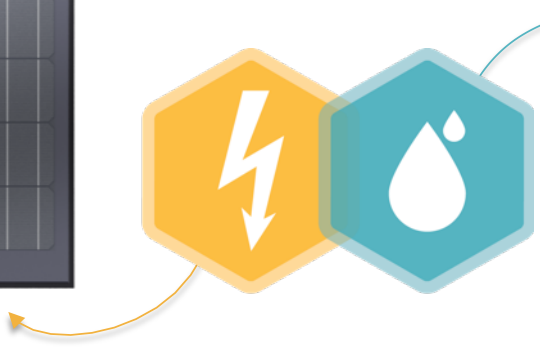
DUALSUN
PROFESSIONNELS

An innovative solar panel that produces simultaneously electricity and hot water.

Dimensions of a standard photovoltaic panel (60 6-inch cells)

High-efficiency monocrystalline cells, cooled by water circulation on backside of panel

Building-integration possible due to thin frame and PV-like dimensions



Rigid and ultra-thin heat exchanger, completely integrated into panel (patented design)

Excellent heat transfer between photovoltaic frontside and water circulation on backside

The most competitive solar technology for the energy independence of buildings.

www.dualsun.com

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The DualSun panel is certified IEC and Solar Keymark n°011-7S2285 P

GENERAL DATA	
Length	1677 mm
Width	990 mm
Thickness	40 mm
Weight empty / filled	30 kg / 31.7 kg
Frame color / backsheet	Black / Black

ELECTRICAL DATA	
Number of cells per module	60
Cell type (dimensions)	Monocrystalline (156 mm * 156 mm, 6 inches)
Nominal power (P_{mpp})	250 Wc
Module efficiency	15.40 %
Tolerance	+/- 3 %
Nominal peak power voltage (V_{mpp})	30.7 V
Nominal peak power current (I_{mpp})	8.15 A
Open circuit voltage (V_{oc})	38.5 V
Short circuit current(I_{sc})	8.55 A
Maximal reverse current	15 A
Efficiency loss / °C	0.44 %/°C
NOCT	49 °C
Connectors	MC4 PLUS
Application class	Class A

THERMAL DATA	
Total surface area of module	1.66 m^2
Total surface area (excluding frame)	1.60 m^2
Volume of heat transfer liquid	1.70 L
Heat transfer liquid	Glycol water
Optical efficiency a_0*	55 %
Heat loss coefficient a_1*	15.76 W/K/m^2
Heat loss coefficient a_2*	0 W/(m^2.K^2)
Stagnation temperature	74.7 °C
Maximum service pressure	0.8 bar
Pressure loss per panel	6000 Pa at 200 liters/hour
Hydraulic input/output**	½ inch (15/21 mm)

* The a_0, a_1 et a_2 coefficients are the measured values from testing during EN 12975 certification at the TÜV Rheinland for unglazed collectors with a wind speed of u=2m/s : n_0=0.578 ; b_u=0.028 ; b_1=12.078 ; b_2=1.842.
** The DualSun panels are delivered with hydraulic tubing, equipped with ¾ inch rapid connectors for the input/output of the panel chain.

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