

Results of Annual Simulation

Installed Collector Power:	5.32 kW	
Collector Surface Area Irradiation:	4.07 MWh	1,088.37 kWh/m ²
Energy Produced by Collectors:	2,260.01 kWh	604.28 kWh/m ²
Energy Produced by Collector Loop:	1,960.99 kWh	524.33 kWh/m ²

DHW Heating Energy Supply:	3.72 MWh
Solar Contribution to DHW:	1960.99 kWh
Energy from Auxiliary Heating:	2231.86 kWh

Natural Gas (H) Savings:	252.3 m³
CO2 Emissions Avoided:	454.36 kg
DHW Solar Fraction:	46.8 %
Fractional Energy Savings (prEN 12976):	48.0 %
System Efficiency:	48.2 %

Basic Data

Climate File

Location:	DUBLIN
Weather Data Record:	"Dublin"
Global Radiation Annual Total:	948.71 kWh
Latitude:	53.43 °
Longitude:	6.23 °

Domestic Hot Water

Average Daily Consumption:	250 l
Desired Temperature:	45 °C
Load Profile:	Detached House (morning max)
Cold Water Temperature:	February:8 °C / August:12 °C

System Components

Collector Loop

Manufacturer:	Ecologics
Type:	20 tube 58mm Collector
Number:	2.00
Total Gross Surface Area:	7.6 m ²
Total Active Solar Surface Area:	3.74 m ²
Inclination (Tilt Angle):	40 °
Azimuth:	0 °

Bivalent (Twin Coil) DHW Tank incl. Heating Element (3 kW)

Manufacturer:	T*SOL Database
Type:	DHW Tank - 300
Volume:	300 l

Auxiliary Heating

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



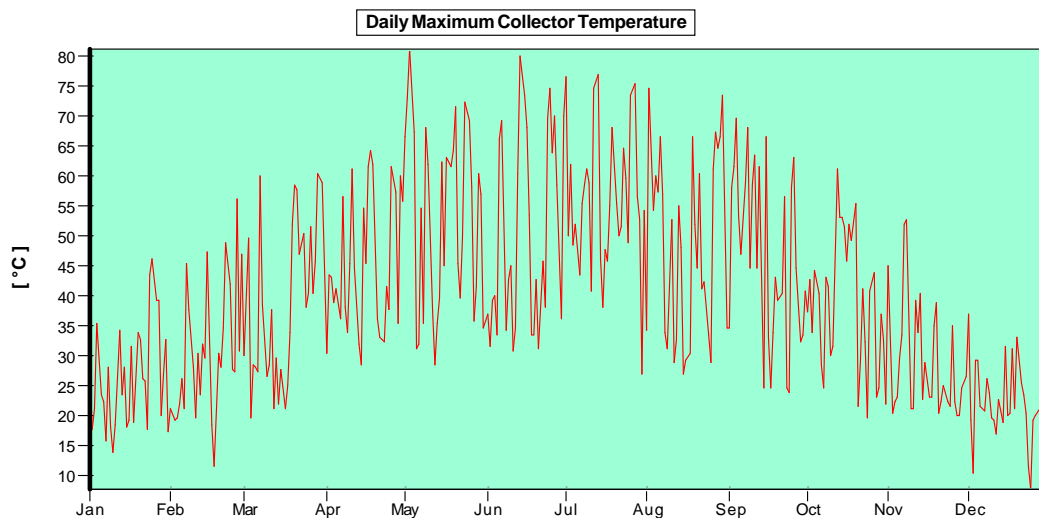
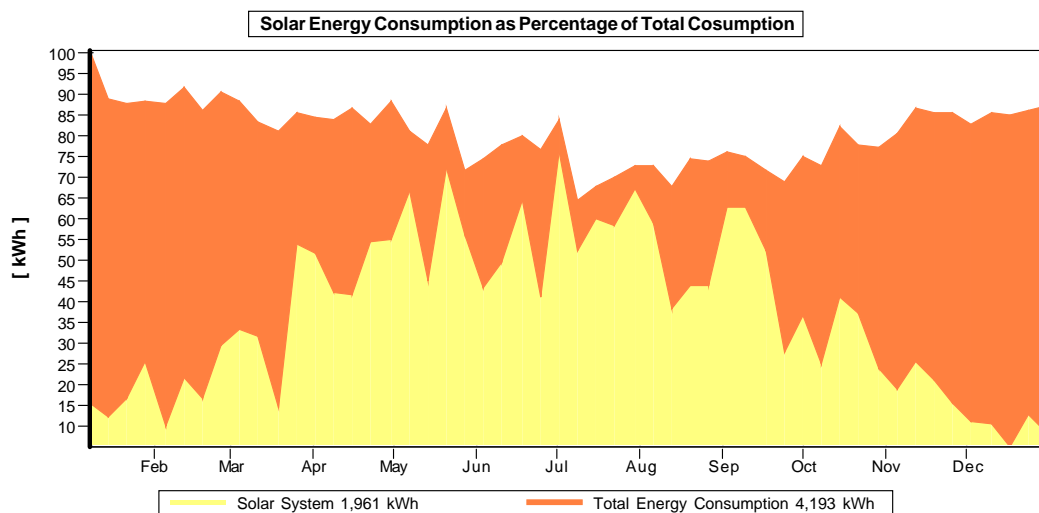
Original T*SOL Database



With Test Report



Solar Keymark



These calculations were carried out by T*SQL 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.