

AIR-SUN

SOLAR ASSISTED POSITIVE INPUT VENTILATION



SYSTOVI®

Why is it so important to ventilate your home?

Over recent years, the focus has been on the external shell of buildings and their energy performance. Yet attention is rarely paid to an even more important aspect: **the air**. While the human body needs but two litres of water per day, **it needs more than 15,000 litres of air!** 80 to 90% of this consumption takes place indoors. Unfortunately, **indoor air is on average 5 to 10 times more polluted than outdoor air.**

The reasons behind **indoor pollution** are many and varied: buildings breathe less on account of being increasingly-well insulated; excessive humidity is generated producing allergens and mould; there are more and more chemical pollutants in the objects of our everyday lives and so on.

Ventilating your home is therefore vital for you, for your loved ones and also for your home itself. It is a daily requirement for your comfort and health and for the longevity of your building. So which ventilation solutions are the most relevant for you?

Is your home showing signs of poor ventilation?



The spread of unpleasant odours



Humidity penetrating easily causing windows to mist over



Signs of mould, particularly toward the tops and bottoms of the walls



Allergy symptoms more pronounced indoors than out



Frequent bouts of coughs and colds or even asthma

Often neglected, poor air quality is however the source of many ills. Efficiently ventilating your home can prevent these problems and improve your daily comfort.

AIR-SUN

NEW GENERATION SOLAR VENTILATION

Systovi solutions are designed and manufactured in Saint-Herblain (France) and distributed throughout Europe.

Both the company and its products are certified and approved by benchmark organisations in the solar energy sector. Our company invented aerovoltaic technology and is particularly attentive to the choice of components and its quality procedures.

All our systems can reduce your energy bills and improve your standard of living indoors.



