



AeroSTAR(+) Series
R290 integrated heat pump water heater

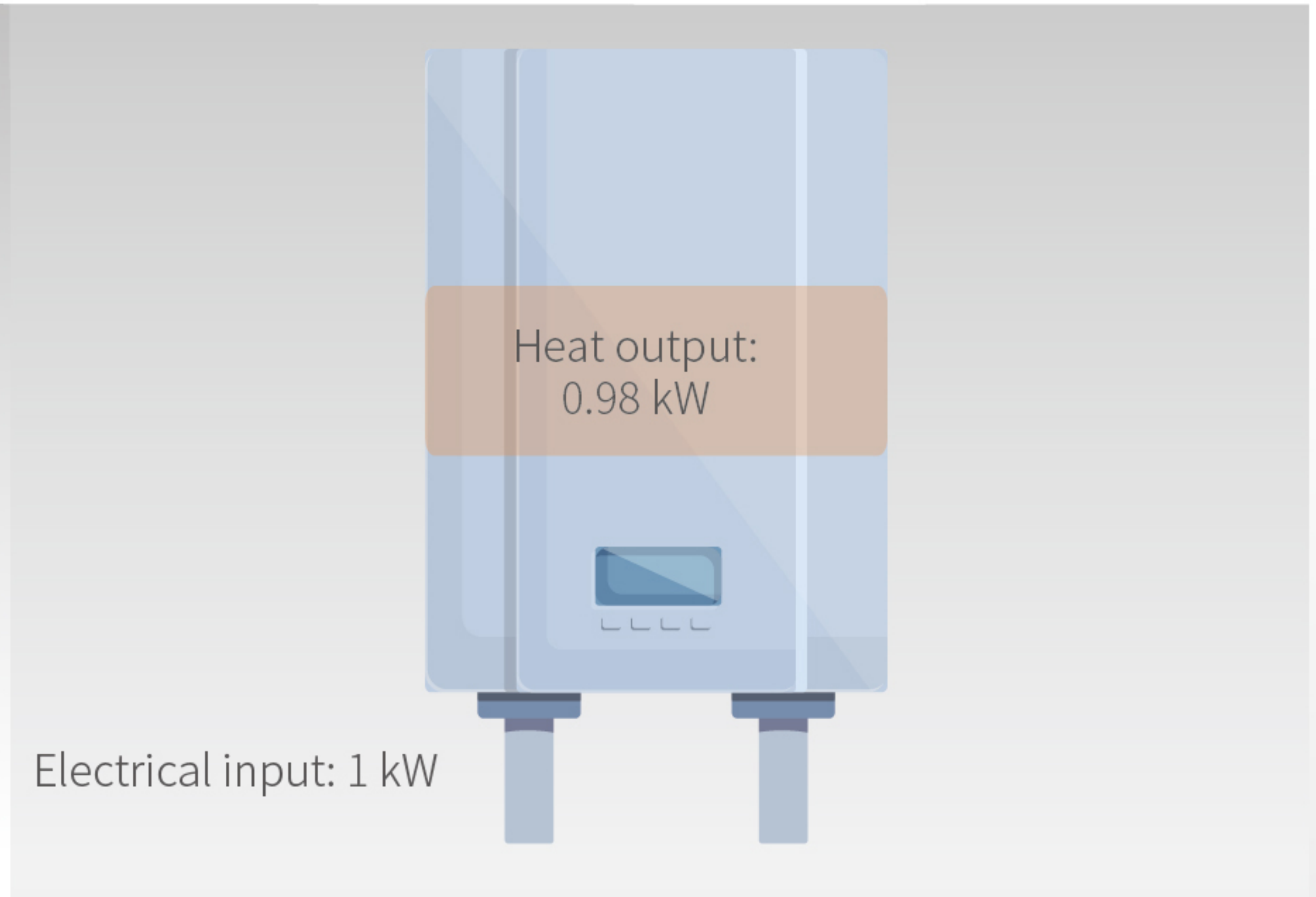
How does an air source water heater save energy for you?

The energy-saving principle of air source water heaters lies in "harnessing extra energy".

Unlike ordinary electric water heaters that directly convert electricity into heat, resulting in high energy consumption and limited efficiency, air source heat pump water heaters not only use electricity but also freely extract a large amount of heat from the surrounding air. With the same amount of electricity input, they can generate several times more heat than traditional electric water heaters to heat water.

