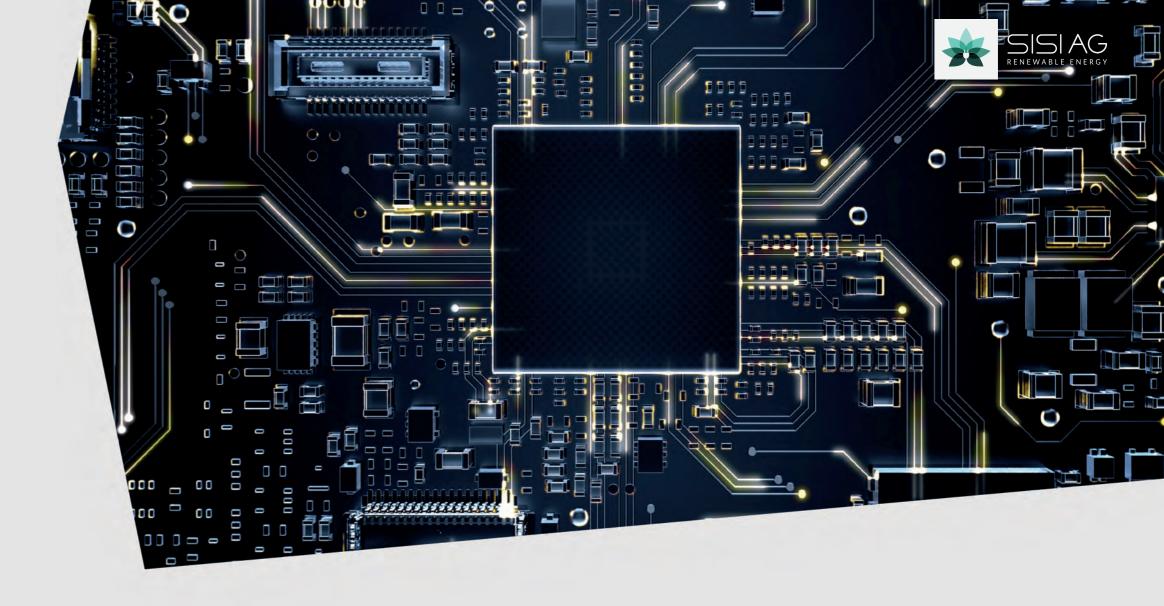
- the weather (precipitation, outside temperature, light intensity, wind speed)
- the position of the sun
- the solar power
- the energy demand in heat
- the energy demand in electricity
- the energy level of the storage capacities (water heat storage, the electricity storage (optional)
- e-mobility (optional)
- optional: the pool temperature
- optional: closing and/or opening blinds, shutters, skylights, awnings
- optional: activation or deactivation of additional (existing) heating systems

### It works like this:

**SOLESY**<sup>®</sup> regularly retrieves solar thermal, photovoltaic and wind power data. These are compared with the data from the measuring unit, also known as the weather station.

### It consists of:

- light sensor
- a rain sensor
- an outside temperature sensor
- four buttons with display, which are also attached to the first module as a measuring station and connected to the central communication control device.



On the one hand, the power capacity of the individual segments and modules is constantly checked, on the other hand, **SOLESY®** knows the available solar and wind power.

At the same time, **SOLESY®** regularly calls up the energy values of the buffer storage and the consumption values of the electricity requirement. As a result, the system is always up to date with regard to heating requirements, electricity requirements and the amount of energy stored.

The weather data (rain sensor, light sensor, outside temperature sensor and characteristic values of the wind generators = wind force) represent the available energy output. **SOLESY**<sup>®</sup> uses this data to decide which type of energy is currently required and should therefore be produced.

## Heat, electricity or bothdistributed as a percentage!

### That means:

The colder the outside temperature, the higher **SOLESY**® strives to keep all buffer storage filled with maximum heat, because heat is the cheapest storage. But heat is also the highest proportion of energy costs.

The warmer the outside temperatures, the more **SOLESY**<sup>®</sup> focuses on electricity production and, in non-heating periods, limits the priority of water heating to a buffer storage tank for domestic hot water supply.