Civil liability
20-year guarantee



IEC 61215 ed. 2 certificate
61730 certificate



MCS Certificate 10/12



Solar Keymark
EN ISO 9806:2013
Licence 078/000227



ISO 9001 & 14 001





AIR-SUN

YOUR HOME IS VENTILATED 24/7

**YOUR INDOOR AIR
IS CLEANED AND RENEWED**

**HUMIDITY
IS CONTROLLED AND CORRECTED**

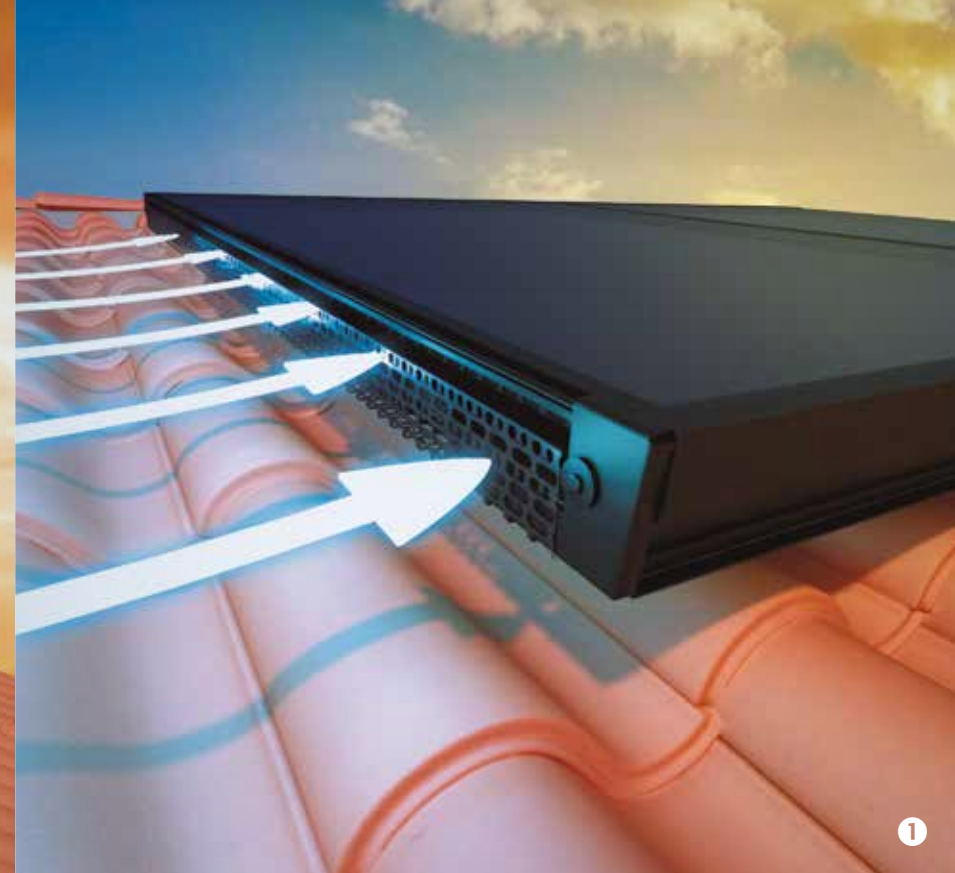
YOUR HOME IS HEATED BY THE SUN



COLLECTING FRESH AIR

The outdoor air is **5 to 10 times less polluted** than your indoor air, and it is also **available in unlimited supply**. It therefore seems quite natural to exploit this resource to ventilate your home, but not just any old way! Sure, our first reflex may be to open the windows to let the fresh air in. Yet this approach is neither totally efficient nor genuinely sustainable: no control of air quality; major heat loss, leading to increased heating costs, etc.

It is by taking into account all these constraints that AIR-SUN has been developed, **to best exploit the outdoor air**: bringing multiple benefits, while eliminating the problems that are usually encountered!



For efficiently ventilating your home, nothing tops blowing outdoor air indoors! To do this AIR-SUN captures the outdoor air via its lateral ventilation grilles (❶).

Large volumes of air are drawn in and naturally sucked towards the duct outlet on the rear panel of the system (❷). Needless to say, the grilles are designed to preserve the blown air quality while avoiding, for example, insect intrusion.

AIR QUALITY, WITH ENERGY SAVINGS TO BOOT!

AIR-SUN does not simply capture the outdoor air. **Before blowing the air, the system heats it!** As the air passes along the inside of the panels, it is heated by means of **solar radiation** and the unique patented form of the modules.

Known as aerothermal solar energy, this technology is particularly efficient in mid-season. With 4 panels, it is not rare to obtain enough heat to cater to a home's entire heating needs for the months of April or September (example for a 150 m² house in a climate zone in London). This is quite the opposite of other ventilation systems which when in operation, cool your home and therefore increase your energy bill.

With AIR-SUN, while improving your indoor air quality you're also making **real savings on your heating costs!**





FILTERING AND DISTRIBUTING PURE AIR

More than just a simple fan, the MODUL-AIR of your AIR-SUN system is a true distillation of intelligence and technology. Its missions are varied but they all serve the same objective: **offering you the best possible indoor air quality.**

The built-in circuit board **measures in real time** the heat of the air that it receives from the panels. It also centralises the building's **temperature and humidity** information. Depending on all these variables, it adjusts its air-blowing rate (ranging from 70 to 400 m³/h) and the aperture of the intake valve to obtain just the right balance between warm air and cool air, and correct these aspects (❶).

The MODUL-AIR is also **equipped with a filter** (F5 hospital type) to clean the outdoor air before blowing it into the home (❷). Renewed and stripped of its pollutants and allergens, the air that you breathe will never have been so pure and clean!

Lastly, combined with the flow rate and humidity management, a low-consumption* resistor ensures that a **suitable heat level is maintained 24/7**. This means that using AIR-SUN permanent ventilation does not cool down your home and does not mean running up a massive energy bill! It can even be quite the opposite given that the system produces hot air in the daytime, thereby reducing heating expenses!

*: the AIR-SUN resistor is 500 W, making it 2 to 4 times more cost-effective than those of competing systems.





