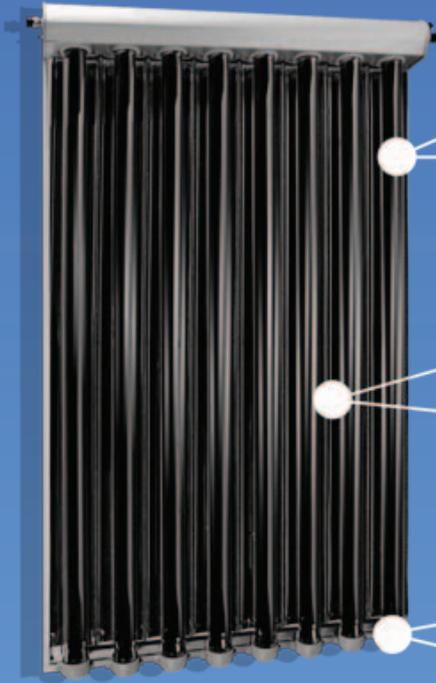




alpha solar

Clean Green Affordable



1
VACUUM
TUBE



2
CPC
TECHNOLOGY



3
EASY CHANGE
SYSTEM



THE ALPHA SOLAR COLLECTOR – WHY IS IT SO POWERFUL?

Vacuum Tube

Modern solar design uses tubes that consist of 2 layers of borosilicate glass with a vacuum layer between them. The vacuum acts like a thermos flask, retaining up to 97% of the thermal energy, resulting in an increased efficiency. The Sun's thermal energy is then transferred to the manifold via the U pipes located in each tube.

The Alpha Solar evacuated tube technology delivers measurably higher performance than other evacuated tube or flat plate systems on the market today.

How? Because Alpha Solar evacuated tubes contain not one but two transfer pipes to double the heating capacity of each tube. This is called the U pipe system and when combined with Alpha Solar's unique CPC reflector, creates a smaller high performance collector that outperforms all equivalent heat pipe and flat plate systems.

CPC Technology

Alpha Solar's unique CPC or Compound Parabolic Concentrator reflector ensures that the sun's rays can reach all 360° of each tube's surface area. Even on a dull winter day your Alpha Solar collector will be working hard, saving you money.

The unique CPC reflector is a highly polished metal component that sits just below each tube in the collector. It ensures that the sun's rays are reflected from the highly polished surface right into the back surfaces of the tubes to ensure the most efficient capture of the available light.

Easy Change System

No more maintenance problems with awkward and hard to use fittings. Alpha Solar's easy to use clip out - clip in system ensures that replacing a tube is simple and safe.

Technical Details

Alpha Solar System	Alpha 12	Alpha 18v
Number of tubes	12	18
Tube Diameter (mm)	58	58
Thermal Efficiency	61.20%	61.20%
Thermal Losses	1.505 W/m(sq)K 0.007 W/m(sq)k(sq)	1.505 W/m(sq)K 0.007 W/m(sq)k(sq)
Total Area (m(sq))	2.16	3.21
Aperture area (m(sq))	1.89	2.83
Volume of liquid (L)	1.74	2.60
Weight (empty - kg)	43	65
Height, length, thickness (mm)	1603x1358x140	1603x2018x140
Max working pressure (bar)	6	6
Optimal suggested flow	0.6(L/min x m(sq))	0.6 (L/min x m(sq))