AirSolaris

CATALOGUE EUROPE SPRING 2016
SOLAR AIR HEATING SYSTEMS: COLLECTORS & ACCESSORIES

BETTER INDOOR CLIMATE + ENERGY SAVINGS

FUTURE
HOMES, SCHOOLS
FACTORIES AND OFFICES
NOW
WITH **WARM FRESH AIR**
POWERED BY THE **SUN**

EnergySolaris

MOLDOVA
WORLD EXPO
MILANO 2015

FEATURED AT
EXPO
MILANO

FUTURE BUILDINGS

THE BIG CHALLENGE: SAVE LOTS OF ENERGY AND ENSURE THE QUALITY OF INDOOR AIR

HEATING VS VENTILATION. PLANET VS PEOPLE.

It's tricky. Saving energy when heating buildings is central to fighting climate change. And yet fresh air is essential as Europeans spend around 90% of their time indoors. On the one hand, measures to save energy – like air-tight windows and insulation – often harm indoor air quality. And on the other hand, most approaches to ventilation waste energy.

A SMART AND NATURAL SOLUTION ?

What if there was a way to make new and existing buildings healthier for people and for the planet? Both more energy-efficient and with better air. At the same time. And without costing the earth. What if it used new solar technology that was 4x more efficient than solar PhotoVoltaic panels? And paid for itself in just a few years?

CLIMATE OF CHANGE.

Making major advances in space heating and ventilation is a priority for many decision-makers. Considering the facts it's not hard to see why.

VENTILATION: OFTEN A PROBLEM.

Many buildings are ventilated mainly by opening windows; this not only allows unfiltered air to enter, it leads to uneven replacement of air and massive heat loss. And the special ventilation systems that do recover heat are very costly.

HUMAN IMPACT. PROPERTY DAMAGE.

Poor ventilation can lead to an indoor build-up of:

- toxic moulds that grow on wood, tiles, carpet and other materials when moisture is allowed to accumulate
- airborne contaminants, such as carbon monoxide and germs, that can cause illness or worse
- carbon dioxide, and low levels of oxygen, which at best reduce alertness and harm productivity
- humidity that can result in rust and other material damage

ENVIRONMENTAL IMPACT.

Buildings use 40% of energy and create over 30% of CO_2 emissions. Up to 70% of Europe's home energy goes on space heating. And 17% of Europe's carbon emissions reduction potential depends on retrofitting existing buildings.

COST COMPETITIVENESS.

Heating buildings with gas, electricity or biofuels is expensive. As the immense shift to new forms of energy gathers pace countries, cities, organizations and households will race to cut fuel costs related to heating and ventilation.

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AirSolaris HOME

COMPACT PREMIUM SOLAR AIR SYSTEMS

700 Wp. Collector: 1.5 m x 0.75 m. Fan: 12 V, 6 W. Accessories incl.

SEE PAGE 5

AVAILABLE TO ORDER

AirSolaris PLUS

LARGE PREMIUM SOLAR AIR SYSTEMS

1300 Wp. Collector: 2.0 m x 1.0 m. Fan: 12 V, 6 W. Accessories incl.

SEE PAGE 6

AVAILABLE TO ORDER

AirSolaris 4-IN-1

WORLD'S FIRST **4-IN-1** SOLAR AIR SYSTEM

1 Space heating. **2** Ventilation. **3** Slow cooking. **4** Fruit drying.

SEE PAGE 9

COMING IN 2016

THE FUTURE. NOW.

Introducing **AirSolaris** — the future of space heating and ventilation. For the sustainable, cosy and healthy living of tomorrow, today.

Healthy indoor climate.

Warm fresh air: ventilate your building without opening windows. Boost productivity and reduce the build-up of germs for less spread of sickness.

Healthy property.

Warm dry air absorbs humidity to prevent mould and reduce property maintenance.

Healthy savings.

Save 15-35% off your heating bills, year after year, with 1 m^2 of **AirSolaris** for each 20 m^2 of insulated building.

Healthy materials.