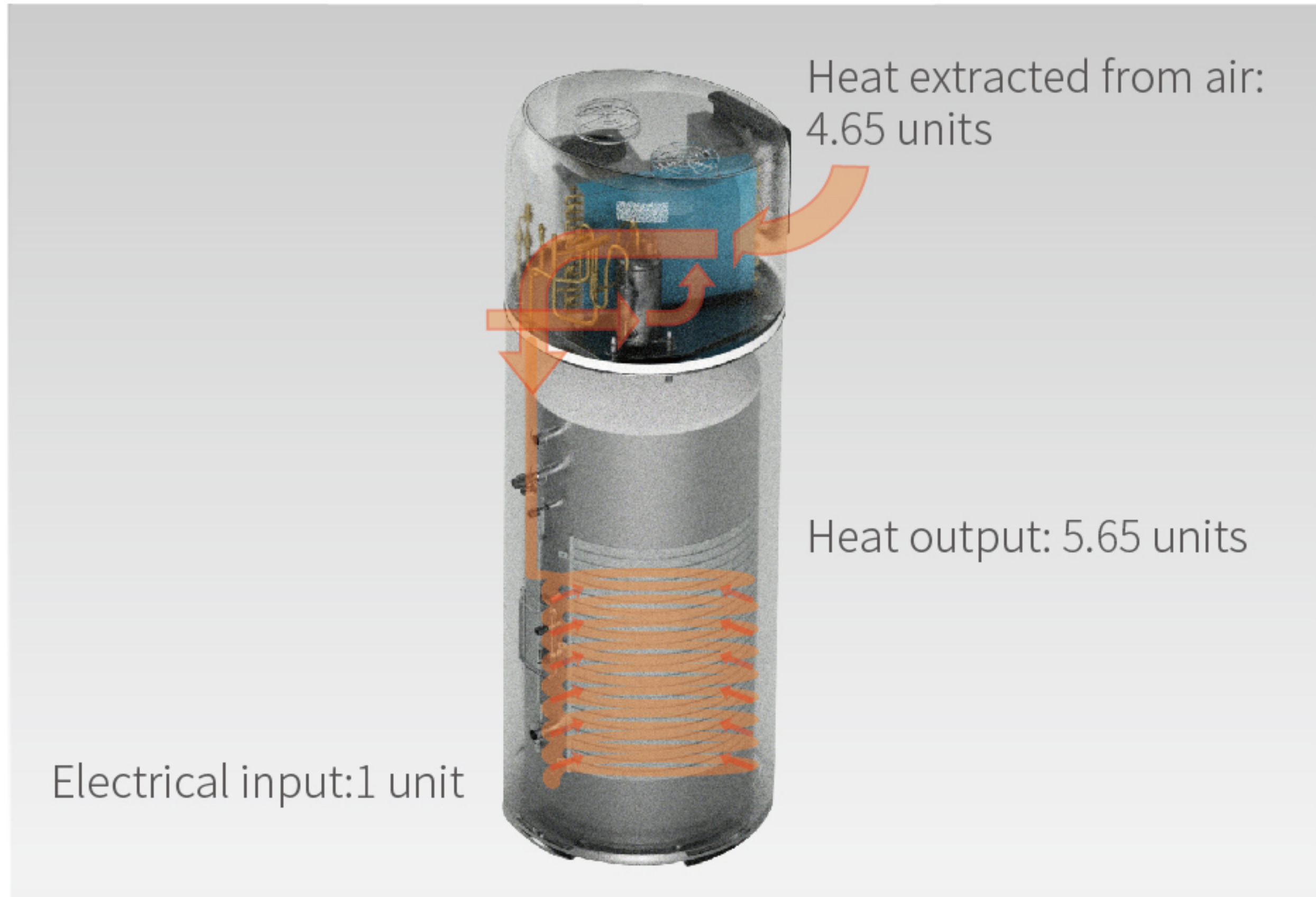
This "more heat with less energy" principle allows every kilowatt-hour of electricity to be used more effectively, reducing energy consumption and saving real costs.

