



POLYSOLAR ENERGY SYSTEM

The photovoltaic solution



INNOVATION!

Get the most out of your CARE290 swimming pool Heat pump by combining it with photovoltaic panels and the Polysolar Energy system.

Energy consumption is thus optimized almost entirely free of the electrical distribution network and self-sustaining. Providing up to 100% of the consumption necessary to ensure the proper operation of your swimming pool heat pump*.



*depending on model and number of panels

Reduced electricity bill and savings

Combining the Polytropic heat pump with the PolySolar Energy system is already a worthwhile investment and offers many advantages.

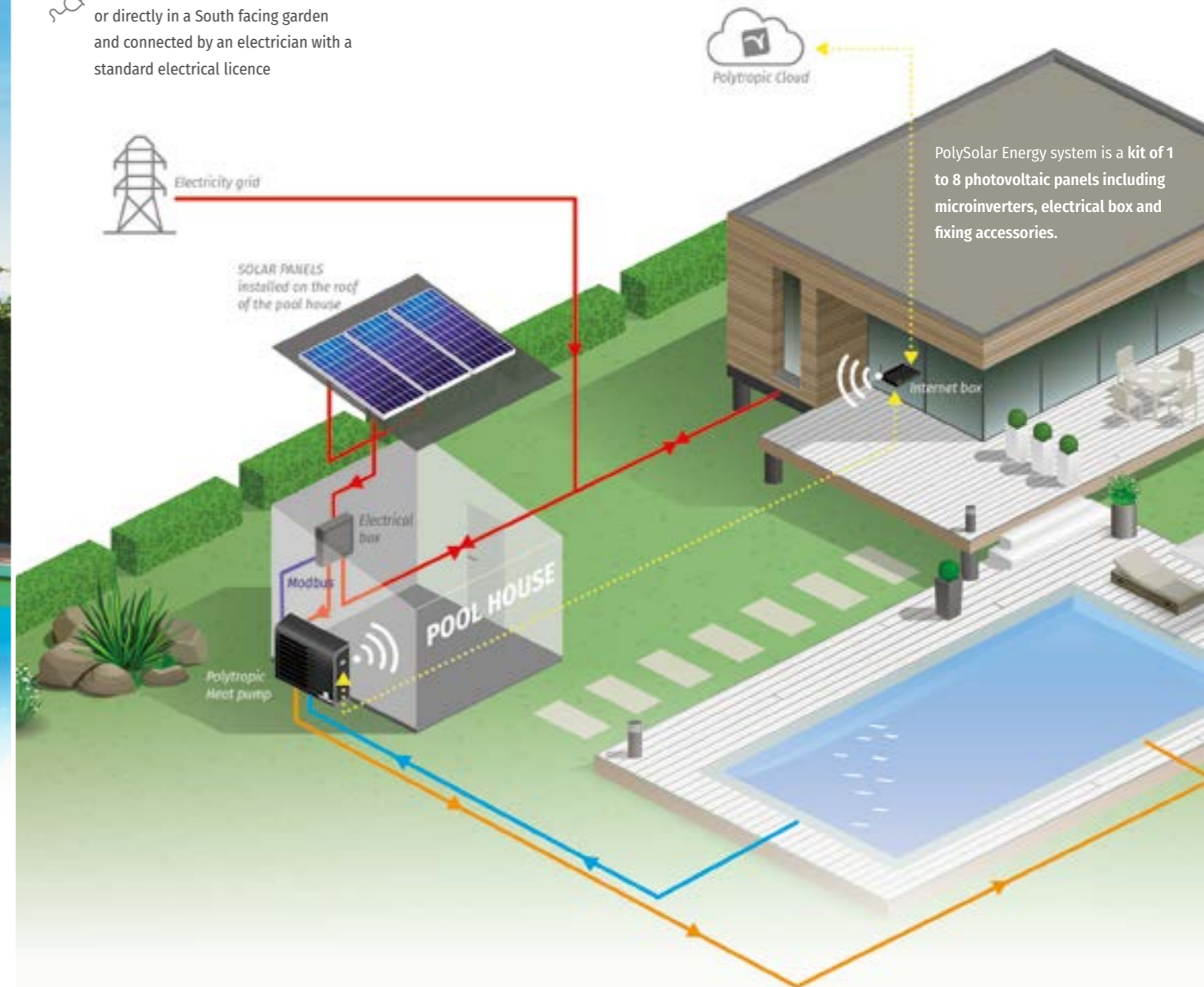
By converting solar radiation into electricity, each photovoltaic panel **optimally supplies the pool heat pump with up to the full required power** (depending on the number of modules, exposure and geographical location), while the remaining consumption is covered by the conventional electricity grid.

Electricity consumption is then optimised by being partially freed from the network and allowing self-production and self-consumption.

When the water in the pool has reached 28°C, **the surplus energy production can supply the rest of the pool equipment, and also the home!**

The user can also choose to continue operating the heat pump in order to use the pool as an indirect energy storage in the form of calories.

Installed on the roof of the pool house or directly in a South facing garden and connected by an electrician with a standard electrical licence



Features and benefits



Financial gain: The PolySolar Energy System can produce up to 100% of the energy required to drive the Swimming pool Heat pump. When the desired set point temperature has been achieved, the energy supplied by the panels is consumed by the other electrical appliances in the house and contributes to the overall profitability of the system.