①



③



②

④ With AIR-SUN, put an end to:



- Signs of mould



- Fogged-up windows caused by humidity



- Allergy symptoms exacerbated indoors



- Frequent coughs & colds and asthma attacks



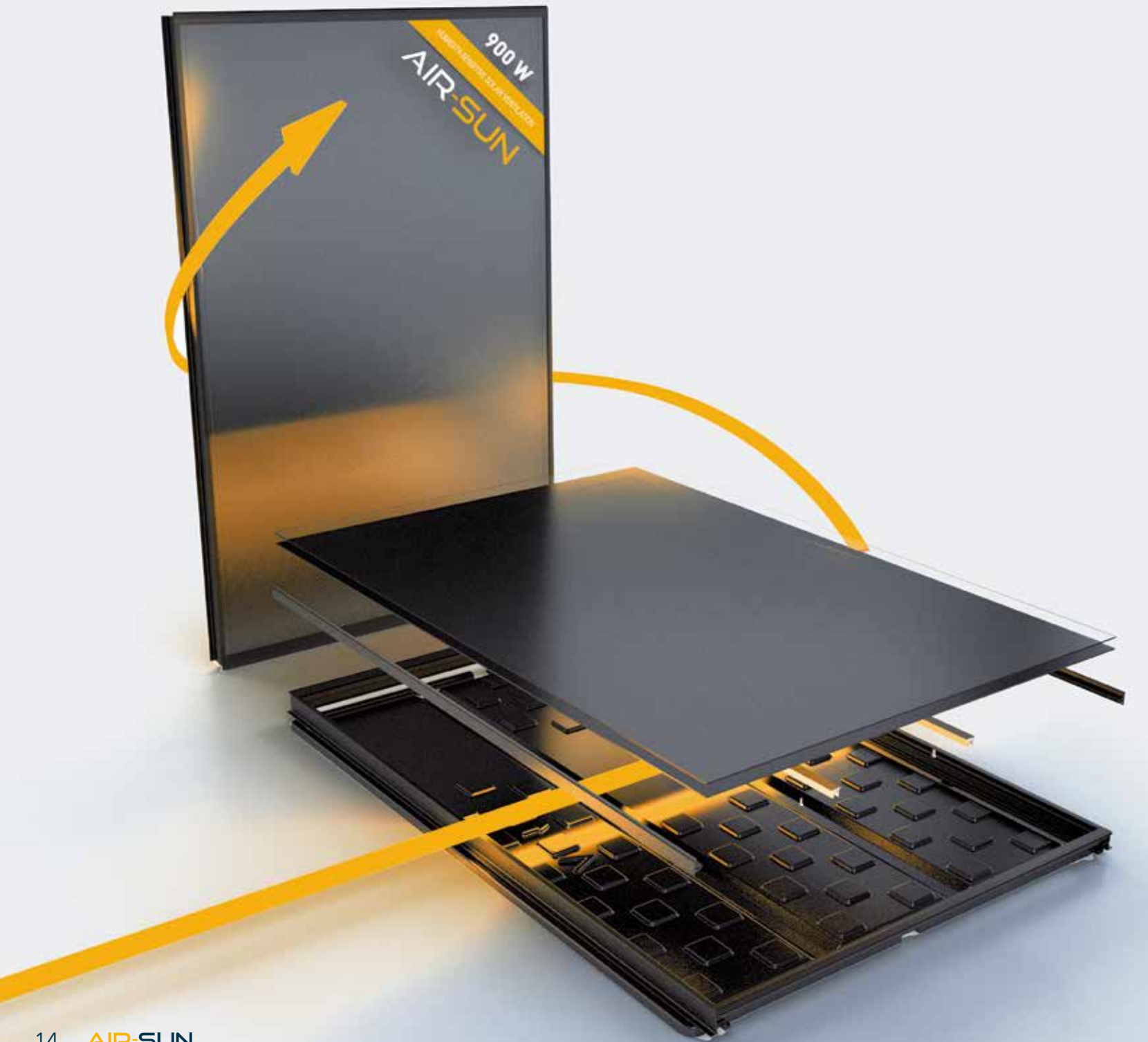
- The spread of nasty odours

BREATHING FRESH AIR

Installing AIR-SUN means you'll be sure to enjoy fresh levels of comfort. The pure air that you will breathe will not only make you feel good: it will serve on a daily basis as a partner in preserving your health, your hygiene and your home itself! In short, AIR-SUN solar positive input ventilation offers you:

- Renewed and cleaned air at the ideal humidity level, 24/7 (①)
- Slight pressurisation that acts as a barrier against the bad air and cold air that would otherwise seep in through the natural openings in your home (②)
- Simple measurement and management of your system via thermostat and smartphone, and of indicators of your indoor environment: temperature and humidity (③)
- The end of domestic ills caused by poor ventilation (④)
- And as a bonus, free heating to warm up your home!