### **Daily Recording:**

At the same time, **SOLESY**<sup>®</sup> records the performance indicators and consumption on a daily basis and not only creates energy statistics for its own production and consumption, but also consumption-usage behavior. Based on the respective usage behavior, **SOLESY**<sup>®</sup> can look ahead even better to the needs in the following year hire and act even more economically. In order for the system to calculate precisely, it needs results from a winter and summer season, i.e. data from at least one year.

## **SOLESY®** adapts to the users.

### Cover your own needs:

Put simply, it is essentially about meeting your own needs - not exporting the energy, which is completely uneconomical. On the one hand, heat generation has priority, since heat represents the greatest energy requirement and thus the highest costs. On the other hand, it makes no sense to produce heat if it is not needed and the power supply is neglected as a result.

Conversely, it is fatal if the required electricity is produced, for example the following day, but not enough heat is available and therefore has to be purchased.

## That is why we have launched an absolute novelty:

As soon as **SOLESY**® recognizes that the maximum amount of heat generated in one day is being met and the PV capacities have not yet been fully exhausted, it automatically switches to power supply.

### In planning: view into the weather

With the online connection, **SOLESY®** will be able to access weather forecasts. A preview of future solar and wind power will be another milestone for economic optimization. The Weerdata supplementary module can optionally be connected to the main controller.

### Compatibility: Future proof

Contrary to today's standards, SOLESY® guarantees the compatibility of all previously delivered systems for all supplementary developments.



### Manual control:

If you need more or less energy for water, electricity or room heating, e.g. if you are on vacation, planning a party, charging your electric car several times or want to heat up the pool, then you can easily control **SOLESY**® manually. However, this is only recommended in these cases. (Even in manual mode, SOLESY® uses all safety devices and automatically switches to automatic mode, e.g. if there is a risk of overheating.)

### Mixing function:

The intelligent control (AI - artificial intelligence) makes it possible to mix the arrangement of the individual modules. While the individual modules with 8, 12, 16 segments can only be aligned in the photovoltaic position or solar thermal position, it is possible to turn them into different energy generations in rows. For example, row 1 in the solar thermal position and row 2 in the photovoltaic position.



## The SOLESY®- module

That you can understand our SOLESY® even better, let's take a look at the module, which roughly consists of 8 to a maximum of 16 segments, a motor and a controller.

## module sizes & output

\*Additional yield from solar tracking and intelligent control are not included

### pair - 2 segments\* segr PV 70 Wp Solar 375,65 Wp 150 Wind 3 Wp length 242 cm width 27 cm 25 cm hight surface 0,65 m<sup>2</sup> 26,1 Kg weight 10

\*A pair of 2 segments can be connected to the S & M modules to extend the area.

### to the details:

- 8, 12 or 16 segments
- a stepping motor that quietly rotates all segments of a module at the same time (regular under 10 decibels)
- a communication controller that sends all data and measurement units directly to the main controller
- an optical angle of rotation sensor with 9 photocells (wear-free for monitoring and positioning)
- 4 temperature sensors (one temperature sensor each on the heating probes)
- 7, 11 or 15 Wwind generators (each 12 volts, 5 watts)
- 8, 12 or 16 solar tubes (Sydney vacuum tubes with heating lance & finned heat exchanger)
- 8, 12 or 16 photovoltaic elements (each 12 volts, 35 watts)

- 4, 6, 8 wiping brushes: There is an optional independent wiping brush between every 2nd segment, which is driven by the stepping motor. A wiping brush cleans 2 adjacent segments. The outermost segments have no wiping brushes.
- optional: a heating wire with 100 Wa in the collection tray for snow melting

The smaller the module size, the better the system works in snow conditions. In snowy regions, we therefore recommend 8 modules rather than 16 modules, as these have a higher rotation torque and can handle larger amounts of snow better.