Easy: plug & play installation on any pool house roof or in a south facing garden. The kit is very easy to connect, a simple electrical qualification is required.



Warranty: French photovoltaic panel manufacturer, 15 years product warranty. 85% photovoltaic yield guaranteed after 25 years.



Performance: high-efficiency solar cells convert the entire solar radiation thanks to their high-performance coating.

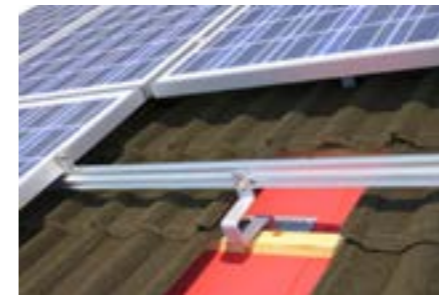
Technical specifications

ROOF installation			
Item reference	Name	kit contents	Peak power output
PolyS 4 RF	Pack PolySolar Energy System 4 panel ROOF	4 PV panel, 1 micro-inverter, 1 Polysolar control box, fixings: 2 rails 4 hooks 4 clamps (+ accessories)	1.72 kWc
PolyS 5 RF	Pack PolySolar Energy System 5 panels ROOF	5 PV panels, 1 micro-inverter, 1 Polysolar control box, fixings: 2 rails 4 hooks 6 clamps (+ accessories)	2.15 kWc
PolyS 6 RF	Pack PolySolar Energy System 6 panels ROOF	6 PV panels, 1 micro-inverter, 1 Polysolar control box, fixings : 2 rails 6 hooks 8 clamps (+ accessories)	2.58 kWc
PolyS 7 RF	Pack PolySolar Energy System 7 panels ROOF	7 PV panels, 1 micro-inverter, 1 Polysolar control box, fixings : 4 rails 2 junctions 8 hooks 12 clamps (+ accessoires)	3.01 kWc
PolyS 8 RF	Pack PolySolar Energy System 8 panels ROOF	8 PV panels, 1 micro-inverters, 1 Polysolar control box, fixings : 4 rails 2 junctions 12 hooks 16 clamps (+ accessories)	3.44 kWc
PolyS 9 RF	Pack PolySolar Energy System 9 panels ROOF	9 PV panels, 1 micro-inverters, 1 Polysolar control box, fixings : 8 rails 4 junctions 16 hooks 22 clamps (+ accessories)	3.87 kWc
PolyS 10 RF	Pack PolySolar Energy System 10 panels ROOF	10 PV panels, 1 micro-inverters, 1 Polysolar control box, fixings : 8 rails 4 junctions 16 hooks 22 clamps (+ accessories)	4.3 kWc

FLOOR OR FLAT ROOF installation			
Item reference	Name	kit contents	Peak power output
PolyS 4 FL	Pack PolySolar Energy System 4 panel FLOOR	4 PV panel, 1 micro-inverter, 1 Polysolar control box, 1 ballast tray (+ accessories)	1.72 kWc
PolyS 5 FL	Pack PolySolar Energy System 5 panels FLOOR	5 PV panels, 1 micro-inverter, 1 Polysolar control box, 2 ballast boxes (+ accessories)	2.15 kWc
PolyS 6 FL	Pack PolySolar Energy System 6 panels FLOOR	6 PV panels, 1 micro-inverter, 1 Polysolar control box, 3 ballast boxes (+ accessories)	2.58 kWc
PolyS 7 FL	Pack PolySolar Energy System 7 panels FLOOR	7 PV panels, 1 micro-inverter, 1 Polysolar control box, 4 ballast boxes (+ accessories)	3.01 kWc
PolyS 8 FL	Pack PolySolar Energy System 8 panels FLOOR	8 PV panels, 1 micro-inverters, 1 Polysolar control box, 6 ballast boxes (+ accessories)	3.44 kWc
PolyS 9 FL	Pack PolySolar Energy System 9 panels FLOOR	9 PV panels, 1 micro-inverters, 1 Polysolar control box, 8 ballast boxes (+ accessories)	3.87 kWc
PolyS 10 FL	Pack PolySolar Energy System 10 panels FLOOR	10 PV panels, 1 micro-inverters, 1 Polysolar control box, 6 ballast boxes (+ accessories)	4.3 kWc

Installation

Installation on any pool house roof or in a south facing garden:



Roofing installation accessories



Accessories for deck or flat roof installation

PolySolar Energy system is compatible with :



Case study

Covered swimming pool of **8 m x 4 m**, 1.5 m deep, in the Cambridge area, heated with a **set temperature of 28°C** by a swimming pool heat pump Master-Inverter S by POLYTROPIC, combined with the Polysolar Energy System from 15 May to 15 September is:

with a 4 panels pack

> 100% of the electricity consumption of the heat pump during the season is provided by the production of the photovoltaic panel kit

with a 8 panels pack

> 100% of the electricity consumption of the heat pump AND the filtration pump during the season is provided by the production of the photovoltaic panel kit*.

*Indicative data on the annual production of the panel, according to exposure and supplier rates. Polytronic is not responsible for this information.

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