Electric Water Heater: A heating element converts electrical energy into thermal energy



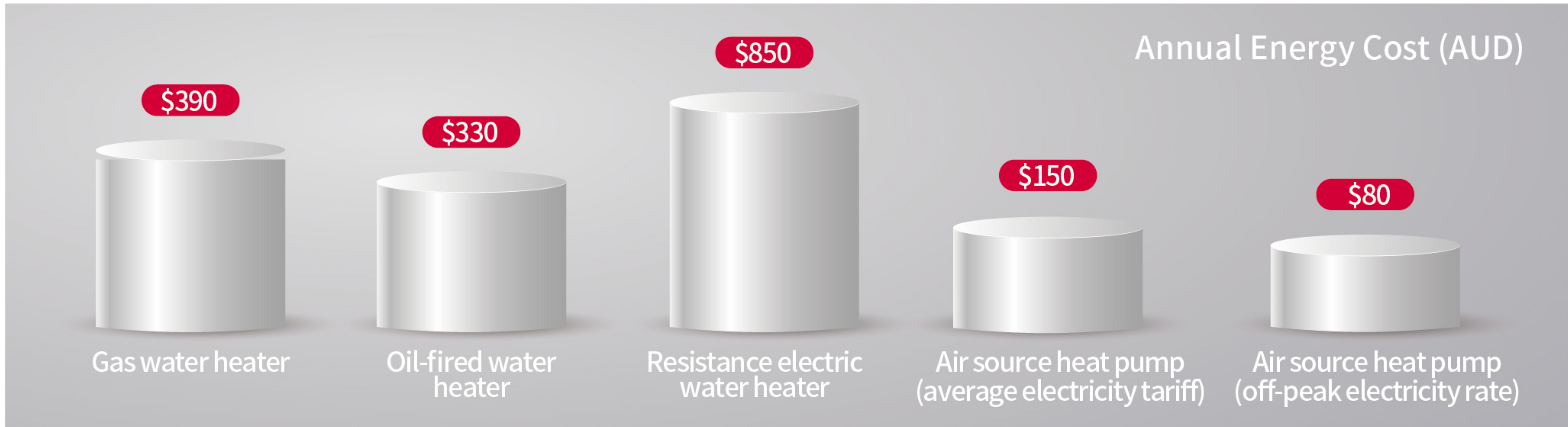
VS

Air-Source Heat Pump: A compressor moves existing heat from the air into the water



Save more on hot water with our air source heat pump

Tired of sky-high energy bills? The choice is clear. For a household using 150L of hot water daily (aligned with Australian household averages), our air source heat pump water heater delivers unmatched savings. We're transparent about the numbers: Annual Energy Cost Comparison of Various Water Heater Types (AUD/year).



Energy Costs: We base our calculations on real-world Australian 2025 prices (e.g., average residential electricity at \$0.38/kWh, off-peak electricity at \$0.20/kWh; natural gas at \$0.15/kWh; heating oil at \$1.10/L).

Efficiency Matters: Our heat pump boasts an impressive annual average COP of 5.65, far surpassing the efficiency of traditional gas, oil, and electric resistance heaters.

Beyond Efficiency: The Off-Peak Advantage

Unlike instant electric water heaters that rely entirely on peak electricity rates, our heat pump uses smart thermal storage technology. It takes advantage of cheaper off-peak electricity to heat and store water in advance, delivering hot water at a lower cost.

The Bottom Line: Real Savings

Switching to our heat pump can save you a substantial \$700 per year compared to a standard electric resistance water heater. Compared to natural gas and oil-fired heaters, you'll see your annual costs drop by an incredible 75-80%. Make the smart choice for your wallet and the planet.

Installation-Friendly Plug & Play Design

10A power plug compatible with standard household circuits, requiring no dedicated wiring.



