

Sustainable Hot Water



Replacing an inefficient hot water unit is one of the most significant low cost, carbon-reduction opportunities available to the consumer today.

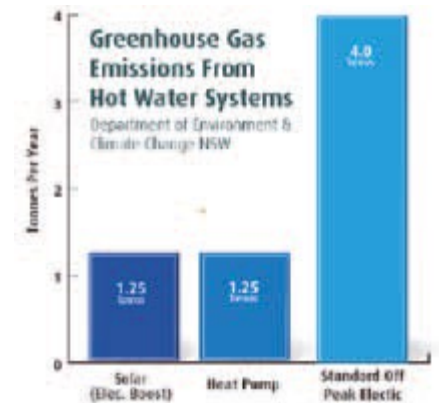
Most people are aware of the three main ways to produce hot water for the home: electric, gas and solar. The fourth, is the energy and cost efficient Quantum heat pump.

This revolutionary invention was initially developed in the 1970's at Melbourne University. Extensive product development and a series of innovative technologies developed by Quantum has resulted in a world leading product that will save you money and reduce your environmental footprint. The Quantum heat pump water heater has the quickest hot water recovery for its size, utilising Quantum's proven and patented technology.

Today, Quantum continues to be the leading innovator and manufacturer of heat pumps for Australian conditions.

Considerable savings with the Quantum heat pump

Heating hot water accounts for up to 30% of the average homes energy bill. This makes producing hot water the largest source of greenhouse gas emissions in the home. Installing a Quantum heat pump will reduce the amount of greenhouse gas emissions and reduce your cost to produce hot water by up to 75% when compared to other hot water systems.





SOLAR heat pumps



Savings of up to 75% on running costs



Easy installation - no roof panels required



Saves energy and reduces greenhouse gas emissions



Over 30 years of on-going product development

Installation is simple

Installing a Quantum heat pump is almost identical to an electric water heater. There are no solar panels or special requirements, ensuring a simple and easy conversion to sustainable hot water for your home. Simply remove your old electric heater and replace it with a Quantum.



