



QUANTUM

RELIABLE SOLAR HOT WATER, WHENEVER YOU WANT IT

Quantum
ENERGY TECHNOLOGIES



ENVIRONMENTALLY FRIENDLY HOT WATER, ON TAP DAY AND NIGHT

Most people are aware of three ways to generate domestic hot water – electric, gas and solar. But there is a fourth, which combines the eco credentials of solar, with the reliability of gas and electric systems – the Quantum solar heat pump system.

One of the most efficient hot water systems available, unlike a solar panel system, a Quantum solar heat pump works so efficiently day and night. Instead, it makes use of the ambient temperature – that of the air around it – to heat the water. What's more, it's so efficient that it can provide reliable hot water 24 hours a day, even in temperatures as low as -10°C.

Replacing an inefficient hot water unit is one of the most significant low cost, carbon-reducing opportunities available to the consumer today. Which means that by installing one of our systems, you'll use far less non-renewable energy, and dramatically reduce your household's footprint.

More than environmental benefits. The fact that you'll use less electricity is good for more than your conscience. When you consider that heating water accounts for up to 30% of the average home's energy bill, the cost savings can be significant. In fact, with a Quantum solar heat pump system in your home, you'll save up to 75% of the running costs when compared to a regular electric hot water system.



A simple concept. Brilliantly executed. The Quantum solar heat pump systems work on a patented principle similar to that of a refrigerator – but in reverse.

Instead of using an external energy source such as electricity or gas, Quantum systems absorb the heat from the ambient air with a commonly used refrigerant in the evaporator. This refrigerant gas is then compressed which causes the temperature and pressure of the gas to be raised. This hot gas is passed through copper tubes wrapped around the outside of the water tank as the condenser. Heat is then transferred from the tubes to the water inside the tank.

Once the heat has been transferred to the water, the refrigerant gas cools to become a liquid and is forced up to the evaporator to start the process again, until the water in the storage tank reaches the desired temperature.

Energy from the environment – whatever the temperature. Only minimal electricity is required for the compressor, fan and digital display panel. The majority of the energy comes from the ambient environment, meaning that it's continually replenished, and free – even in cold weather or at night. In fact, our systems work from -10°C right through to +40°C, without the need for a back up booster or element.

Proven performance over time. Quantum solar heat pump systems have been developed and improved for

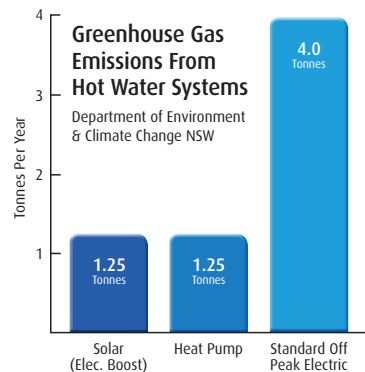
HOW OUR SOLAR HEAT PUMP TECHNOLOGY WORKS



over 30 years. Each model incorporates high-quality construction, with a full range of settings to bring you water just the way you want it, and years of worry-free operation. What's more, because our unique patented technology uses a condenser coil that wraps around the outside of the water tank, the average life of a Quantum solar heat pump system can last much longer than a comparable electric system.

