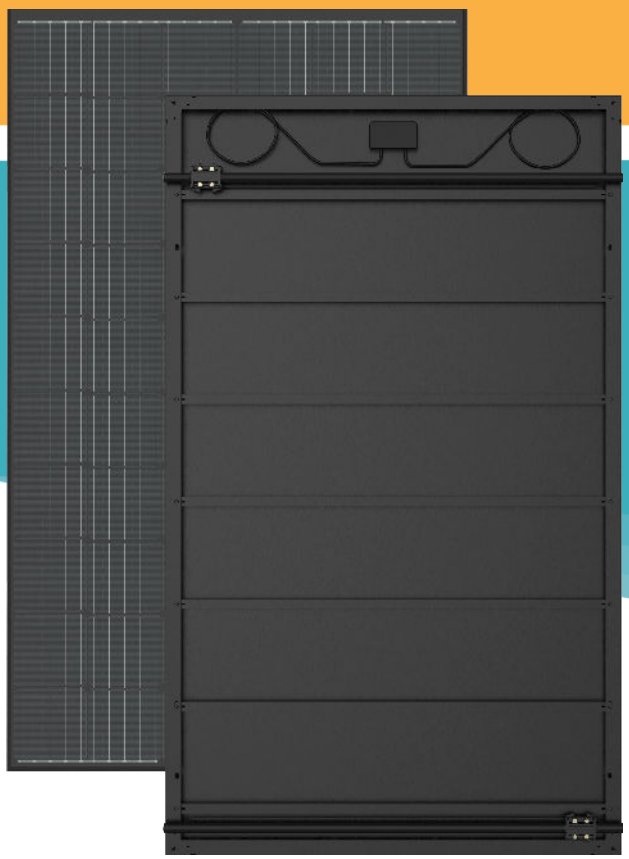
DUALSUN

French manufacturer of solar panels



SPRING hybrid solar panel (PVT)® designed and manufactured in France (certified Made in France), produces both electricity and hot water

SPRING® 300 Black (PVT-2)

PHOTOVOLTAIC FRONT FACE

- High performance monocrystalline cells cooled by water circulation
- Positive classification -0/+5 Wp
- Anti-reflective glass ensuring high performance even in diffused light

THERMAL REAR FACE

Hot water production thanks to an ultra-thin patented heat exchanger completely integrated into the panel

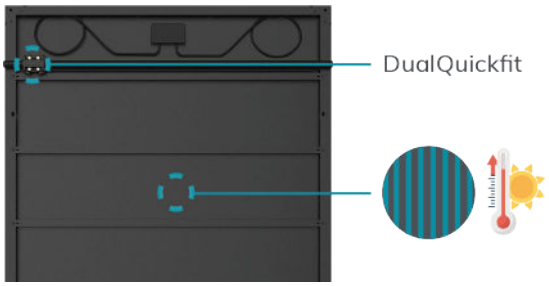
DualBoost® : Photovoltaic efficiency boost by cooling cells

WARRANTY

Product and labor warranty* 10 years

25-year linear power output warranty

* Refer to the DualSun warranty conditions



QUALITY & SAFETY

- CE marking
- IEC 61215 & 61730 n°16429 Rev.2
- SOLARK KEYMARK n°16458 + n°16459 Rev.2
- CEC listed / UL 1703 n°702139 / ICC-SRCC n °10002099

DUALQUICKFIT®

Patented Plug & Play hydraulic connection system for faster and more reliable installation of the SPRING® panel

INDUSTRY OF THE FUTURE LABEL

Engineered in France :

R&D center in Marseille

Made in France (certificate FR-IMF-2019-198):

