

Results of Annual Simulation

Installed Collector Power:	1.92 kW	
Collector Surface Area Irradiation:	2,413.82 kWh	1,326.27 kWh/m ²
Energy Produced by Collectors:	1,037.01 kWh	569.79 kWh/m ²
Energy Produced by Collector Loop:	915.73 kWh	503.15 kWh/m ²

DHW Heating Energy Supply:	1182.63 kWh
Solar Contribution to DHW:	915.73 kWh
Energy from Auxiliary Heating:	616.73 kWh

Natural Gas (H) Savings:	4,226,466,803.0 m ³
CO2 Emissions Avoided:	238.37 kg
DHW Solar Fraction:	59.8 %
Fractional Energy Savings (prEN 12976):	59.7 %
System Efficiency:	37.9 %

Basic Data

Climate File

Location:	Dublin
Weather Data Record:	DUBLIN
Global Radiation Annual Total:	1117.82 kWh
Latitude:	53.43 °
Longitude:	6.25 °

Domestic Hot Water

Average Daily Consumption:	80 l
Desired Temperature:	45 °C
Load Profile:	1 Hour Per Day
Cold Water Temperature:	February:7 °C / August:12 °C

System Components

Collector Loop

Manufacturer:	Ecologics
Type:	20 x 47mm Evacuated Tube
Number:	1.00
Total Gross Surface Area:	2.74 m ²
Total Active Solar Surface Area:	1.82 m ²
Inclination (Tilt Angle):	40 °
Azimuth:	0 °

Bivalent (Twin Coil) DHW Tank

Manufacturer:	T*SOL Database
Type:	DHW Tank - 100
Volume:	100 l

Auxiliary Heating

Manufacturer:	T*SOL Database
Type:	Gas Condensing Boiler - 9
Nominal Output:	9 kW



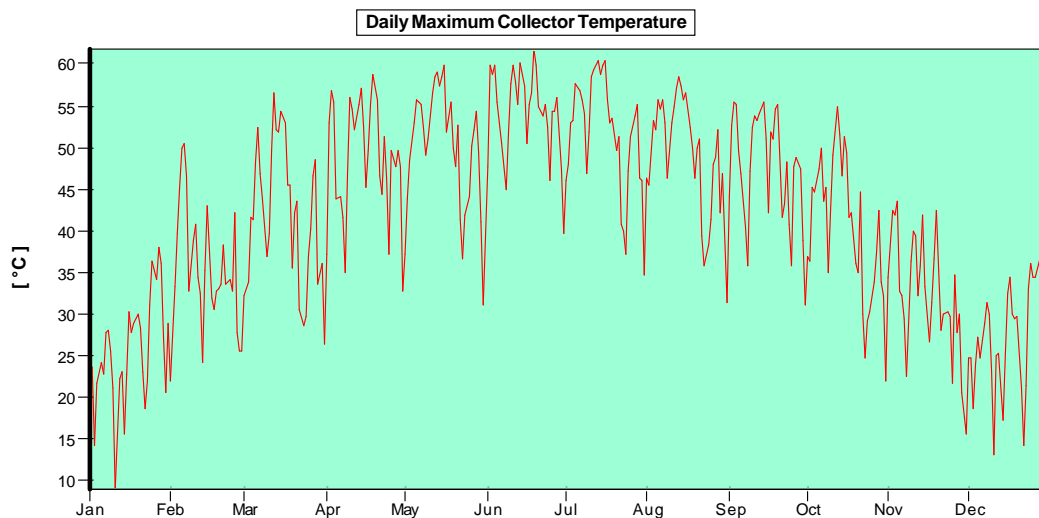
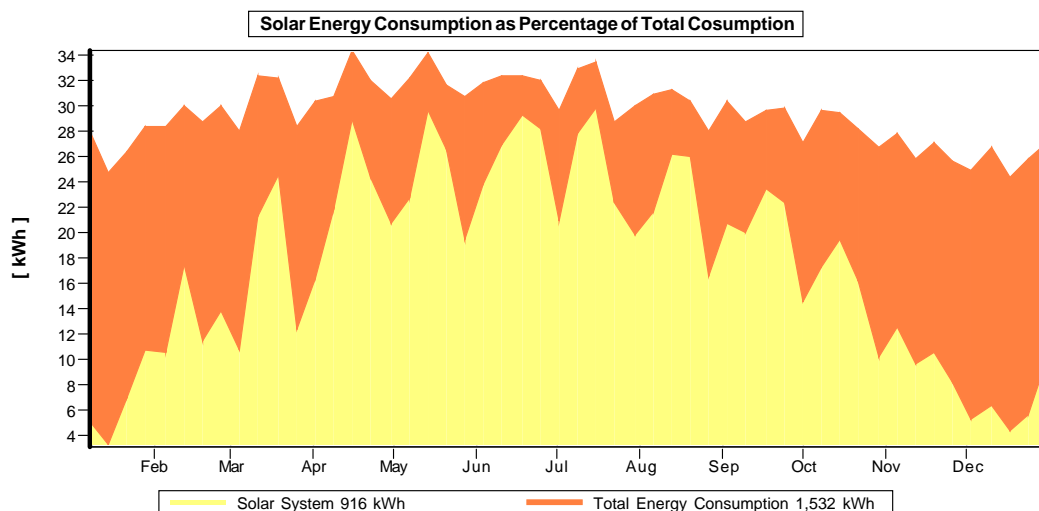
Original T*SOL Database



With Test Report



Solar Keymark



These calculations were carried out by T*SOL Pro 4.4 - the Simulation Programme for Solar Thermal Heating Systems. The results are determined by a mathematical model calculation with variable time steps of up to 6 minutes. Actual yields can deviate from these values due to fluctuations in the weather, consumption and other factors. The Schematic System Diagram above does not represent and cannot replace a full technical drawing of the solar system.