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SAVE UP TO 80% ON HOT WATER COSTS

WI-FI CONTROL

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ALL-IN-ONE
HOT WATER HEAT PUMP

220L, 270L, 320L WITH OPTIONAL E-HEATER

Emerald. Designing a sustainable, safer future.

Designed by Emerald, an Australian company with 17 years of manufacturing experience, this heat pump combines efficiency, reliability and Wi-Fi.

Ideal for both residential and commercial use, it delivers peak performance in any setting.

WARRANTY
5 years system
2 years labour
and service

R290
LOW GWP 3

emerald energy

Heat Pump Device is On

Tank Capacity   Water Temperature
100%   57/60°C

Outdoor Temp.
23°C   Sunny

Mode
Boost Mode   Silent Mode

Energy Consumption

Smart Actions

> "At Emerald, we want our customers to gain the most out of technology. We focus our energies on creating products that are technologically superior, last longer and perform better.

STUART EDGLEY EMERALD MANAGING DIRECTOR

The energy-saving, stylish, all-in-one heat pump.

Why choose an Emerald hot water heat pump?

Emerald's All-One Heat Pump is renowned for its outstanding energy efficiency, reliability, and the money-saving benefits of its built-in Wi-Fi.

Designed to minimise its environmental impact, it utilises R290, a natural and non-toxic refrigerant with minimal environmental harm. R290 has zero Ozone Depletion Potential (ODP) and an extremely low Global Warming Potential (GWP) of 3.

In addition to its eco-friendly features, this heat pump comes with smart controls and an integrated electric backup system, making it a versatile choice anywhere in Australia.

320 Litre

270 Litre

220 Litre

Features.

PREMIUM TECHNOLOGY
Built using premium materials and DC technology to ensure exceptional performance, delivering efficiency and reliability.

QUIET OPERATION
The DC technology combined with premium components results in quieter operation.

LOW GLOBAL WARMING POTENTIAL (GWP 3)
Uses R290, the preferred refrigerant due to its low Global Warming Potential compared to traditional refrigerants.

BUILT TO LAST
Manufactured using materials that prioritise outstanding performance and durability.

MODERN COMPACT DESIGN
Designed with a contemporary, compact style to seamlessly blend into modern home design.

WI-FI APP CONTROLS AND MONITORING
Adjust your heat pump's settings and track its performance in real-time via Wi-Fi.

What makes heat pumps so incredibly efficient?

Save up to 80% on your hot water bills.

Hot water heating systems are often the most significant contributor to household energy costs, amounting to approximately 25-30% of the total energy consumption.
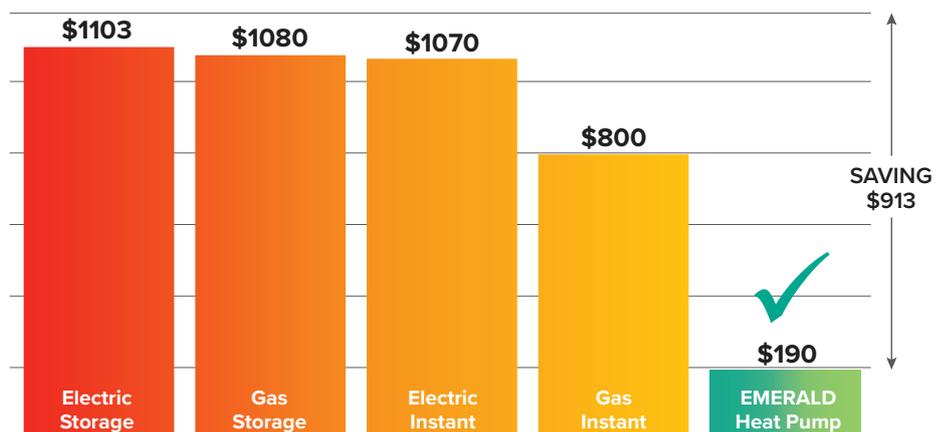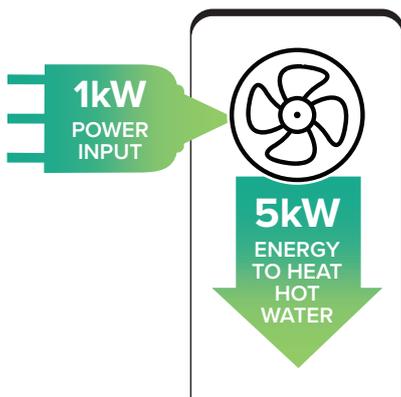
Whether replacing an existing system or installing one, opting for an Emerald hot water heat pump guarantees both comfort and energy efficiency for your home.