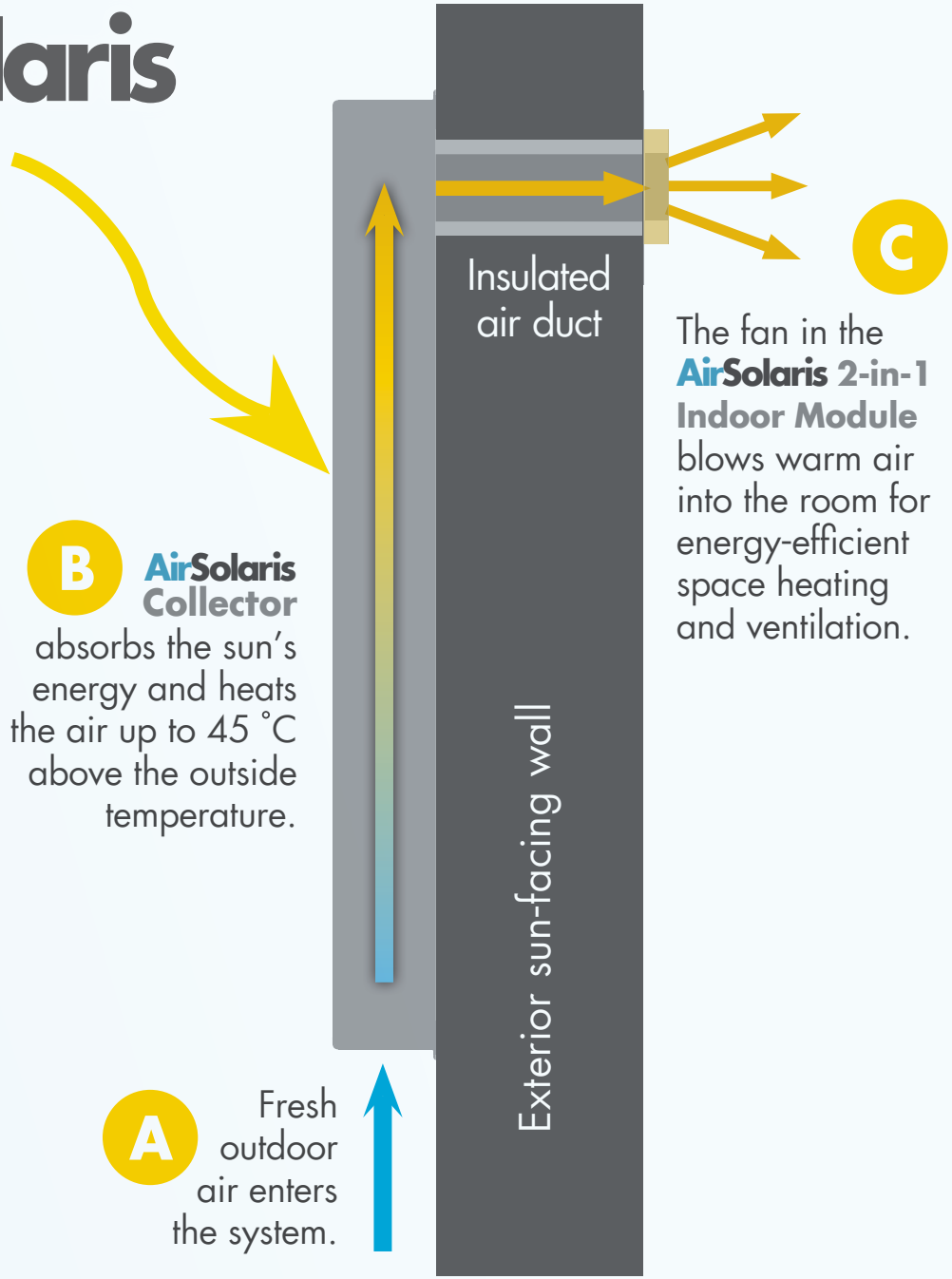
Our products use Europe's finest materials, which are tested to exacting health standards.

Healthy planet.

Heating with 100% renewable energy: one of the key steps to a smaller carbon footprint.

TAP THE SUN ON YOUR WALLS.

AirSolaris



C The fan in the **AirSolaris 2-in-1 Indoor Module** blows warm air into the room for energy-efficient space heating and ventilation.

B **AirSolaris Collector** absorbs the sun's energy and heats the air up to 45 °C above the outside temperature.

A Fresh outdoor air enters the system.

DIAGRAM ILLUSTRATES THE OPERATION OF
AirSolaris HOME
AirSolaris PLUS
PREMIUM SOLAR AIR HEATING SYSTEMS

N.B. DOES NOT APPLY TO
AirSolaris 4-IN-1
PREMIUM 4-IN-1 SOLAR AIR HEATING SYSTEM

BEST SOLAR FOR WALLS.

