

POLYSOLAR ENERGY SYSTEM The photovoltaic solution

INNOVATION!

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

Energy consumption is thus optimized almost entirely free of the electrical distribution network and self sustaining. Provides up to 90% of the consumption necessary to ensure the proper operation of your swimming pool heat pump*.



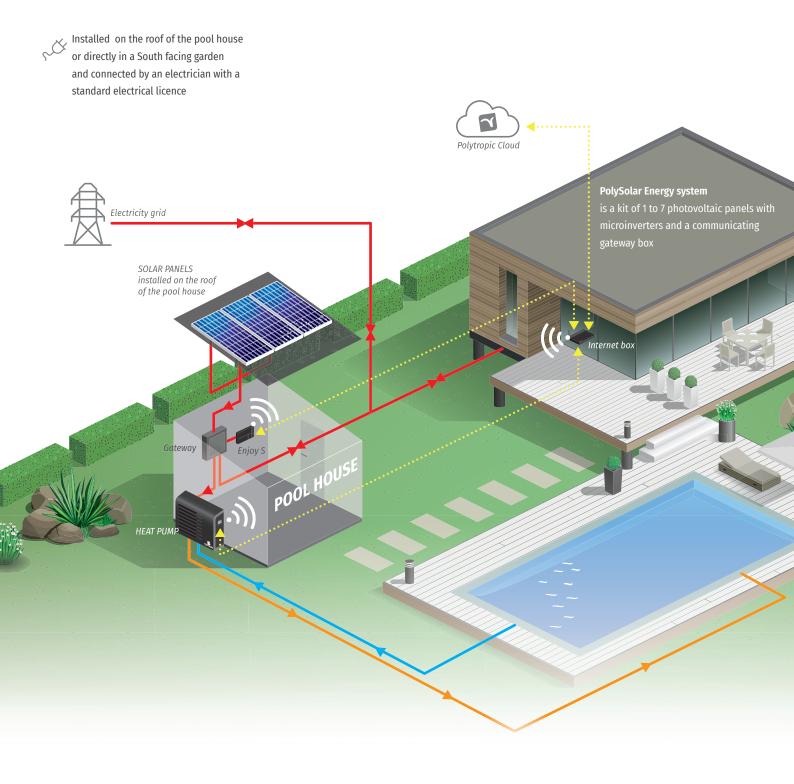
Reduced electricity bill and savings

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 90% of the required power (depending on the number of panels, exposure and geographical location), with the remaining consumption being covered by the conventional electricity grid. The Polytropic heat pump is powered by the PolySolar Energy system panels on sunny days. The Gateway on-board energy management system then increases the self-consumption rate: the heat pump switches on, converts the solar energy into heat and increases the water temperature.

When the water in the pool has reached 28°, the surplus energy production supplies the rest of the pool house equipment, but also the house! Nothing is wasted!

Electricity consumption is then optimised by partially freeing itself from the grid and allowing self-production and self-consumption.



Features and **benefits**

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Financial gain : Our Polysolar Energy System can produce up to 90% of the energy required to drive the Swimming pool Heat pump. When the desired set point temperature has been achieved, the energy now generated is used to drive other equipment within the filter plant and so contributes to our renewable Global approach.

Performance: High efficiency Solar cells capturing and converting the entire photovoltaic yield

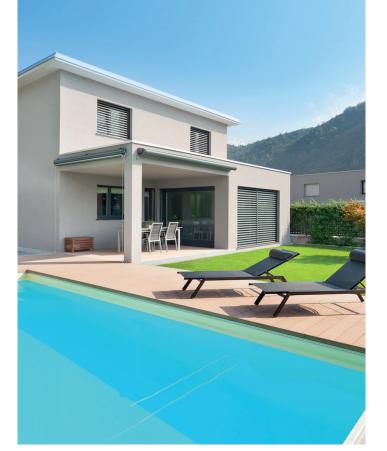
Ease of installation: 'Plug & Play' Installation on any roof type or in a garden with exposure to the South. The kit connects electrically with ease-electrical clearance is required

Garantee : French manufacturer, 20 Year guarantee on product + further 5 Year extension when the guarantee has been activated. 25 Year performance guarantee on the Photovoltaic yield.

