# **EcoOnline Performance+**

**Premium Solar Pool Heating Systems** 

**OKU Panels Adapted** for Australian Conditions

Designed to be the best solar pool heating systems in , Australia – bar none.

Dr Gregory Grochola (PhD)



Certified

**Panels** 







**Precision Engineering Unmatched Attention to Detail** 



EcoOnline / Optex Solar Pty Ltd

ABN: 88 128 228 884

Address: 7B Steele Crt, Mentone, 3194, Victoria

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# **EcoOnline** Performance+ <sup>™</sup> **OKU** Panel Systems



German Certified **Panels** 





## Absolutely No Compromise On Materials Selection

- HIGH DENSITY POLYETHYLENE collector panels which are near indestructible in the sun
- 316/314 ALL STAINLESS fixing straps and clamps for maximum strength and longevity
- SILICON joiners with thick reinforced sall grade silicon for perfect seals each time



# Efficient & Ultra Durante OKU HDPE Panels

- Open channel high water flow design the superior heat conductance
- Flat collector face with no air gaps for lowest possible wind and hot spot loses
- Unbeatable performance in cool, spring and autumn weather when you need it most



#### Cockatoo, Hail and Leak Protected

- Proven HDPE cocky and hail proof track record
- Soft joiners and a unique negative pressure system
- And an easy panel leak repair system just in case



#### Potable Grade

- No need for winter flushing
- No phthalate PVC plasticisers
- German TUV certification







# **Reduced Pumping Needs**

- Open collector channels with parallel row feed
- High flow design with minimum pumping power
- Substantial power savings over small diameter tube systems



## Lowest Pressure and Thermal Cycling Design

- Other companies may oversize collectors and/or pumps and don't care for later
- We advise very low collector pressures and do not oversize systems
- Resulting in the lowest pressure and thermal cycling rates for max longevity



## Don't Pay \$5K - \$10K for Inferior Systems

- Pool companies ask a mint for rushed installs during peak seasons
- DIY if you can do it safely or source your own trusted installer
- You'll get the best components and the best install for much less
- \* NegSheild™ sets up a small negative pressure at the collector roof level. Note: for independent setups this may not be possible if a constrictive return outlet is shared with the main filter pump and the solar and filter pumps are running simultaneously.



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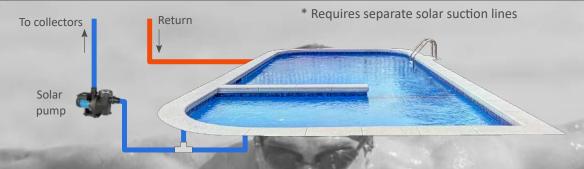
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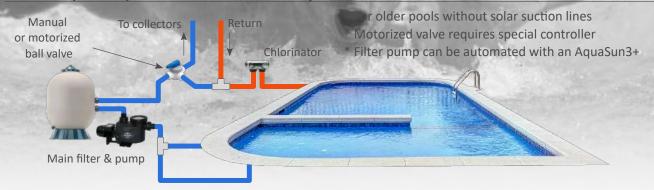








#### Manual/Timer/Motorized Ball Valve System



#### **Integrated-Independent System**



#### **Booster/Retro Fit System**

To collectors

Booster pump

\* For older pools without solar suction lines



Main filter & pump



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Return

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**Performance+ OKU Panel Thermal Specs** 

0.06 psi

2-5L/min/m<sup>2</sup>

6 kg or 12kg with water

<6L

65 psi -1 to 1psi

89%

20 to + 115°C

as low as 1.2L/min/m<sup>2</sup>

Pressure drop at 3.3L/m/m2

Testing pressure
Recommended working pressure

Optimal flow rate range

Efficiency at 1000W/m2

Temperature range

Frost resistant

Minimum flow rate

Water content

Weight



German Certified Panels



Performance+ OKU Panel Mechanical Specs					
1.2m <sup>2</sup>					
1360mm					
1340mm					
845mm					
40mm metric					
25mm metric					
Yes					
All					
HDPE grade					
SRCC					
Yes					
35 Years					

# Performance+ ™ vs Tube Systems - Energy Savings

A Performance+ system uses open channel, low pressure drop collectors which require smaller solar pumps than that used for other narrow tube systems. This results in substantial energy savings; below we give an example of the energy saved across an expected 35 year lifetime of a Performance+ system. As you can see in most locations the energy savings alone cover the better part of the system cost (approx \$4K for 30 panels). And this does not include electricity price inflation nor does it include savings from the extra wear on a pump operating at a higher pressure as is the case for a tube system, or the amount of time (let alone risk) you'll save not needing to get up on the roof to plug the next leaking PVC tube.

Pump energy savings for a 30 panel EcoOnline Performance+ system over 35 years				
	Months in Season	kWhs Saved per Day	Savings per Season	35 Year Savings
Melbourne	6	2.7	\$111	\$3,880
Sydney	7	2.7	\$129	\$4,527
Perth	8	2.7	\$148	\$5,174
Brisbane	8	2.7	\$148	\$5,174
Hobart	5	2.7	\$92	\$3,234
Adelaide	7	2.7	\$129	\$4,527

#### Assumptions

- \* We compare a 30 panel Performance+ system requiring a 450W pump vs an equivalent PVC tube system requiring 900W pump for the same flow
- \* We assume an an average 6 hour solar collection day and a 22.5c/kWh electricity cost

As such there is a good chance that your Performance+ system will actually pay for itself in reduced electricity and pump replacement costs. How good is that!

All of this makes the exceptional *EcoOnline* Performance+ OKU system the absolute best choice for your next - or should we say the *LAST* pool heating system you'll ever need to buy!



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