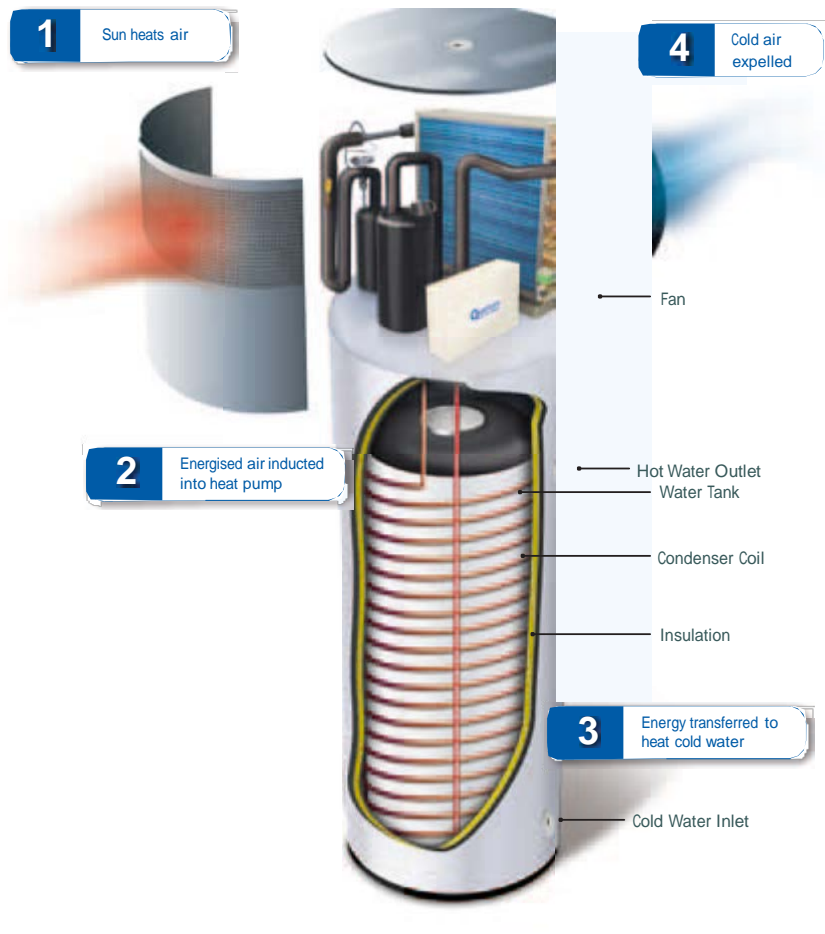
**2 Years
Warranty**

Refrigeration &
Electrical Circuits

**5 Years
Warranty**

Water Storage
Tank

heat pump explained



Over 30 years of on-going product development provides a “worry free” operation using proven technology

A Quantum heat pump is a patented system whereby heat from the ambient air is absorbed by an environmentally friendly refrigerant in the evaporator. This refrigerant gas is then compressed which causes the gas's temperature and pressure 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 from the compressed gas has been transferred to the water in the tank, the gas becomes a liquid again as it has lost its heat. This liquid gas then passes through an expansion device (TX valve) and back to the evaporator. The cycle is then repeated until the water in the storage tank reaches the set temperature.

The Quantum heat pump's efficiency stems from the fact that only minimal electricity is required for the compressor, fan and digital display panel. It works in temperatures from as low as -10°C up to 40°C both day and night very efficiently **without the need for boosting**, and only Quantum can offer that!

The heat pump principle is simple and can be compared to a refrigerator, but in reverse. It extracts latent energy from the air and transfers it to the heating system. This free energy from the environment is converted into useful heat to heat water. In other words, you are using free energy from the environment that doesn't cost a cent, and at the same time reducing your carbon footprint.

Domestic Model Range

Model	150-08ACW-134	270-11AC3-134	340-11AC3-134	340-17ACW-134
	Domestic Compact 150 Litre	Domestic Compact 270 Litre	Domestic Compact 340 Litre	TITAN Compact 340 Litre
Storage Size (Litres)	150L	270L	340L	340L
Rated Size (Litres)	125L	250L	315L	315L
Heat Output*	2.36kW	3.53kW	3.53kW	6.1kW
Power Input*	0.680kW	0.986kW	0.986kW	1.68kW
COP of Heating*	3.46	3.55	3.55	3.6
Water Temp Setting			60°C	
Max Water Temp Setting			70°C	
Compressor	16.5cc Rotary	23.1cc Rotary	23.1cc Rotary	39.0cc Rotary
Refrigerant			R134a	
Electrical Supply			220-240V/50Hz/1Ph	
Circuit	10 Amps	10 Amps	10 Amps	15 Amps
Water Connections			3/4" BSP	
PTR Valve Setting			1000kPa	
Expansion Ctrl Valve (ECV) Setting			850kPa	
PLV (without ECV fitted / with ECV fitted)			500 or 600kPa / 350 or 500kPa	
Operating Sound Level at 1.5M	50dBA	52dBA	52dBA	58dBA
Dimensions (Height x Diameter)	1620x540 mm	1900x650 mm	2200x650 mm	2300x650 mm
Empty Weight	100kg	135kg	170kg	180kg
Ambient Air Operating Temperature			-10°C to + 40°C	

Ambient Air	Hot Water Production Rate, Litres per hour			
35°C	76	112	112	199
30°C	68	100	100	177
25°C	60	88	88	154
20°C	51	75	75	131
15°C	42	59	59	109
10°C	35	48	48	90
5°C	28	38	38	73
0°C	23	31	31	59
-5°C	20	26	26	51
-10°C	18	24	24	45

* Testing at 20°C, 60% relative humidity air, and water heated from 20°C to 60



Suitable for
Small
Households



Suitable for
Average
Households



Suitable for
Large
Households



Suitable for
Extra Large
Households