







\* Solar Collector and Stainless Steel Tank only. For full warranty details refer to www.edson.com.au.

'Proud to be making a difference'

## 'Edson – providing hot water to Australian families for more than 50 years'

#### Edson hot water systems

- Over 50 years experience in providing domestic, commercial and industrial hot water solutions.
- Built to last, backed with long-life manufacturers warranties.
- Solar options available with all Edson systems to reduce your carbon footprint.

### 'Edson delivers peace of mind for your family'

Edson Solar Hot Water Systems provide your family with an efficient solution for hot water in your home, save you money and reduce your greenhouse gas emissions.

\* Source: Department of Environment & Climate Change NSW



# edson

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# Edson is proud to be Australian owned and operated

Our development team have been involved in the production of hot water technology for more than 50 years.



edson

Edson specialise in the provision of hot water solutions to domestic, commercial and industrial markets across Australia.

Our tried and proven technology provides affordable efficient hot water solutions with the flexibility to accommodate almost any installation application.

With a national network of product outlets, authorised resellers and a qualified network of professionals available for service, support and installation, you can trust Edson to be there for the life of your hot water system.

Rick Ward Managing Director

# How it works

# The Edson Solar Hot Water System uses solar collectors that collect heat by absorbing sunlight.

The collectors are devices for converting the energy in solar radiation, providing a highly efficient means of heating your water.

#### **The Evacuated Tubes**

Glass evacuated tubes are the key component of the Edson Solar Collectors. Each evacuated tube consists of two glass tubes. The outer tube is made of extremely strong transparent borosilicate glass, that is able to resist impact from hail up to 25mm in diameter. The inner tube is also made of borosilicate glass, but is coated with a coating which features excellent solar heat absorption and minimal heat reflection properties. The air is withdrawn from the space between the two glass tubes to form a vacuum, which eliminates conductive and convective heat loss.

#### The Evacuated Tube Heat Pipe System

Inside the glass evacuated tubes, a copper heat pipe is installed. The copper heat pipe transmits heat to its tip which is plugged into the collector's heat transfer manifold. As water runs through the manifold heat is transferred from the copper heat pipe to the water as shown in the diagram (below right). The heat transfer manifold is housed in a highly insulated aluminum housing.

This method of heat transfer is a thousand times more efficient than a solid copper rod. Heat is therefore very efficiently transferred from the glass evacuated tube to the water. Since no water is flowing through the collector tubes and the tubes are hermetically sealed it does not suffer from corrosion problems, as is the case with other types of solar collectors.

Unlike other types of solar collectors, evacuated solar collectors still provide excellent results on cloudy days. This is because the tubes are able to absorb the energy from infrared rays which can pass through clouds. Wind and low temperatures also have a minimal effect on the function of evacuated tubes when compared to flat plate solar collectors. This is due to the insulating properties of the vacuum in each tube.





# Solar will significantly reduce your carbon footprint

Edson are proud to be making a difference and hope that through education and working with the community we can make a significant contribution to the reduction of green house gas emissions in Australia.

### Why should you go solar?

- It's free from the sun
- Reduce your hot water power bill by up to 70%
- Up to 90% of the system cost can be recovered in rebates and STCs in some areas
- Reduce your carbon footprint by up to 3 tonnes per year
- The equivalent of planting 200 trees or taking a small car off the road each year

#### Small-scale Technology Certificates (STCs) (formerly known as RECs)

The purchase and installation of an Edson Solar Hot Water System may entitle you to Small-scale Technology Certificates (STCs) if your system is eligible under the Small-scale Renewable Energy Scheme. STCs are sold and transferred to liable entities (usually electricity retailers) through a market based online system called the REC Registry, or via the ORER managed STC Clearing House.

For more information, visit: www.climatechange.gov.au www.rec-registry.gov.au



## **STC Rebate Zones**

One Small-scale Technology Certificate (STC) is the equivalent of one megawatt hour of renewable energy generation. Refer to your authourised Edson reseller for information regarding the STCs, State and Federal Government Rebates applicable to your choice of system.

# edson *Electric*

**edson** *Electric* Boosted Hot Water is supplied with your choice of Storage Tank in Vitreous Enamel or Stainless Steel. Coupled with our Evacuated Solar Tubes, either option will operate the same as a standard non-solar electric system.

