

Solar Hot Water After Sunset



Quantum
Eco Hot Water

SOLAR
heat
pumps

**NEW
GENERATION
SOLAR!**

Sustainable Hot Wa



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

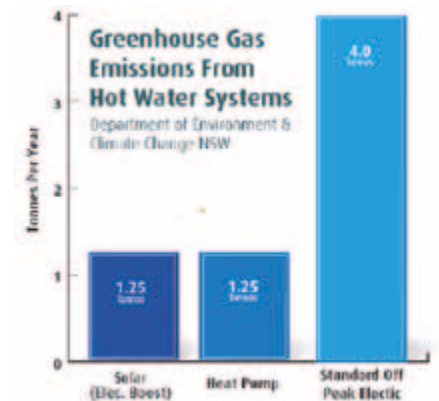
Most people are aware of the three main ways to produce hot water for the home: electric, gas and solar. The fourth, is the energy and cost efficient Quantum heat pump.

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.



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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

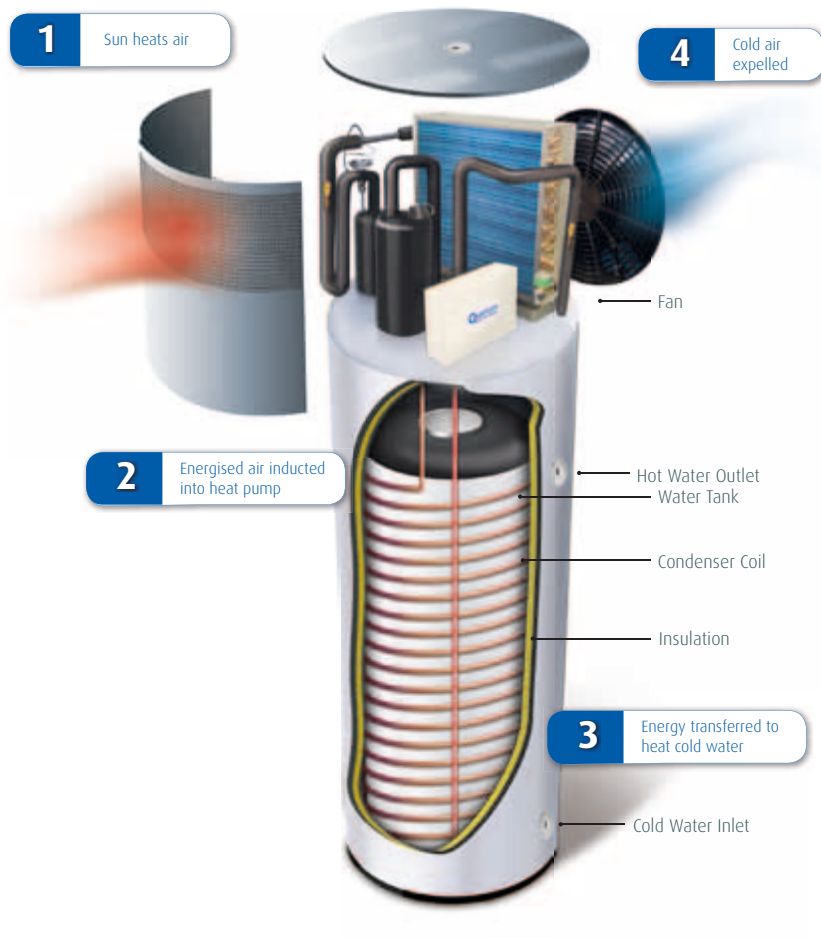
**5 Years
Warranty**

Water Storage
Tank

ter



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 it’s 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**

SOLAR heat pumps

Making a difference is even easier... with significant rebates

A Quantum heat pump saves you energy, money and reduces greenhouse gas emissions once installed. State and Federal Governments are also rewarding those who install greenhouse friendly technologies. There are many financial incentives available.

1. Renewable Energy Certificates (REC's)

REC's are the trading credits that are created when you purchase and install an eligible solar or heat pump hot water system.

Customers can assign their REC's to Quantum and enjoy a once off lump sum payment*. The exact number of REC's depends on the part of Australia you live in and model you install. Call us or refer to the website www.rec-registry.gov.au for more information.



2. Federal Government Solar Hot Water Rebate Program

A rebate of \$1,000 is available to eligible applicants who replace an existing electric hot water storage system. Conditions apply*.



3. State Based Rebates

Most states have programs to promote sustainability and reduce greenhouse gas emissions associated with water heating. Although each state has slightly different requirements, the general aim is to financially reward home owners who replace electric water heaters with solar and heat pump water heaters.

What do I need to do?

The Quantum customer service team is happy to help with any questions you may have.

For more information on receiving the rebates, log on to

www.quantumecohotwater.com.au

or simply call Quantum Customer Service and we will assist you to claim your incentives

1800 383 888

*Conditions

1 Subject to satisfying the provisions of the Renewable Energy (Electricity) Act 2000. Quantum cannot take responsibility for changes to the regulations, applied number of REC's, nor their value, that affect the level of the rebate, and rely on the end user complying with the Act and completing the necessary documentation to obtain the rebate. **2** Subject to satisfying the provisions of the Australian Government Department of the Environment and Water Resources Solar Hot Water Rebate program. **3** Subject to satisfying the provisions of the various State Governments rebate schemes.



Distributed By:

Quantum Energy Technologies Pty Ltd

ABN 88 095 959 327 Web: www.quantumecohotwater.com.au

Sydney

Melbourne

Brisbane

Adelaide

Perth

Phone: 1800 383 888

Darwin

Hobart