- **4x as efficient** as current solar PhotoVoltaic
- **Double-glazed** solar glass for winter warmth
- **Easy to install** with built-in mounting frame
- **Safer**: no leaks, freezing, or electrical in panel
- **Fast to service** with magnetic-grip filter (pictured) and self-cleaning glass

How it works

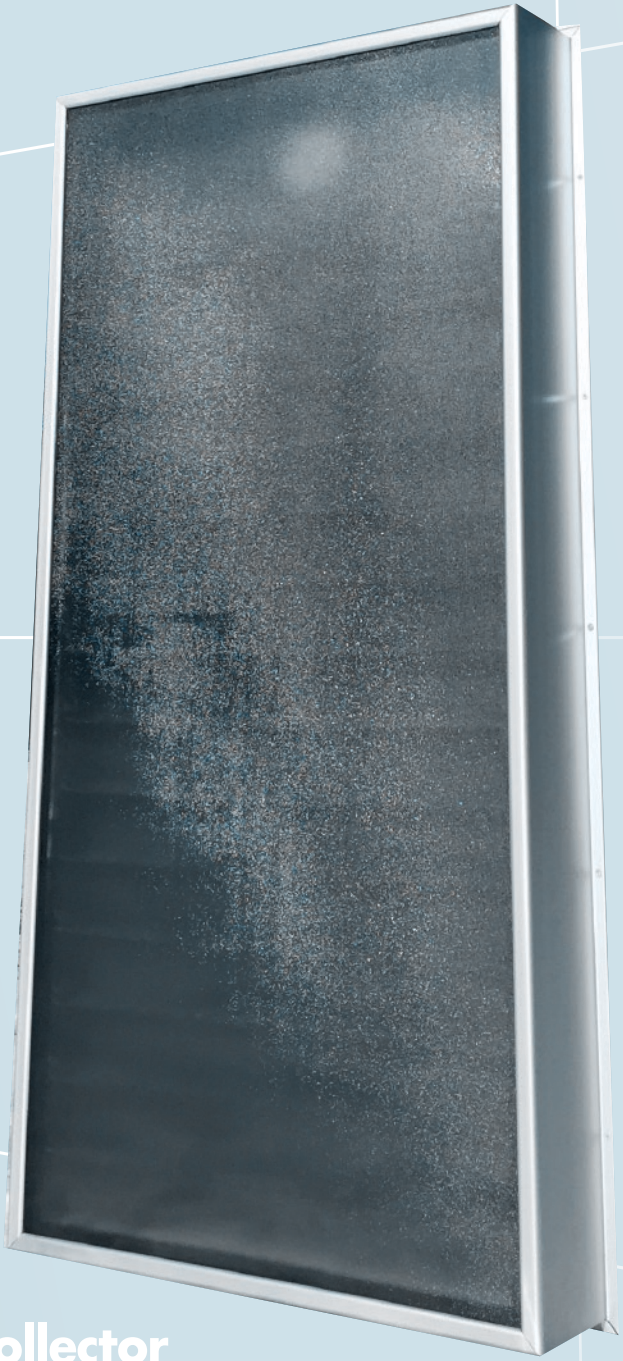
A. FRESH AIR ENTERS.
Fresh outdoor air enters **AirSolaris** collector through a dish-washable G4 filter (see below).

B. SUN HEATS METAL.
Black metal absorbers, with advanced coating technology, capture the sun's energy.

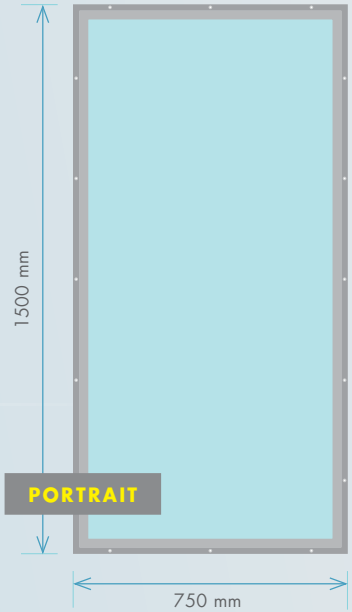
C. METAL HEATS AIR.
Temperature-responsive fan draws air through the collector's unique '**thermo-optic**' design for efficient transfer of heat from metal to air.