S - 8 ments	M - 12 segments	L – 16 segments
280 Wp	420 Wp	560 Wp
)2,59 Wp	2253,89 Wp	3005,18 Wp
12 Wp	18 Wp	24 Wp
242 cm	242 cm	242 cm
108 cm	162 cm	216 cm
25 cm	25 cm	25 cm
2,61 m²	3,92 m²	5,23 m²
04,40 Kg	156,80 Kg	209,20 Kg

## color variants

**SOLESY**<sup>®</sup> optionally offers several color options for the aluminum cooler, which are ideally matched to the common house and roof color palettes.



The respective plastic covers in the visible area are available in black with the highest requirements for heat and UV protection, but they can also be delivered painted in any RAL color as an option.

## safety devices

The intelligently programmed control is equipped with different safety devices.

### protective position:

The system turns to the basic position in the event of an emergency and there is a risk of overheating.

- The system oscillates in the respective time interval
- Danger of icing with precipitation (snow clearance)
- Danger of icing without precipitation

This prevents moving parts from freezing up due to humidity and a loss of performance due to storms and overheating.

### Additional function snow shovel:

Even in the cold winter months, **SOLESY**<sup>®</sup> generates energy faster than other regenerative energy systems, because **SOLESY**<sup>®</sup> is the first system in the world that clears itself of snow.

### It works like this:

As soon as the system registers precipitation and a low outside temperature, all segments rotate once every half hour between 5 p.m. and 8 a.m. The snow is compressed into the tub below. Sweeping brushes free each segment from the remaining snow.

## self-cleaning

Expensive cleaning of the PV system? That was yesterday! **SOLESY**® is the first system in the world that cleans itself. We have developed a cleaning function that automatically cleans continuously in daily operation. Completely without chemicals and without wasting water. Because **SOLESY**® uses dew, humidity, rain and snow to clean the segments. When dry, **SOLESY**® simply brushes them off.



We have also developed a cleaning program that activates the cleaning function in the event of snow and dew icing. The system rotates several times before power generation to wipe away dew and snow.

### This has the advantage that

- the performance does not drop due to dust and dirt deposits.
- reducing performance loss due to wetted or fogged segments.



### Good to know:

If a part of a dark area is free, the snow melts off very quickly as a result of the melt water flowing off.

### blow off:

**SOLESY**<sup>®</sup> permanently measures the performance of the modules. Solar thermal as well as photovoltaics and wind. If the system registers a high loss of performance compared to the measured light intensity when the outside temperature is low, the cleaning was not successful. Accordingly, only a large amount of snow can result. The wind generators switch to the fan. The first centimeters of the segments are blown off and the snow melts away.

## **SOLESY**<sup>®</sup> is suitable for all houses and house types

Old building, new building, insulated, uninsulated, high flow temperature (radiators), low flow temperature (panel heating underfloor heating - wall heating)

You can have **SOLESY**® installed anywhere.

### And even better:

It doesn't matter whether your roof faces east, west or south, because **SOLESY**® always faces the sun ideally. The maximum energy is always generated. This is an absolute novelty that you won't find anywhere else.

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### Which roof variants are suitable?

SOLESY® is ideally suited for all roofs - including flat roofs. **SOLESY**<sup>®</sup> can and should be pitched between 8-45 degrees. In the case of south orientation, an inclination of between 20 and 40 degrees is recommended. In addition, the solar tracking is based more on the position of the sun in azimuth (horizontal angle), which optimizes the alignment to the sun over the course of the day. The angle of inclination is less important for east or west orientations, so it fits here **SOLESY**® adapts more to the position of the sun elevation (elevation angle) and thus optimizes the seasons.

In the case of flat roofs, the angle of inclination can be adjusted as required using the SOLESY® support system.