With AIR-SUN, the sun gives you a breath of fresh air!



THE SENSORS



MECHANICAL SPECIFICATIONS

Dimensions (H x L x D)	1518 x 1011 x 43 mm
Sensor weight	20.6 kg (17 kg/m²)
Origin of panels (encapsulation)	4 mm solar glass with anti-reflective coating
Glass	3.2 mm with anti-reflective coating
Rear surface	Black composite film
Frame	Black anodised aluminium
Maximum load	Advanced test up to 5400 Pa as per IEC 61215
Hail resistance	Up to a diameter of 25 mm with an impact speed of 23 m/s

AEROTHERMAL SPECIFICATIONS

PMAX (W)	900 W
Solar selective absorber	Selective aluminium (98% energy absorption, 5% emission)

INTEGRATION SYSTEM

Orientation	Portrait / Landscape
Roof	All types
Roof angle	From 0° (flat roof) to 90° (roof gable)
Min. slope required (including flashing)	1 m for landscape installation 1.5 m for portrait installation

POWER (W) PER PANEL - IRRADIATION 1000 W/m²

 Certified values SOLAR KEYMARK acc. to EN ISO 9806:2013 Licence 078/000227		Air flow / column (m³/h)		
		75 m³/h	100 m³/h	150 m³/h
Air speed < 1 m/s	AEROTHERMAL	613 W	736 W	929 W



THE MODUL-AIR



AIRFLOW SPECIFICATIONS		
MODUL-AIR construction	Dimensions (H x L x W) (mm)	380 x 550 x 500
	Weight	10 kg
	Shell	PPE - expanded polypropylene
	Internal trim	PPE - expanded polypropylene
	Motors	Servomotor 2 Nm/230 VAC
	Fan	Low-consumption variable speed, 70 m³/h - 400 m³/h
	Filter	F5 for incoming air between MODUL-AIR and blowing point
	Ecoboost resistor	500 W
Adjustment	Thermostat	Digital wireless
	Modes of operation	Heating, cooling, PV ventilation, frost protection
Max./min. operating temperatures	Unit location	-7 °C/ 60 °C
	Heating mode	65 °C
Blowing vent	Ceiling	400 m³/h: circular vent diam. 330 mm
	Wall-mounted	Rectangular plenum, 400 m³/h or 200 m³/h
Electric	Cistern	230 VAC
	Electrical protection	Class II

ACOUSTIC SPECIFICATIONS				
Clear line-of-sight - Measured 1 m from the blow point of the MODUL-AIR				
Air flow (m3/h)	100	200	300	400
Noise (dbA)	10	27	37	44

INTEGRATION COMPATIBLE WITH ALL HOUSES

WHAT KINDS OF INSTALLATIONS ARE POSSIBLE?

Even in converted lofts, AIR-SUN can be installed easily in every home: whether new or undergoing renovation. From the panels to the MODUL-AIR and the blow vents, the flexibility of the installations makes it possible to adapt our systems to every configuration. Thanks to our comprehensive configuration of connections there will always be a really simple solution on hand.

FOR WHAT TYPES OF HOMES?

- Renovation or new
- Single or multi-storey
- Unfitted or converted lofts
- Sloping roofs
- Terraced roofs (available soon)
- With or without the existing ventilation system



Loft space integration

SMART-AIR

ENERGY REGULATION AND MONITORING SYSTEM

CONTROLLING MY SYSTEM

This innovative service allows you to manage the SYSTOVI solar solutions and much more:



CONTROL

Manage your energy performance remotely in association with our smart weather service



STATUS

Follow your energy production and consumption (electricity, heating, domestic hot water, ventilation) in real time



HISTORY

Learn to optimise your energy independence while keeping tabs on your revenue



NOTIFICATIONS

Manage with precision the interventions and information linked to your system



MEASURE

ANALYSE

MANAGE



Download the app now and check out the performance of the showhouse!



Energy independence for life

www.systovi.com