AirSolaris HOME

COMPACT PREMIUM SOLAR AIR HEATING SYSTEMS



CHOOSE **PORTRAIT** OR **LANDSCAPE**
COLLECTOR(S) TO FIT YOUR **HOME**



HOME SYSTEM INCLUDES

- COMPACT SOLAR AIR HEATING COLLECTOR
- 2-IN-1 INDOOR MODULE (incl. fan, 3-way switch)
- ACCESSORIES (incl. flexible aluminium pipe, 12 V adaptor)

Compact Solar Air Heating Collector

AirSolaris PLUS

LARGE PREMIUM SOLAR AIR HEATING SYSTEMS

PLUS SYSTEM INCLUDES

- LARGE SOLAR AIR HEATING COLLECTOR
- 2-IN-1 INDOOR MODULE (incl. fan, 3-way switch)
- ACCESSORIES (incl. flexible aluminium pipe, 12 V adaptor)

Large Solar Air Heating Collector

AirSolaris collectors

TECHNICAL INFORMATION

OVERVIEW	SYSTEM	AirSolaris HOME **COMPACT** COLLECTOR	AirSolaris PLUS **LARGE** COLLECTOR
	Dimensions	1.5 x 0.75 x 0.16 m / 0.75 x 1.5 x 0.16 m	2.0 x 1.0 x 0.16 m
	Total Area / Aperture Area	1.125 m^2 / 0.943 m^2	2.0 m^2 / 1.75 m^2
	Weight	37 kg	64 kg
	Orientation	Portrait (P) or Landscape (L) installation	Landscape (L) installed installation
DESIGN	Finish	Standard: silver coloured frame with glass cover; non-standard frame colours on request.	
	Type of System	Open to ambient (not re-circulating/closed)	
	Absorber	Sheet aluminium with hydrophobic selective-surface: 90% absorption; approx 20% emissivity	
	Absorber Airflow	Over, under and through	
	Frame	Corrosion resistant, heavy-duty anodized aluminium alloy	
	Cover	Double-glazed Integrated Glass Unit (IGU)	
	Glass	3 mm low iron prismatic solar safety glass. Optical transmission: 91.4% (single pane)	
PERFORMANCE	Insulation	Heat-resistent foam for collector and duct pipe	
	Peak Power (Aperture)	700 Wp/m^{2*}	1300 Wp/m^{2*}
	Temperature above Ambient	up to 45 °C*	up to 60 °C*
	Recommended Airflow	25-50 m^3/h	50-100 m^3/h
	Space Suitable to Heat	Approx 20 m^2 / 50 m^3	Approx 35 m^2 / 88 m^3
		* = Pending independent testing at Solar Thermal TestLab, Fraunhofer ISE	

AirSolaris 2-IN-1 indoor module & accessories

INCLUDED WITH AirSolaris HOME & AirSolaris PLUS PREMIUM SOLAR AIR HEATING SYSTEMS

FEATURES

— 100% natural Italian cork finish with anti-bacterial coating

— Intelligent airflow adjustment thanks to temperature-responsive fan. Manual over-ride allows maximum airflow.

— Easy removal / exchange of fan and stainless steel cover

— Heat resistent, easy-to-handle, high performance foam insulation

TECHNICAL INFORMATION

WALL PIPE & FAN	Components / Dimensions	Indoor Module: 180 x 180 x 40 mm. Fan: 120 x 120 x 38 mm; 320 g Extendable Aluminium Pipe: ⌀100 mm. Foam Pipe Insulation: ⌀150 mm
	Fan Build	Aluminium die-cast frame; dual ball bearings; PBT, UL94V-0 Plastic Impeller
	Nominal Power of Fan / Noise	6 W, 12 V DC, 0.5 A; 43 dBa
	Life Expectancy of Fan	100 000 hours (L10 at 65 °C)
INSTALLATION	Powering the Fan	Included 12 V AC-DC adaptor and 3-way switch (Auto - Off - Full) built-in to module: plugs into 220 V AC power
	Method of Installation	1. Drill ⌀150 mm hole in wall, for insulated pipe. 2. Cut aluminium pipe and foam to wall thickness and attach to collector with supplied double-sided tape. 3. Attach collector to exterior wall through holes in frame. Pre-drill holes with supplied template if hard material. 4. Mount indoor module on interior wall

AirSolaris 4-IN-1

WORLD'S FIRST **4-IN-1** SOLAR AIR SYSTEM

FEATURED AT EXPO MILANO

COMING IN 2016

Indoor Module

WORLD'S FIRST INDOOR SOLAR SLOW COOKER

EnergySolaris

Designed and made in Moldova. With the best materials from Europe.

ORDER **NOW***

*** For pricing and availability, please email contact@energysolaris.com**

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