How heat pumps work.

Hot water heat pumps operate by extracting heat from the air and transferring it to the water in the tank. This process is similar to how a refrigerator works but in reverse. The heat pump contains a refrigerant that evaporates at low temperatures, absorbing heat from the air. This vapor is then compressed, raising its temperature, and the heat is transferred to the water.
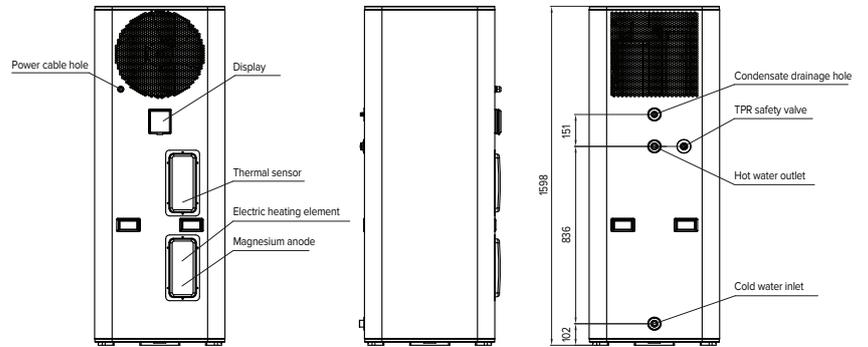
Hot water out of thin air.

Heat pumps extract thermal energy from the surrounding air. From 1kW of power input they can output 5kW to heat water.

UP TO x5 MORE EFFICIENT

1kW POWER INPUT

5kW ENERGY TO HEAT HOT WATER

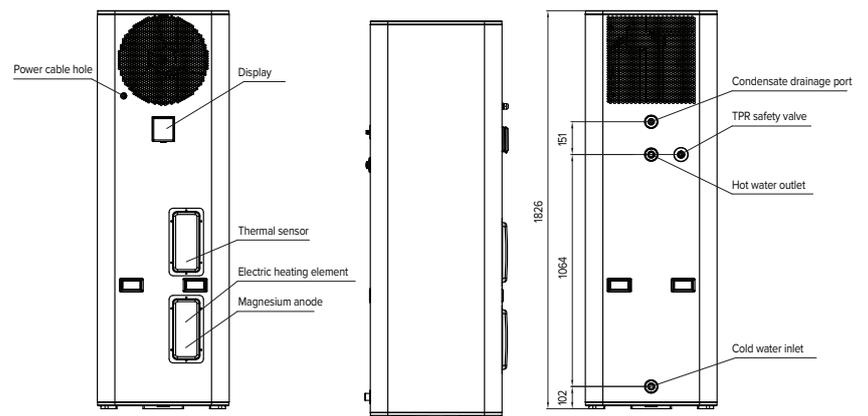| Electric Storage	Gas Storage	Electric Instant	Gas Instant	EMERALD Heat Pump
$1103	$1080	$1070	$800	$190

SAVING $913

*Average annual Australian household hot water cost estimates based on daily use of 150-200L for 4 people

A size to suit every household's hot water needs.

EE-HWS-A1-220E(-1)
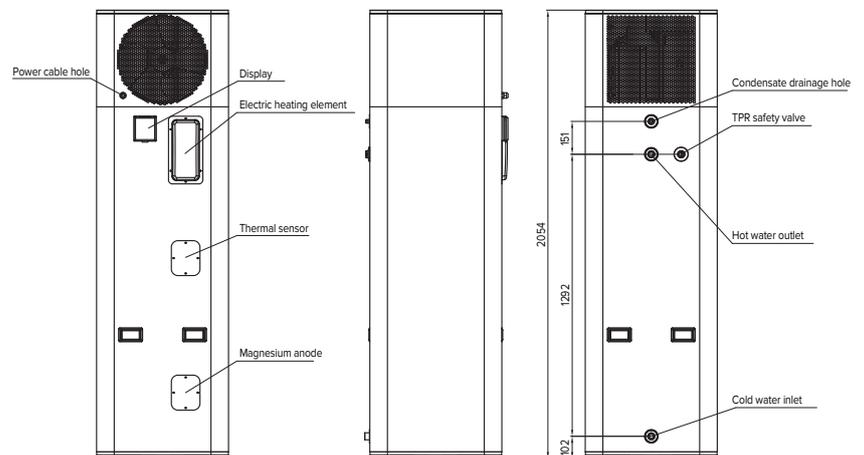(The electric heating element is not included in EE-HWS-A1-220)