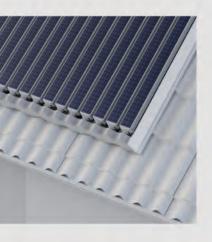
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## in-roof system

With the in-roof variant, **SOLESY**® is not only used as an energy generation element, but also as a roof cover. **SOLESY**® is delivered here with an integrated and indestructible sheet metal roof. This offers several advantages:

- SOLESY<sup>®</sup> is used as an energy generation element and at the same time as roofing. This saves you the cost of roofing or shingle renovation.
- The system can be integrated in the roof and is mounted on an invisible sheet metal cover. (\*Due to the modules, the "tin roof" is weighted down with 40 kg/m2 and shielded and thus protected from rain and noise.)
- Due to the deeper installation of 10 cm, the visually protruding height is reduced to just 15 cm, which means that the system is beautifully integrated into the roof.
- As with all other variants, the cables are protected and embedded invisibly.
- Optical improvement of the roof.





## on-roof system

The rooftop system is probably the most commonly used variant for existing houses. It is perfectly suited for mounting on smooth roof shingles or on corrugated roof tiles. The system is mounted directly on the roof of your house with roof hooks on the support frame. A special substructure is not required for either variant. We have therefore developed two onroof system variants.

### 1. On-roof system for corrugated/tiled roof:

- Due to the uneven roof tiles, the system can't be set up stably without a cross frame. This is why the invisible aluminum beams below are connected in the head and foot area with a cross beam (horizontal connections) and additionally supported. Thanks to this crossbeam, the system rests stably on the corrugated roof tiles.
- The water flows off easily through the shape of the corrugated roof.

### 2. On-roof system for smooth roof/shingle roof:

- Since the system lies flat on the roof of a glass roof, the aluminum supports below that are not visible do not require any horizontal connections.
- The water runs off easily through the horizontal aluminum supports with an application of 30 mm.
- · Applications for balconies, facades and garden fences will follow in structurally identical variants with the possibility of elevation from 45 to 90 degrees.

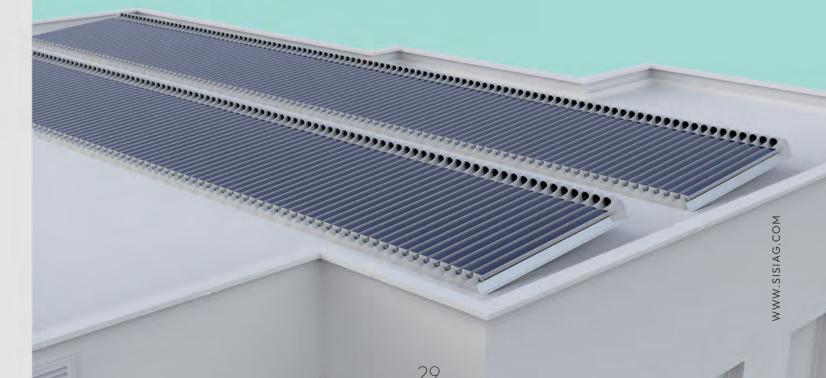
## Flat roof system

We offer two application systems for flat roofs.



### 1. Flat roof system with a minimum slope of 10 to 20 degrees:

- In this variant we use an on-roof system without sheet metal roofing.
- The system is equipped with short adjustable feet and an integrated base tray, which is filled with padding to weigh it down.
- For this system variant, we recommend an east or west orientation (at best the main direction).
- This variant is visually less noticeable because it is less erect.
- **SOLESY**<sup>®</sup> adjusts the segments optimally to the position of the sun by rotating them.
- The system is better protected from weather extremes than the installation variant up to 45 degrees. However, this variant produces less wind energy.







### 2. Flat roof system with installation variant till 30 degrees:

- So that the wind is better directed, we use an in-roof system with integrated and invisible sheet metal roofing (also without sheet metal roofing on special order).
- The system is equipped with support beams for erection and a floor tray that is filled with padding to weigh it down.
- We recommend a south orientation for this variant.

## Efficiency & price advantage

**solarthermal:** 3.005 Wh per module One module (L) can generate 24 kilowatt hours of pure heating energy throughout the day.

The following values show the energy consumption per building status and the average number of **SOLESY**® modules required.\*

year of construction up to 1950	150 kWh/m2/year	10 L-Modules
year of construction up to 2000	100 kWh/m2/year	5 L-Modules
low energy house	60 kWh/m2/year	3 L-Modules
passive house	15 kWh/m2/year	1L-Modules

\*based on a Ø living area of 100m<sup>2</sup>

### photovoltaics: 560 Wh per module

One module (L) can produce 4 kilowahours of pure electricity throughout the day.