Continuous hot water supply powered by heat pump only

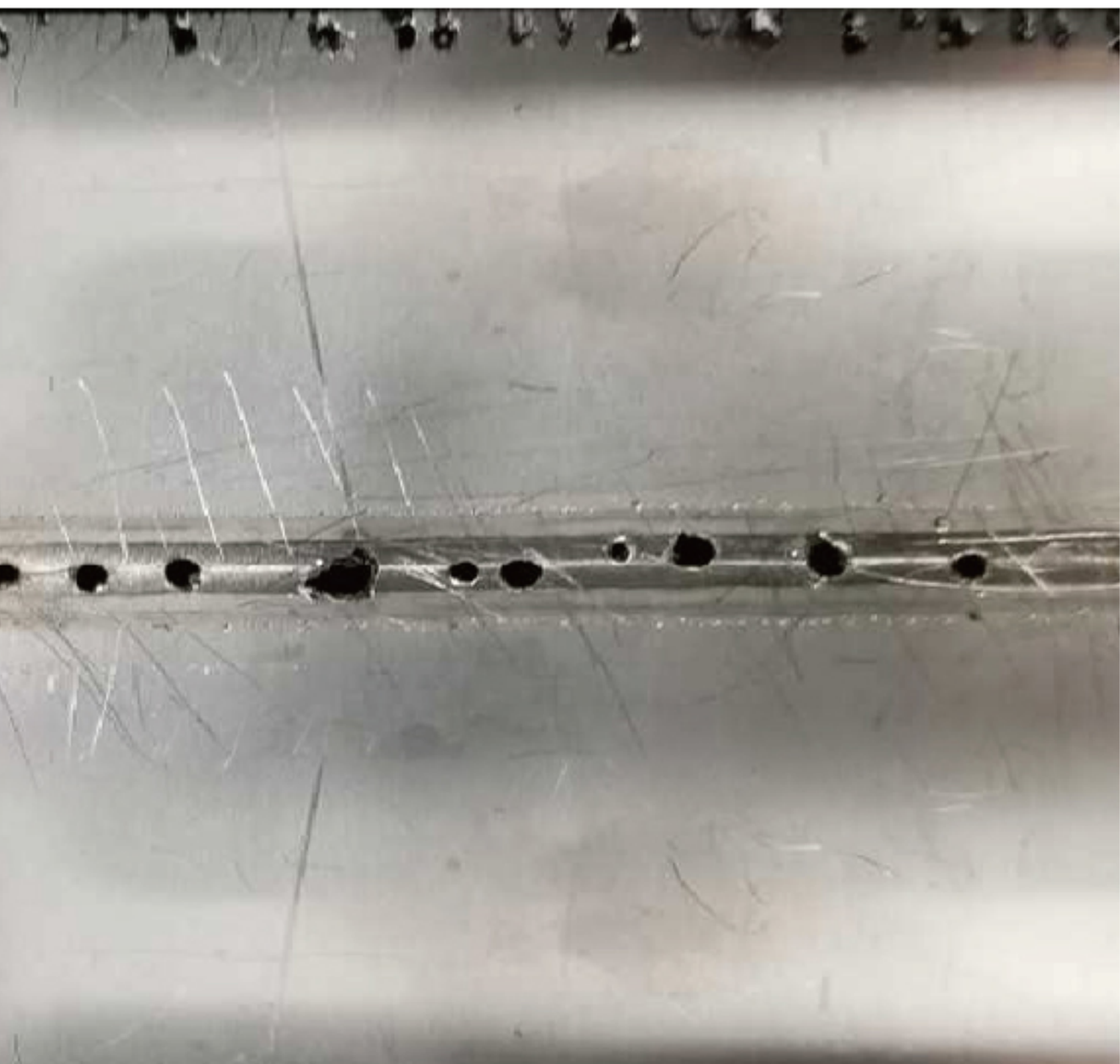


Up to **123 L/h**
Hot Water Output @ COP 5.32

High-Performance Duplex 2205 Tank Liner

Superior corrosion resistance compared to standard SUS304 and SUS316L stainless steel.

After 24-hour immersion in a 6% ferric chloride solution:



SUS304



SUS316L



Duplex 2205

Note: AMITIME heat pump water heaters are available with two premium liner options: enamel and Duplex 2205.

Versatile Operating Modes for All Needs

- 

ECO mode:
Economical, quiet operation for daily use
- 

Standard mode:
A balance between energy efficiency and hot water recovery speed
- 

Boost mode:
Rapidly replenishes and stores high-temperature hot water in one go

- 

Vacation mode:
One-click control while you're away
- 

E-heater mode:
Backup electric heating for emergency use

All DC Inverter Technology

Applicable to AeroSTAR+ Series

Exceptional energy efficiency in daily operation, plus powerful hot water output on demand.



Extractable Control Panel

- Push to reveal, pull to operate, offering flexible dual-mode interaction.
- Concealed storage design, tidy without occupying extra space.