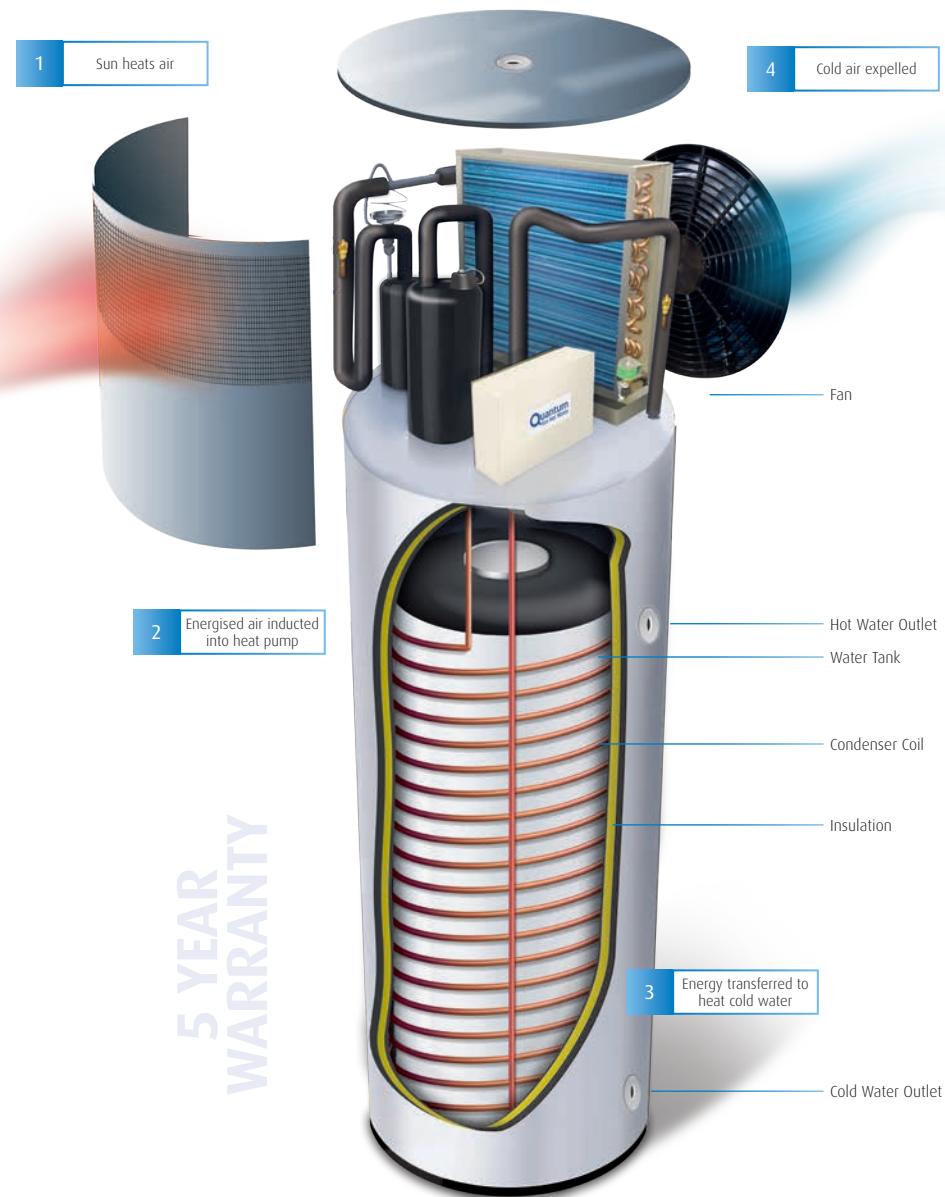
As a leading innovator and manufacturer of solar heat pump hot water heating systems, you'll also find Quantum systems around the world in commercial and industrial water heating applications, as well as for swimming pool heating.

Installation is simple. Installing a Quantum solar heat pump system is almost identical to installing a regular electric hot water system. There are no solar panels or special requirements, meaning an easy, trouble-free conversion to sustainable and reliable hot water for your home.