Power cable hole
Display
Thermal sensor
Electric heating element
Magnesium anode
Condensate drainage hole
TPR safety valve
Hot water outlet
Cold water inlet
1598
151
836
102

EE-HWS-A1-270E(-1)
(The electric heating element is not included in EE-HWS-A1-270)

Power cable hole
Display
Thermal sensor
Electric heating element
Magnesium anode
Condensate drainage port
TPR safety valve
Hot water outlet
Cold water inlet
1826
151
1064
102

We offer three heat pump models with various litre capacities: 220L, 270L, and 320L, all featuring an optional built-in electric heater.

The back-up heater offers faster heating, guaranteeing a continuous supply of hot water - even in extreme weather conditions!

EE-HWS-A1-320E(-1)
(The electric heating element is not included in EE-HWS-A1-320)

Power cable hole
Display
Electric heating element
Thermal sensor
Magnesium anode
Condensate drainage hole
TPR safety valve
Hot water outlet
Cold water inlet
2054
151
1292
102

Convenient, smart control with the Emerald app

The Emerald app provides you with convenient control and monitoring capabilities for your heat pump hot water system.

Monitor electricity consumption

View information on your heat pump hot water systems electricity usage.

Real-time hot water temperature

Check the current temperature of the hot water and monitor the water level to ensure you have up-to-date information about your hot water status at all times.
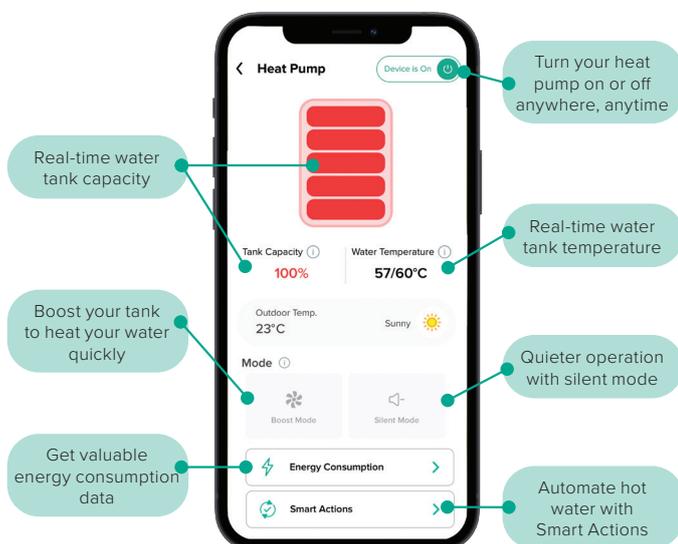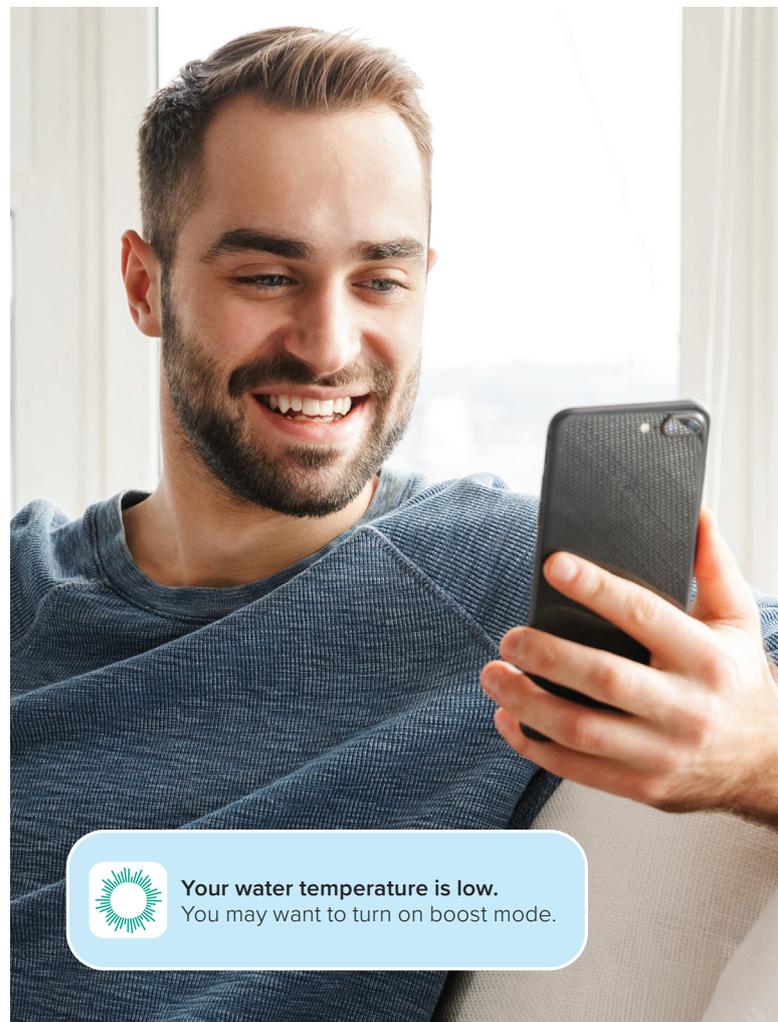
Control anywhere, anytime

