DUALSUN

French manufacturer of solar panels

The insulated DualSun SPRING4 hybrid panel enables powering a solar water heater to produce low-carbon electricity for domestic hot water.

NEW : Ultra-resistant exchanger

SPRING4 425 TOPCon I

PHOTOVOLTAIC EFFICIENCY

High-efficiency TOPCon monocrystalline cells water-cooled

Exceptional minimum module guaranteed efficiency of **21.80%** and performance at 30 years of 87.40%

OPTIMIZED PERFORMANCE

Operates year-round with dual solar production, providing output in both summer and winter.

Patented metal exchanger, ultra resistant to pressure.

DUALSUN WARRANTY

French manufacturer

10 year product warranty from activation of warranties*

30 year linear performance warranty on photovoltaïc efficiency

* Warranty activation conditions on dualsun.com

QUALITY & SAFETY

- IEC 61215 & 61730 PV 60174698 0001
- SOLAR KEYMARK 011-7S3217 P

SUSTAINABLE. RELIABLE.

Maximum resistance to mechanical loads (wind, snow). **Compatibility** with the main manufacturers of fixing systems.

INDUSTRY OF THE FUTURE LABEL

Panel assembled in France (Ain)

DIN EN ISO 9001: 2015 certified factory

Industry of the Future label

PANEL COMPATIBLE FOR APPLICATIONS:

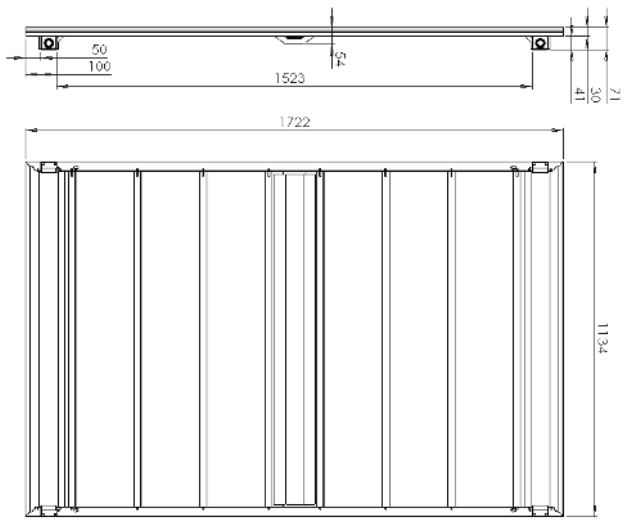
Domestic hot water (individual and collective)

Collective swimming pools

Recyclable panel

SPRING4 425 TOPCon I

Dimensions

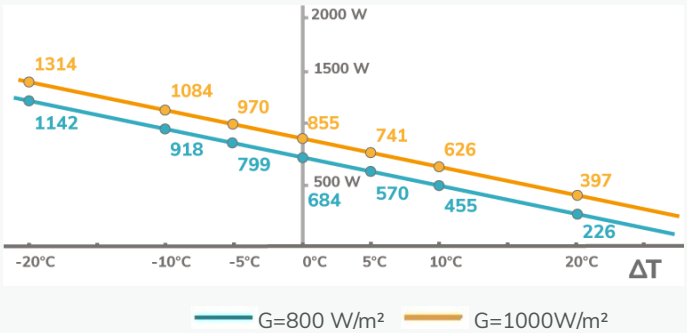


Physical characteristics

Dimensions (L x W x T)	1722 mm X 1134mm X 71mm
Frame thickness	30 mm
Empty / full weight	34,5 / 42,3 kg
Number of cells	108 1/2
Cell type	Monocrystalline N-Type TOPCon
Connectors	MC4 original EVO2
Cable length	1400/1400 mm
Maximum load	6600Pa (snow), 3600Pa (Wind)*
Frame / Backsheet	Black anodised aluminium / transparent
Collector	Black powder-coated aluminum

* In standard condition: 4 stirrups on the long side

Thermal power of the panel in Watt as a function of (T_{water} -T_{air}) for G=800 and G=1000W/m²



Performances derived from the values a0, a1 (wind u = 1.3 m / s)

Photovoltaic characteristics

Nominal power	425 W
30-year linear power guarantee	87,4%
Output power tolerance	0/+3%
Module minimum guaranteed efficiency	21,8 %
Rated voltage (V_{mpp})	33.75 V
Rated current (I_{mpp})	12.6 A
Open circuit voltage (V_{oc})	39.35 V
Short-circuit current (I_{sc})	13,33 A
Voltage temperature coefficient (μV_{oc})	-0,26 %/°K
Current temperature coefficient (μI_{sc})	0,038 %/°K
Power temperature coefficient (μP_{mpp})	-0,31 %/°K
Maximum system voltage	1500 VDC
Maximum reverse current	30A
NMOT	45+/-2°C
Application class	II

* STC conditions (AM 1.5 - 1000 W/m² - 25°C)
Measurement tolerance: +/- 3%

Thermal characteristics

Thermal power	438 W_{th}/m²*	855 W_{th}/pn
Collector area	1,95 m²	
Heat exchanger volume	4,9 L	
Max operating pressure	6 bar	
Pressure drop	at 60 L/h : 6 | 0,6	
(Pa | mmH20)	at 100 L/h : 18 |1,8	
Stagnation temperature	80°C	
Optical efficiency a_0	43,8 %**	
Coefficient a_1	11,7 W/K/m²**	
Coefficient a_2	0 W/(m².K²)**	

* Thermal power calculated with wind u = 1.3 m/s, DT = 0, G = 1000 W/m²

** The coefficients a_0, a_1 and a_2 result from EN 9806: 2017 certification tests for solar collectors without glazing carried out by KIWA for a **wind speed u = 1.3 m/s: $a_0 = n_0 - c_6*u'$; $a_1 = c_1 + c_3* u'$; $u' = u - 3$**

Find the installation instructions and mounting systems in our resource area:

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