DIN EN ISO 9001: 2015 certified factory in Jujurieux

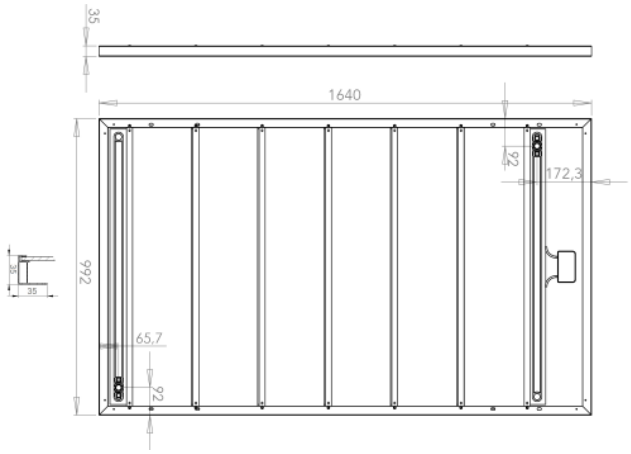
COMPATIBLE PANEL FOR APPLICATIONS:

DHW	HP	POOL

PV CYCLE Recyclable panel

SPRING® 300 Black (PVT-2)

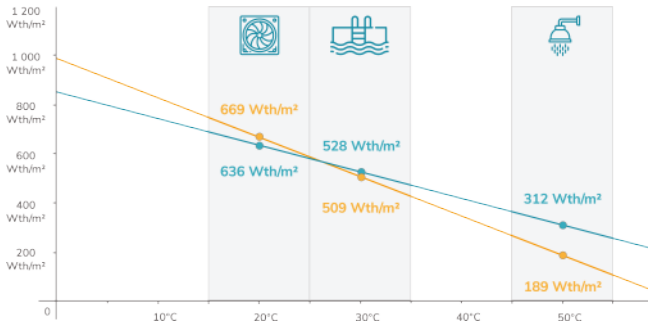
Dimensions



Physical characteristics

Length	1640 mm	
Width	992 mm	
Thickness	35 mm	
	Non insulated	**Insulated**
Empty / full weight	24,3 / 29,3 kg	25,1 / 30,1 kg
Number of cells	60	
Cell type	PERC Monocrystalline	
Connectors	MC4 / MC4 compatible	
Cable length	900 mm	
Maximum load	5400 Pa (snow) / 2400 Pa (wind)	
Frame / Backsheet	Black anodised aluminium / Black	

Thermal power output as a function of the temperature of the water in the panel and by application



Performances derived from values a0, a1 (wind u = 1m/s) in STC conditions (T = 25 ° C, G = 1000 W/m²)

Photovoltaic characteristics

Nominal power	300 W
Output power tolerance	0/+3%
PV module efficiency	18,3 %
Rated voltage (V_{mpp})	32,3 V
Rated current (I_{mpp})	9,28 A
Open circuit voltage (V_{oc})	39,9 V
Short-circuit current (I_{sc})	9,96 A
Voltage temperature coefficient (μV_{oc})	-0,31 %/°K
Current temperature coefficient (μI_{sc})	0,06 %/°K
Power temperature coefficient (μP_{mpp})	-0,432 %/°K
Maximum system voltage	1000 VDC
Maximum reverse current	15 A
NMOT	45 +/- 2°C
Application class	Class A

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

Thermal characteristics

Thermal power		629 W_{th}/m^2*	
Gross area		1,635 m²	
Heat transfer liquid volume		5 L	
Max operating pressure		1,5 bar	
Pressure drop		**Portrait**	**Landscape**
(Pa | mmH20)	at 32 L/h	59 | 6	167 | 17
	at 100 L/h	461 | 47	961 | 98
Hydraulic inlet / outlet		DualQuickft® fitting	
		Non insulated	**Insulated**
Stagnation temperature		70°C	75,6°C
Optical efficiency a_0		58,9 %**	58,2 %**
Coefficient a_1		16,0 W/K/m²**	10,8 W/K/m²**
Coefficient a_2		0 W/(m².K²)**	0 W/(m².K²)**

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

** The coefficients a_0, at_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 m / s: $a_0 = n_0 - vs_6 * u$ '; $at_1 = c_1 + c_3 * u$ '; u '= u - 3**

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

1.1 – 2021
DualSun 300M-60-3BBPI / DualSun 300M-60-3BBPN

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