Enjoy the flexibility of controlling your heat pump, allowing you to turn it on or off from anywhere via your mobile phone.

Boost your hot water

Activate the Boost feature to speed up the heating process of your hot water tank when you need it to be ready quickly.

Run your heat pump in Silent Mode

Opt for a quieter operation by activating Silent Mode.

Your water temperature is low.
You may want to turn on boost mode.

Heat Pump

Turn your heat pump on or off anywhere, anytime

Real-time water tank capacity

Real-time water tank temperature

Tank Capacity 100%

Water Temperature 57/60°C

Outdoor Temp. 23°C   Sunny

Mode

Boost Mode   Silent Mode

Boost your tank to heat your water quickly

Quieter operation with silent mode

Energy Consumption

Smart Actions

Get valuable energy consumption data

Automate hot water with Smart Actions

Smart Actions to help save more

What are Smart Actions?

Smart Actions is a feature designed to automate temperature control. It allows you to set specific rules for your heat pump, enabling it to adjust temperature settings based on your preferences.

How do Smart Actions work?

Smart Actions will maintain your preferred temperature while saving you energy and money according to your preferences.

Government certificate rebates

Australian energy saving schemes

Australian federal, state and territory governments have established energy-efficiency schemes and programs to incentivise the adoption of smart technology solutions, such as hot water heat pumps, to help reduce energy usage and the carbon footprint of businesses and households across the country.

Emerald works closely with government agencies to ensure our products are at the forefront of energy-efficient technology, and aligned to and approved by energy-efficiency schemes across Australia such as VEU, ESS and REPS.

Federal Small-Scale Technology Certificates (STCs)

Air Source Heat Pumps qualify for Small-Scale Technology Certificates (STCs) that encourage heat pump water heater installation. STCs can be traded on the Australian market based on their value, which is determined by the efficiency of the unit and the temperature zone in Australia. Each STC represents 1MWh of energy saved over ten years.

State Grants

Victoria

Victorian residents can enjoy extra rebates when upgrading outdated hot water systems to Heat Pumps. In addition to Federal STC grants, eligible installations qualify for Victorian Energy Efficiency Certificates (VEECs).

New South Wales

New South Wales residents can take advantage of extra rebates when upgrading outdated hot water systems to Heat Pumps. In addition to Federal STC grants, eligible installations qualify for Energy Savings Schemes (ESCs).

Peak Demand Reduction Scheme (PRCs)

A Peak Reduction Certificate is a tradeable certificate created when an Accredited Certificate Provider undertakes activities that provide the capacity to reduce electricity usage during peak demand periods.

Emerald Heat Pumps are accepted under Australian government energy-efficiency schemes.