Case study

Based upon the cost of Kw/h on site, a Swimming pool of 8.0m x 4.0m x 1.5m (48m3) in the Rhone-Alpes region heated to 26°C by a Polytropic swimming pool Heat pump combined with the Polysolar energy system, ✓ saved **1700 kWh**

✓ or 300€ over the season !



Efficiency

Average percentage of electricity consumption of the swimming pool Heat pump for the season (May-Septembre) using the Polysolar Energy System Photovoltaic panel kit.

(To attain 26°C on a swimming pool of 48 m³ in the Rhône-Alpes region)

Deafing installation	Deck installation	Heat pump model						
Roofing installation		XXS	XS	S	S+	М	ХМ	
PS010001 Solar pack 2 panels and boxes	PS020001 Solar pack 2 panels and boxes	75 %	55 %	35%	-	-	-	
PS010002 Solar pack 3 panels and boxes	PS020002 Solar pack 3 panels and boxes	90 %	75%	55%	35%	-	-	
PS010003 Solar pack 4 panels and boxes	PS020003 Solar pack 4 panels and boxes	-	90%	75%	55%	35%	-	
PS010004 Solar pack 5 panels and boxes	PS020004 Solar pack 5 panels and boxes	-	-	90 %	75%	55%	35%	
PS010005 Solar pack 6 panels and boxes	PS020005 Solar pack 6 panels and boxes	-	-	-	90%	75%	55%	
PS010006 Solar pack 7 panels and boxes	PS012006 Solar pack 7 panels and boxes	-	-	-	-	90 %	75%	



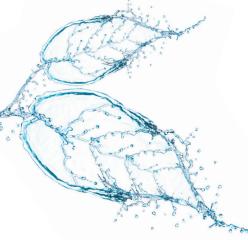
The app

Thanks to Polyconnect 2.0, power generation and consumption can be viewed in real time

in real time			Énergie Produite Mis à jour II y a 5 minutes	<	<u>557-</u> 33.0
			4,8 kWh septembre 23, 2022	6,3 kWh septembre 22, 2022	
Fourier Fourier	COUTROPIC COUTROPIC	Champ PV	0.35		
 ✓ ■ 31 MARABANE 3022 ✓ 4,8 kv/m seqtembre 33, 2022 	Équivalent es devise 4.8mm - E 0.7 Equivalent es devise	178 224 228 kWh kWh kWh	0.00 • 0.00		
6,3 kWh expensive 22, 2022	Équivalent solaire	Predentine 6,25 mm	033		
	< 4.8 mm Present seture Ampound DO W	Total Produit e	0 Dam 3 0	9 Dan 3	0 9
	Commandes du graphique	6,25 ^{wh} Cumul de production	Équivalent en devise 🏾 💿		Commandes du graphique
	septembre 12, 2022	92,80 ^{1wh}	4,8 km = € 0,7 Energie Produite = Equivalent en devise	4.8xxm Produit solaite - 48 Heures > Arripoule 100 W	septembre 23.2022 teptembre 22.2022

PolySolar Energy system is **compatible with** :





Sustainable solutions

Energy efficiency is no longer enough, it is the overall impact of the swimming pool that matters.

As a designer-manufacturer specialized in heat pumps, we are committed to meeting and surpassing regulatory requirements!

Reducing the products impact throughout its life through (**reliability, repairability, low energy consumption and a recycling program**) but also in the way we work. The essence of our business and expertise is in practicing and proposing innovative solutions. We thus **propose a hybrid approach in coupling a photovoltaic panel kit to your swimming pool Heat pump**. As a major player in the market we have always be diligent in doing our part and are concious of our environmental impact.

In order to formalize our approach, this year we have engaged and are involved in :

- ✓ The calculation of our Carbon footprint
- ✓ The Positive Workplace **RSE label**

The objective is to take stock and establish a road map in further evolving our practices.

Since 2020, we have also committed ourselves to 'Planete urgence' and take part in its program of environmental development through reforestation projects of our ecosystems, local economic development and the mobilisation against climate change.

More information on www.planete-urgence.org

♀ 4 Chemin des Eclapons - 69390 VOURLES
 ◆ +33 (0)4 78 56 93 90
 ▼ orders@polytropic.fr - www.polytropic.fr

POLYTROPIC SAS au capital de 100 000 euros RCS Lyon : 423 815 125 - SIRET 423 815 125 00038 TVA : FR39 423815125 - APE 4674 B