

SPRING4 425 TOPCon Finned

The hybrid solar panel that meets the **heating, domestic hot water and electricity** needs of the home. The finned version of the SPRING 4 is specially dedicated to **coupling with solar thermal heat pumps** (glycoled-water/water), for 100% renewable energy homes.

- ⇒ **Up to 90% savings** on your overall energy bill: when the finned SPRING 4 is coupled to a glycoled-water/water heat pump.
- ⇒ **1.2 times more efficient** than a traditional air/water heat pump
- ⇒ **Aesthetic and solid rendering** thanks to the black aluminum frame.



A 2-in-1 innovation

A combination of photovoltaic and thermal solar energy that produces at least 2 times more energy than a conventional photovoltaic panel.



Made in France label

SPRING technology is designed by Dualsun's engineering teams at the R&D center in Marseille, and manufactured at the Dualsun plant near Lyon.



Low carbon

The panel for reducing buildings' carbon footprint, it is designed with high-quality components and follows manufacturing processes that limit CO2 emissions.

Product specifications

Certifications



- IEC 61215 – 61730 : PV 60174698 0001
- Solar Keymark : 011-7S3219 P

Efficiency & Performance

Front side – Electricity production

- ✓ N-type TOPCon monocrystalline cells
- ✓ Minimum guaranteed exceptional efficiency of 21.8% and performance warranty of 87.4% at 30 years

Back side – Hot water production

- ✓ Patented metal heat exchanger, highly resistant to pressure
- ✓ Generates solar heat in the summer as well as in the winter, providing dual-solar energy production

Warranties

Product

- ✓ 10-year product warranty starting from activation of warranty.

[See more about warranty activation conditions](#)

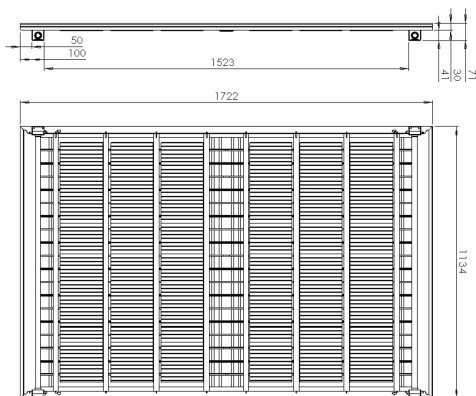
Performance

- ✓ 30-year linear performance warranty for photovoltaic production

Technical Data

DSTF425-108M10TB-03 | Publication 20 February 2024 | Updated 20 February 2024 | V1.0 | SPR202311AACA

Technical drawing



Photovoltaic characteristics

Nominal power	425 W
Power Tolerance	0/+3%
Module minimum Guaranteed Efficiency	21.8 %
Rated Voltage (Vmpp) at STC	32.21 V
Current at Maximum Power Point (Impp) at STC	13.2 A
Maximum System Voltage	1500 V
Open Circuit Voltage (Vco) at STC	38.58 V
Short Circuit Current (Isc) at STC	13.83 A
Voltage temperature coefficient (μlsc)	-0.26 %/°C
Current temperature coefficient (μlsc)	0.038 %/°C
Power temperature coefficient (μPmpp)	-0.31 %/°C
Temperature	-40°C/+80°C
NMOT	45 +/-2 °C
Application Class	2

Values calculated according to SolarKeymark standard: $P = 1000 \text{ W/m}^2$, $T = 25^\circ\text{C}$, $u = 1.3 \text{ m/s}$

Physical characteristics

Length	1722 mm
Width	1134 mm
Thickness	71 mm
Weight	36.3 kg
Front glass Thickness	2 mm
Max Positive Mechanical Load	5400 Pa
Max Negative Mechanical Load	2400 Pa
Hail Resistance	RG3

Thermal characteristics

Filled Weight	41.5 kg
Surface Area	1.95 m ²
Liquid Volume	4.9 L
Maximum Service Pressure	6 Bar
Pressure Drop 100L/h Portrait	0,018 kPa
Stagnation Temperature	70 °C
Thermal Loss Coefficient (A1)	25.01 W/K/m ²
Thermal Power	459 W/m ²

Thermal Power (W) function of ($T_{\text{water}} - T_{\text{air}}$) for $G=0$ et $G=1000 \text{ W/m}^2$