3 modules (L) can generate 12 kW of pure electricity per day. This is an average electricity requirement for a 4-person household.

### windpower: 5 Wh/running meter One module (L) can achieve 290 watt hours throughout the day.

= 145 watt hours per night

- = 24 LED lights for 1 hour (6-9 watts)
- = 3/4 hour electric stove (400 watts)

20 modules (L) can achieve 6 kW per day purely from wind. This is the average energy consumption of a two-person household. **SOLESY**<sup>®</sup> makes you more independent, is good for your energy balance and your finances.

## The following applies to the following calculation examples:

All values are to be considered as average values from the year 2021/2022 and should serve as an orientation as to how energy can be saved with **SOLESY**<sup>®</sup>Rising energy prices are not taken into account over the terms. Likewise, no subsidies are included. We would be happy to determine your individual profit with SOLESY®.

**Important:** In the calculation, the information refers to the certified manufacturer information and to the minimum values for global radiation. Increases in efficiency by modifying the products used have not yet been taken into account. The number of modules and the number of water tanks are decisive for saving energy costs. The more storage options, the lower the energy purchase.

With an ideal amount of water storage, heating costs and electricity costs can be reduced by at least 80%.





## All values are for initial orientation. Information on the basis of calculation can be found on Page 27.

### 2-person household without SOLESY®

30 YEARS without <b>S</b>	<b>DLESY</b> <sup>®</sup> instead pv & heat pump	73.500€
TOTAL		2.450 €/year
HEAT PUMP*	4.000 kWh/year	1.400 €/year
ELECTRICITY	3.000 kWh/year	1.050 €/year

\* 230m<sup>2</sup> living space

## half the roof area **SOLESY**® (approx. 8m x 4m)

6 SOLESY MODULES **	31.400 €
PURCHASING ENERGY	630 €/ year
FEED-IN COMPENSATION	- 150 €/ year
30 YEARS with <b>SOLESY</b> ®	45.800€

\*\* generates at least 10.000 kWh/year \*\* additional CO2 savings of 123 tons

## **27.700 €** savings

Investment costs already taken into account!

## 4-person household without SOLESY®

TOTAL	5.000 €/year
GAS** 22.000 kWh/year	2.200 €/year
ELECTRICITY* 8.000 kWh/year	2.800 €/year

\* mit Pool + poolheating

\*\* 350m² living space

## half the roof area **SOLESY**® (approx. 14m x 7m)

12 SOLESY MODULES \*\*

PURCHASING ENERGY

FEED-IN COMPENSATION

30 YEARS with SOLESY®

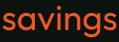
\*\*generates at least 31.000 kWh/year \*\* additional CO2 savings of 243 tons

## **65.450 €** savings

Investment costs already taken into account!



-2	.5€/ year
75	50 €/ year
	62.800€



## All values are for initial orientation. Information on the basis of calculation can be found on page 27.

## factory without SOLESY®

	74.250 €/year
244.000 kWh/year	36.600 €/year
125.500 kWh/year	37.650 €/year
	,

**\*\*** 4.500m<sup>2</sup> factory area

## roof area with **SOLESY**® (approx. 90m x 20m)

30 YEARS with <b>SOLESY</b> ®	1.061.000€
FEED-IN COMPENSATION	- 10.200 €/ year
PURCHASING ENERGY	13.600 €/ year
183 SOLESY MODULES **	1.433.800€

\*\*generates at least 430.000 kWh/year \*\*additional CO2 savings of 2.800 tons



## **691.700 €** savings

Investment costs already taken into account!

