



## Heat Pump 325HAV

### Description

The Solahart Heat Pump 325HAV is a smart, energy efficient alternative for areas where a traditional solar water heater may not be suitable. It uses one of the most abundant renewable energy sources, heat from the air, to provide hot water for your family.

Rather than using roof mounted collectors, efficient heat pump technology extracts energy from the surrounding air. Ambient warmth is used to convert the refrigerant within the sealed system into a gas. The gas is then compressed to generate even more heat which then heats the water in the tank. What's more this process can work day or night, in sunshine and rain, all year round.

Installation is quick and easy. The heat pump can usually be installed in the same location as an outdoor electric water heater and connected



up to the existing plumbing and electrical connections, making it a great replacement for an existing water heater.

It is also equipped with an electric booster designed to operate only in very cold conditions. The ceramic lined tank has a protective sacrificial anode.

### Key Features

- Uses heat pump technology to extract heat from the air, day and night
- Ideal for installations not suitable for traditional solar water heaters
- Integrated electric booster heats in very cold weather conditions
- Uses less energy than a conventional electric water heater\*
- Sleek, modern design

### Key Benefits

- Can save up to 55% to 65% of water heating energy consumption\*
- Hot water regardless of the weather
- Qualifies for valuable environmental incentives\*
- Reduced energy use can save up to 1.5 to 2.7 tonnes of CO<sub>2</sub> emissions per annum\*
- Peace of mind with Solahart's 5/3/2/1 year warranty†

\* Energy savings of up to 55% to 65% shown are based on Australian Government approved TRNSYS simulation modelling using a medium load and apply when replacing an electric water heater with a Solahart heat pump. Savings and incentives will vary depending upon your location and type of water heater being replaced. The impact on an electricity account will depend on the tariff arrangement of the water heater being replaced and where you live. The Solahart 325HAV Heat Pump water heater is recommended for connection to a minimum 16 hour per day power supply. Before purchase consult your energy provider for more information on cost comparisons. Refer to [solahart.com.au](http://solahart.com.au) for further information.

† Solahart Warranty Details: 5/3/2/1 warranty; 5 year cylinder supply, 3 year labour on cylinder, 2 year sealed system including labour, 1 year parts including labour: applies to a single family domestic dwelling only. All other applications have a 3/1/1/1 warranty; 3 year cylinder supply, 1 year sealed system, 1 year parts, 1 year labour warranty.

The Solahart Warranty may not apply to the water heater if it is connected to a water supply with: a Chloride content > 250 mg/L; or a pH < 6; or is scaling with a Saturation Index > +0.4; or is corrosive with a Saturation Index < -1.0.

In Australia, an amended warranty period may apply where a government rebate has been received for the solar water heater. Phone 1300 769 475 for details.

# 325HAV Air Sourced Heat Pump

This system is designed for outdoor installation only.  
The HAV system is suitable for frost regions. It is not suitable for scaling or corrosive water areas.

| HAV System                     |           |         |
|--------------------------------|-----------|---------|
| Model                          |           | 325HAV  |
| Installation location          |           | outdoor |
| Storage capacity               | litres    | 325     |
|                                | US gal    | 86      |
| Electric boost capacity 3.6 kW | litres    | 180     |
|                                | US gal    | 47      |
| Electric boost capacity 1.8 kW | litres    | 100     |
|                                | US gal    | 26      |
| Weight empty                   | kg        | 136     |
|                                | lbs       | 300     |
| Weight full                    | kg        | 461     |
|                                | lbs       | 1016    |
| Temperature setting            | °C        | 60      |
|                                | °F        | 140     |
| Power supply*                  | Volts     | 240     |
| Minimum power connection       | hours/day | 16      |
| Rated power input              | Watts     | 800     |
| Refrigerant type               |           | R134a   |
| Height                         | m         | 1.631   |
|                                | in        | 63.9    |
| Width                          | m         | 0.863   |
|                                | in        | 34.0    |
| Depth                          | m         | 0.638   |
|                                | in        | 25.2    |

\* This water heater will only operate on an electricity supply with a sine wave at 50 Hz. Devices generating a square wave or a lower frequency cannot be used to supply power to the water heater.

| Water Supply         |          |      |                      |     |
|----------------------|----------|------|----------------------|-----|
| TPR valve setting    | kPa      | 1000 | psi                  | 145 |
| ECV* setting         | kPa      | 850  | psi                  | 125 |
| Max. supply pressure |          |      |                      |     |
|                      | with ECV | kPa  | 680                  | psi |
| without ECV          | kPa      | 800  | psi                  | 115 |
| Min. supply pressure | kPa      | 200  | psi                  | 29  |
| Water connections    | cold     |      | RP $\frac{3}{4}$ /20 |     |
|                      | hot      |      | RP $\frac{3}{4}$ /20 |     |
| TPR valve connection |          |      | RP $\frac{1}{2}$ /15 |     |

\* Expansion Control Valve (ECV) is not supplied.

**Energy Tip:** When installing your heat pump water heater, install minimum 3 star rated shower roses and flow restrictors to your taps if you don't already have them. This will not only save water but make your energy savings go further.

Note: Technical data is subject to change.

| Heat Pump Performance Specifications |                   |                                       |                                 |
|--------------------------------------|-------------------|---------------------------------------|---------------------------------|
| Ambient Air Temperature              | Relative humidity | Recovery rate @ 45°C rise litres/hour | Co-efficient of Performance COP |
| 10°C                                 | 60%               | 25                                    | 2.2                             |
| 20°C                                 | 60%               | 33                                    | 2.8                             |
| 30°C                                 | 60%               | 41                                    | 3.5                             |
| 40°C                                 | 60%               | 52                                    | 4.5                             |

| Electric Boost Specifications               |              |                                 |                  |                  |
|---|--------------|---------------------------------|------------------|------------------|
| Heating unit type                           |              | Copper sheath immersion element |                  |                  |
| Supply voltage                              |              | 240 V                           |                  |                  |
| Hourly recovery rate @ temperature rise of: |              |                                 |                  |                  |
| Rating kW                                   | Current Amps | 30°C litres/hour                | 40°C litres/hour | 50°C litres/hour |
| 1.8   | 8            | 51                              | 38               | 31               |
| 3.6   | 15           | 103                             | 77               | 62               |