It can be connected to off-peak electricity or attached to a timer to take it off automatic boosting. Our thermostat will read the water temperature to heat your water to 60°C to complement the energy harvested from the sun.

Domestic Usage	1-3 people	3-5 people	6+ people
Vitreous Storage Tank	270L	315L	400L
Stainless Steel Storage Tank	250L	315L	400L
Evacuated Tubes	20 or 30	30 or 40	50 or 60

For commercial installations, contact your nearest Edson authorised reseller



Specification	270L GLES	315 L GLES	400 L GLES	250L SS	315 L SS	400 L SS
Electric Element	3.6 kW	3.6 kW	3.6 kW	3.6kW	3.6 kW	3.6 kW
Water Pressure Minimum	300 kPa					
Anodal Protection	Yes	Yes	Yes	Not required	Not required	Not required
Bathrooms	1 to 2	1 to 3	2 to 4	1 to 2	1 to 3	2 to 3
Water Storage	270 L	315L	400 L	250 L	315L	400 L
Material	Vitreous Enamel	Vitreous Enamel	Vitreous Enamel	Stainless Steel	Stainless Steel	Stainless Steel

6 All statistics based on average hot water usage in Zone 3 with a standard installation. Note: Solar Circulating Pump requires a minimum 300kPa water pressure.

## **Electric Boosted Solar Hot Water**



# edsonInstantaneous Gas

**edson** *Instantaneous Gas* Boosted Hot Water is supplied with either an S20 or S26 Solar Rated Instantaneous Booster Unit and either a Vitreous Enamel or Stainless Steel Storage Tank.

With the Instantaneous Gas solution, water is heated as you use it. An extremely efficient way of producing hot water. This system operates like a normal gas hot water system, without the constant gas usage, reducing your energy cost.

Domestic Usage	1-3 people	3-5 people	6+ people
Vitreous Storage Tank	270L	315L	400L
Stainless Steel Storage Tank	250L	315L	400L
Evacuated Tubes	20 or 30	30 or 40	50 or 60

For commercial installations, contact your nearest Edson authorised reseller



Specification	S20 (LP/NG)	S26 (LP/NG)
Hot Water Delivery	20 L per minute	26 L per minute
Megajoule Rating	160 Mj/hr	199 Mj/hr
Gas Supply	3/4" - Natural or LPG	3/4" - Natural or LPG
Water Pressure Minimum	120kPa	160 kPa
Gas Flow Rate	1.13–2.75 kPa at unit	1.13–275kPa at unit
Bathrooms	1 to 2	2 plus
Water Flow Minimum	9L per minute	9L per minute
Ambient Water Temp Rise	25°C	25 °C
Material	Stainless Steel or Vitreous Enamel	Stainless Steel or Vitreous Enamel

8 All statistics based on average hot water usage in Zone 3 with a standard installation. Note: Solar Circulating Pump requires a minimum 300kPa water pressure.

## **Instantaneous Gas Boosted Solar Hot Water**



# Gas or electric?

## edson *Electric*



## **Benefits of Edson Solar Hot Water Systems**

- Evacuated Solar Tubes provide superior daily heat output due to positive sun tracking.
- Toughened 2mm glass evacuated tubes.
- Replacing individual tubes is low cost maintenance as opposed to replacing a complete Solar Flat Panel.
- Tested to Level 2 Australian Standards frost protection (-15°C).
- Maximum surface area and increased water turbulence between the Heat Pipe and Manifold for superior efficiency in the Heat Exchanger.
- Fibremesh Insulated Collector Manifold, Sealed Evacuated Tubes, Tri-chlor Absorber Coating and Freeze Protected Heat Pipes allow reliable solar gain all year round. No glycol or chemicals required!

## edsonInstantaneous Gas



- 12 Sputted Layer, Tri-chlor Coating allows up to 97% of the heat from the sun to be retained.
- Every Edson Solar System is supplied complete with a Plumbers Installation Kit (Quickie Kit).
- Anodised Aluminium Collector and Frame provides both strength and long term corrosion resistance.

- All valves and insulation including the Tempering Valve are included.
- Super quiet, low energy Solar Circulation Pump.
- Inhouse engineering, technical, installation and service support.
- Long-life manufacturers warranty on all Edson products and parts.

#### **Specifications**



All dimensions displayed in millimetres | All information and guidelines outlined were correct at the time of printing





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