## factory with existing PV\* without SOLESY®

TOTAL	99.300 €/year
HEATING OIL** 150.000 kWh/year	21.000 €/year
ELECTRICITY* 290.000 kWh/year	78.300 €/year

\* PV System 160 kWp - 160.000€

**\*\*** with 2 e-cars and existing PV \*\*\* 3.000 m² company area

## roof area with **SOLESY**® (approx. 120m x 10m)

149 SOLESY MODULES \*\*

PURCHASING ENERGY

FEED-IN COMPENSATION

30 YEARS with SOLESY®

\*\*generates at least 430.000 kWh/year \*\*additional CO2 savings of 4.700 tons

## **379.000 €** savings

Investment costs already taken into account!





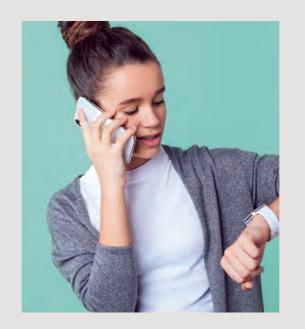
2.072.000€
0€/ year
52.600 €/ year
1.172.000€



## Quality and environment

Quality before quantity! SOLESY® was made very robust with very high quality standards and oversized to not only ensure a longevity of 30 years and beyond, but also to improve disposable behavior. When renewing a **SOLESY**<sup>®</sup> to meet our own standards, we provide the after 30 years, only consumable elements such as complete service ourselves: advice, planning, photovoltaics and vacuum tubes should be replaced. Replacing the entire system and the associated waste generation should be avoided. services.

The high quality also extends throughout the entire process. The individual components are carefully selected and only leave our factory after a strict test procedure. In order production, commissioning, assembly, maintenance, training and other after-sales



## service

In addition to the in-house assembly of our high-end system in our own premises, we provide the entire service team from the initial consultation and planning through to assembly. With our range of services, our competent service staff will support you from the first start-up and carry out regular maintenance and measurements.

So that more people can reduce their energy costs to a minimum, we are also looking for companies from all trades that have experience in the field of renewable energies and include SOLESY® in their portfolio



We are proud of our "MADE IN GERMANY" product and take full responsibility for its performance and efficiency

Through constant further training and optimization of existing technologies, we are now using the latest technology in the field of renewable energy and are thus setting an absolute novelty on the market.

## Our ambition:

"Perfection, the highest possible efficiency and longevity for the benefit of our common environment.'

"The satisfaction and trust of our customers is our greatest asset and can only exist through quality products and a healthy partnership."



our motto: "Efficiency is achieved through proaktive redesign of the given condition."

## Our philosophy

The short version is that for years we have been working on an ideal, environmentally friendly and resource-saving heating and power supply option. Why did we invest so much energy, time and nerves in this project? Because we have the urge to make the world a little bit better, to do something for the climate and for our environment.

### Specifically, these criteria were important to us:

- low use of valuable resources
- low costs and therefore affordable for everyone
- more efficiency
- Independence
- 0 % environmental impact
- sustainable, environmentally friendly, preferably regional production
- · Best treatment of all people: employees, partners, customers



### A big undertaking, isn't it?

Since there is no product on the market that meets these requirements, there was a great incentive to develop a system ourselves. We have combined existing photovoltaic, solar thermal and wind power technologies that have been successful on the market for decades in a new and intelligent way and created a completely new system.

"We are really proud that with SOLESY® we have developed a world first that is able to cover the optimal energy requirements of every building."

For the first time, not only can electricity be used as the main energy source from renewable energy, but the entire heating energy can also be generated with **SOLESY**<sup>®</sup> from pure solar power. And that with 0% carbon emissions generation and consumption. In this way, fossil fuels could be saved as far as possible and everyone can make a simple contribution to climate change.



## Our next goal is to make SOLESY® available to everyone.

### Why are we doing all this?

- climate change.
- them.

"Earth is not only our common heritage, it is also the source of life." (Dalai Lama)

Would you like to hear the long version of our story? We would be happy to fell YOU. Get in contact. (see reverse)



• Our goal is for everyone to have independent, free access to energy and be able to produce it themselves.

• At the same time, we want to make a contribution to stopping

• It is also important to us that throwaway behavior changes and that there is less waste.

• We do our part to ensure that innovative ideas for economic sustainability are implemented by supporting and promoting



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Generate your own energy of tomorrow.