SPECIFICATIONS

		EE-HWS-A1-220E	EE-HWS-A1-220	EE-HWS-A1-270E	EE-HWS-A1-270	EE-HWS-A1-320E	EE-HWS-A1-320
EE Model (Commercial)		EE-HWS-A1-220E-1(-2)	EE-HWS-A1-220-1	EE-HWS-A1-270E-1(-2)	EE-HWS-A1-270-1	EE-HWS-A1-320E-1	EE-HWS-A1-320-1
Power supply		220V ~ 240V/50HZ/60HZ/1Phase					
Water Tank Volume		220L		270L		320L	
Optional Running Modes		Standard / Silent / Booster / E-Heater	Standard / Silent / Booster	Standard / Silent / Booster / E-Heater	Standard / Silent / Booster	Standard / Silent / Booster / E-Heater	Standard / Silent / Booster
Electric Heating Element		1.6KW	N/A	1.6KW	N/A	1.6KW	N/A
Heating Capacity	Standard mode (Heat pump only)	2.7kW		2.7kW		2.7kW	
Rated Input Power		0.56kW		0.58kW		0.53kW	
COP		4.9		4.8		5.2	
Recharge Rate Per Hour		58L/h		58L/h		58L/h	
Sound Level		49dB(A)		49dB(A)		49dB(A)	
Heating Capacity	*Silent mode (Heat pump only)	1.8kW		1.8kW		1.8kW	
Rated Input Power		0.44kW		0.44kW		0.41kW	
COP		4.6		4.6		4.4	
Recharge Rate Per Hour		43L/h		43L/h		43L/h	
Sound Level		45dB(A)		45dB(A)		45dB(A)	
Heating Capacity	*Booster mode (Heat pump + Electric heater)	5.2kW	3.6kW	5.2kW	3.6kW	4.4kW	4.4kW
Rated Input Power		2.4kW	0.8kW	2.4kW	0.8kW	2.4kW	0.8kW
COP		4.5	4.5	4.5	4.5	4.4	4.4
Recharge Rate Per Hour		112L/h	78L/h	112L/h	78L/h	112L/h	78L/h
Heating Capacity	*E-Heater mode (Electric heater only)	1.6kW	N/A	1.6kW	1.6kW	1.6kW	1.6kW
Rated Input Power		1.6kW	N/A	1.6kW	1.6kW	1.6kW	1.6kW
COP		N/A	N/A	N/A	N/A	N/A	N/A
Recharge Rate Per Hour		N/A	N/A	N/A	N/A	N/A	N/A
Max Current (under booster mode)		14A	5A	14A	5A	14A	5A
Refrigerant		R290 (400g)				R290 (450g)	
Compressor		Highly (Hitachi JV) / DC Inverter / Rotary					
Fan Motor		DC Inverter					
Fan Type		Axial					
Expansion Valve		EEV					
Defrost		4-way valve					
Inner Tank		Enamel / 2.5mm tank wall / 3.0mm dome					
Inner Tank Design		Concave					
Tank Insulation		Polyurethane / 35mm-157mm					
Tank Protection		2 x Magnesium anodes					
Heat Exchanger		Microchannel					
Outer Casing		Galvanized painted sheet / White					
TPR valve		AVG / 850kPa					
Rated Outlet Water Temperature		60℃					
Max Outlet Water Temperature		70℃					
Working range with element		-15℃ - 43℃					
Working range without element		-7℃ - 43℃					
IP Class		IPX4					
Electric Shock Proof		I					
Unpacked Dimension		600*600*1598mm	600*600*1598mm	600*600*1826mm	600*600*1826mm	600*600*2050mm	600*600*2050mm
Packed Dimension (outdoor unit)		670*670*1730mm	670*670*1730mm	670*670*1956mm	670*670*1956mm	670*670*2170mm	670*670*2170mm
Net Weight (outdoor unit)		118kg	118kg	132kg	132kg	146kg	146kg
Gross Weight (outdoor unit)		126kg	126kg	141kg	141kg	154kg	154kg

*As per the AS/NZS 4234 modeling Standards the modes (Silent, Booster, E-heater) are one-shot functions that will reset to Standard mode.

*Above test results are given based on the test condition ambient 20ºC/15ºC, Water from 15ºC-55ºC.

*Sound tested at 1m distance in a hemi-anechoic chamber.

The information contained within this brochure is accurate as of the time of publish. Please note that the Emerald app undergoes regular updates to enhance functionality and introduce new features, which may result in changes to the details provided herein.

2024.03