



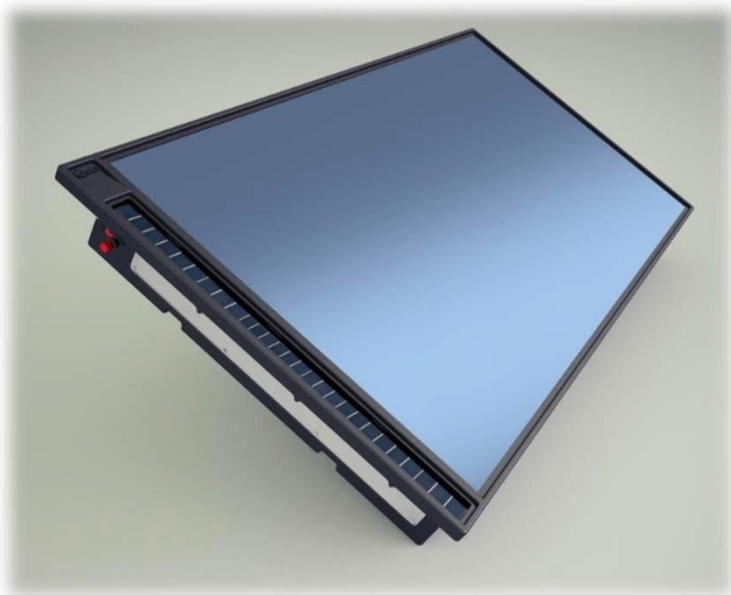
## OKSOL

**OKSOL** by **ORKLI** is a state-of-the-art, all-in-one, autonomous, forced (highly efficient) and 100% renewable thermal solar system for the **instantaneous production of domestic hot water (DHW)** by means of solar technology and without the need of a DHW tank.

The all-in-one system includes an absorber, a forced recirculation system with **drain-back technology**, a 170-litre water tank and the rest of components for an easy plug&play installation.

The recirculation pump is powered by solar photovoltaic (PV) technology works, which makes OKSOL a completely autonomous system with no need of external electrical connection.

Only requirements for installation are the inlet and outlet connections for sanitary water.



### • TECHNICAL DATA

SOLAR ABSORBER	
TYPE	<u>Selective PVD</u>
ABSORPTION SURFACE	2,16 m <sup>2</sup>
ABSORPTIVITY	95%
EMISSIVITY	5%

SIDE AND BACK INSULATION	
TYPE	PIR-ALU <u>panels</u>
THICKNESS	30 mm.
DENSITY	35 kg/m <sup>3</sup>
CONDUCTIVITY	0,023 W/m·K

OUTER CASE	
MATERIAL	PP
LENGHT	2.187x1.160x270 mm.

OTHER DATA	
WEIGHT	95 kg.
WARRANTY	3 years

COVER	
TYPE	<u>Solar Glass</u>
THICKNESS	3,2 mm.
TRANSMITTANCE	> 90%

INSULATION BETWEEN TANK AND ABSORBER	
TYPE	<u>Rock wool</u>
THICKNESS	25 mm.
DENSITY	50 kg/m <sup>3</sup>
CONDUCTIVITY	0,035 W/m·K

TANK	
TYPE	PE
CAPACITY	170 l.

DHW HEAT-EXCHANGER	
MATERIAL	<u>Stainless Steel AISI 316L</u>
LENGHT	16,25 m.



## ● COMPONENTS CHARACTERISTICS

### CIRCULATION PUMP

Type	Magnetic, brushless
Flow rate max.	12.6 l/min
Max height	3.2 m
Voltage DC	12 V

### SAFETY VALVES - PRIMARY CIRCUIT

Type	Pressure
Max. service pressure	3 bars
Max. operating temperature	160 °C

### PHOTOVOLTAIC PANEL

Type	Polycrystalline silicon
Rated power	10 W

## ● SYSTEM OUTPUT INDICATORS

Simulation of the thermal behavior of the solar system, and calculation of its annual energy gain for reference weather and standardised hot water draw-off profiles (according to EN 12976-2):

City	$Q_d$	$Q_L$	$F_{sol}$	$Q_{par}$	V daily draw-off
Stockholm	2791	1595	0.571	--	50
Würzburg	2676	1597	0.597	--	50
Davos	3028	2393	0.790	--	50
Athens	2080	1889	0.908	--	50
Stockholm	4465	2390	0.535	--	80
Würzburg	4282	2415	0.564	--	80
Davos	4845	3559	0.734	--	80
Athens	3327	2896	0.870	--	80
Stockholm	6140	2867	0.467	--	110
Würzburg	5888	2954	0.502	--	110
Davos	6662	4186	0.628	--	110
Athens	4575	3660	0.800	--	110

$Q_d$  = Heat demand (MJ).

$Q_L$  = Heat energy produced by the solar system (MJ).

$F_{sol}$  = Solar fraction (%).

V daily load = Volume demand (l/day).

## ● OPTIONAL ELECTRIC RESISTANCE

- Suitable as a support for water heating, or as an anti-freeze protection system.
- Power = 1.500 W.



## ● CERTIFICATIONS

KEYMARK 011-7S3007 A.