5 YEAR WARRANTY

2 YEAR WARRANTY



DOMESTIC MODEL RANGE

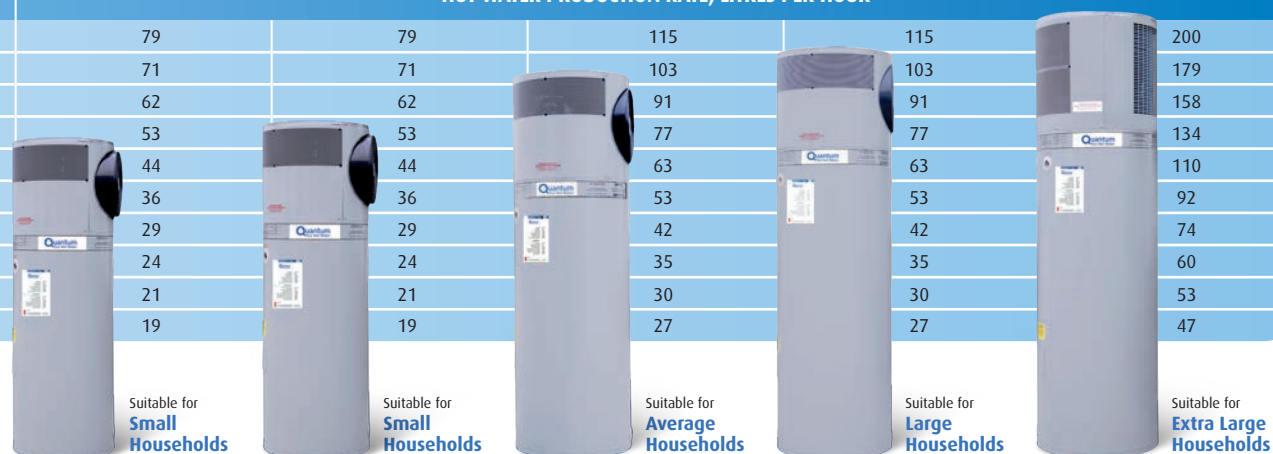
MODEL NUMBER	150-08ACW-134 Domestic Compact 150 Litre	200-08ACW-134 Domestic Compact 200 Litre	270-11AC4-134 Domestic Compact 270 Litre	340-11AC4-134 Domestic Compact 340 Litre	340-17ACW-134 TITAN Compact 340 Litre
Storage Sizes (Litres)	150	200	270	340	340
Rated Size (Litres)	125	175	250	315	315
Heat Output (kW)	2.36	2.45	3.83	3.83	6.22
Power Input (kW)	0.66	0.660	0.986	0.986	1.66
COP of Heating	3.67	3.67	3.88	3.88	3.74
Water Temp Setting	60°C	60°C	60°C	60°C	60°C
Maximum Tank Temp Setting	70°C	70°C	70°C	70°C	70°C
Compressor	16.55cc*	16.55cc*	23.1cc*	23.1cc*	39cc*
Refrigerant	R134a	R134a	R134a	R134a	R134a
Electrical Supply	220-240V/50Hz/1Ph				
Circuit	10 Amps	10 Amps	15 Amps	15 Amps	15 Amps
Water Connections	3/4" BSP - 20mm				
PTR Valve Setting	1,000kPa				
Expansion Ctrl Valve (ECV) Setting	850kPa				
PLV (without ECV fitted / with ECV fitted)	500 - 600kPa / 350 - 500kPa				
Operating Sound Level at 1.5M	50dBA	50dB	48dB (A) (*45dB(A)	48dB (A) (**45dB(A)	58dBA
Dimensions (Height x Diameter)	1620mm x 540mm	1950mm x 540mm	1900mm x 650mm	2200mm x 650mm	2300mm x 650mm
Nett (Empty) Weight	100kg	115kg	135kg	170 kg	180kg
Ambient Air Operating Temperature	-10°C to +40°C				
Hot Water Production Rate L/hr (COP)	53 (3.67)	53 (3.67)	77 (3.88)	77 (3.88)	134 (3.74)

AMBIENT AIR	HOT WATER PRODUCTION RATE, LITRES PER HOUR				
35°C	79	79	115	115	200
30°C	71	71	103	103	179
25°C	62	62	91	91	158
20°C	53	53	77	77	134
15°C	44	44	63	63	110
10°C	36	36	53	53	92
5°C	29	29	42	42	74
0°C	24	24	35	35	60
-5°C	21	21	30	30	53
-10°C	19	19	27	27	47

* Rotary

** Applicable to the split system

Note: Rated at 20°C ambient, and water heated from 20°C to 60°C.



A Quantum heat pump saves you energy, money and reduces greenhouse gas emissions once installed, and the Federal Government provides financial incentives in the form of STCs for hot water heat pumps. In addition, some state and local governments provide other rebates. For more information please visit www.quantumenergy.com.au or call us on 1800 383 888.



The Quantum customer service team is happy to help with questions you may have. For further information about the Quantum solar heat pump range please contact our Customer Service Call Centre on **1800 383 888** or visit **www.quantumenergy.com.au**

Sydney Melbourne Brisbane Adelaide Perth Darwin Hobart