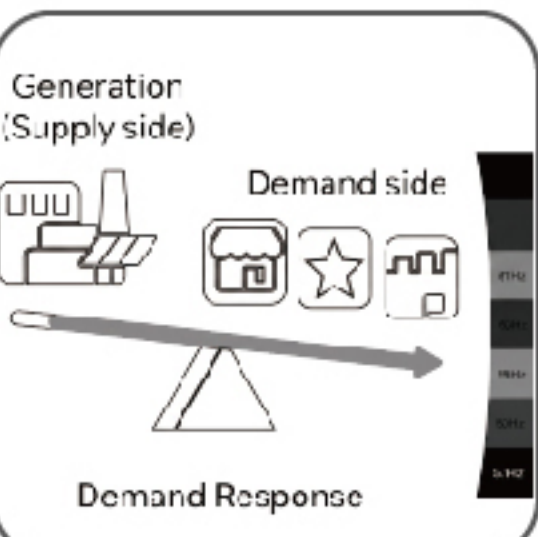
More Key Features

- 

Equipped with R290 eco-friendly refrigerant (ODP=0, GWP=3), boasting excellent environmental performance and high-efficiency thermodynamic properties.
- 

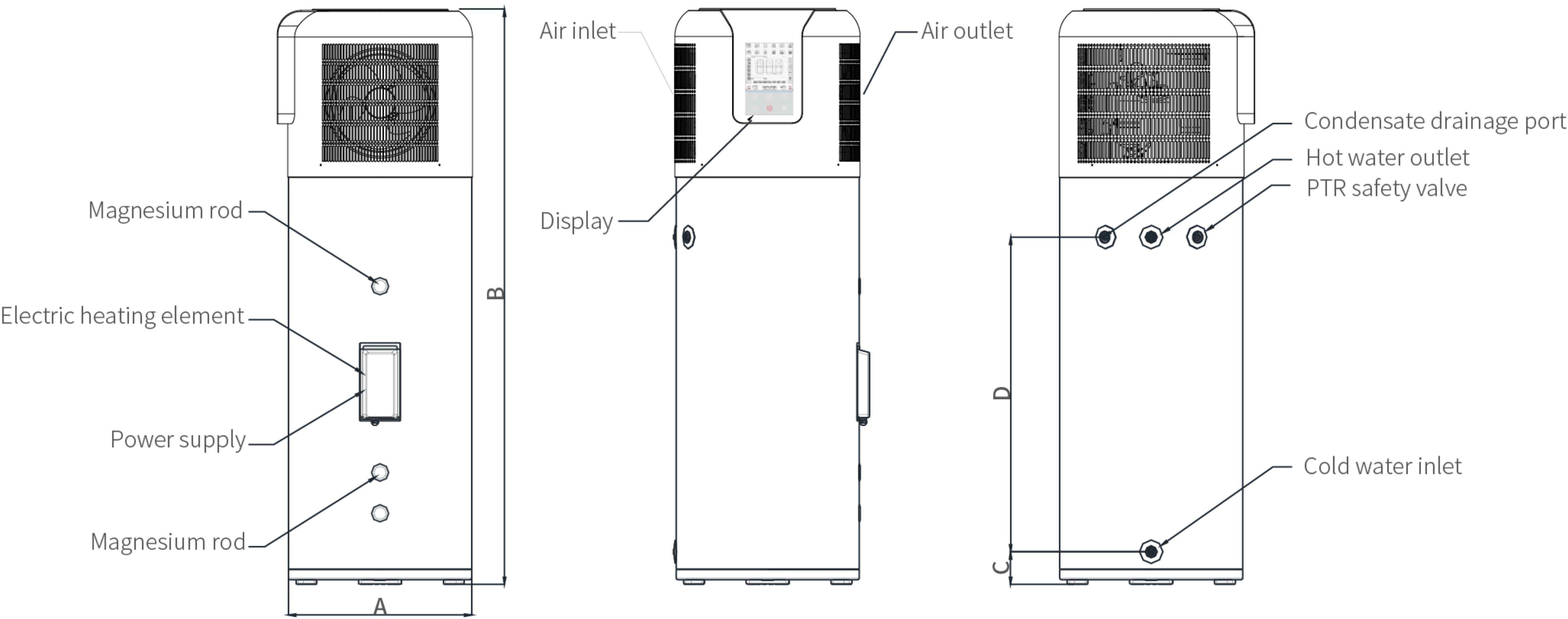
Hot water temperature reaches up to 70°C, far exceeding daily needs; higher temperature enables the same-volume tank to store more heat for longer endurance.
- 

Premium touch HMI with superior waterproof and weather-resistant performance, simple and easy to operate.
- 

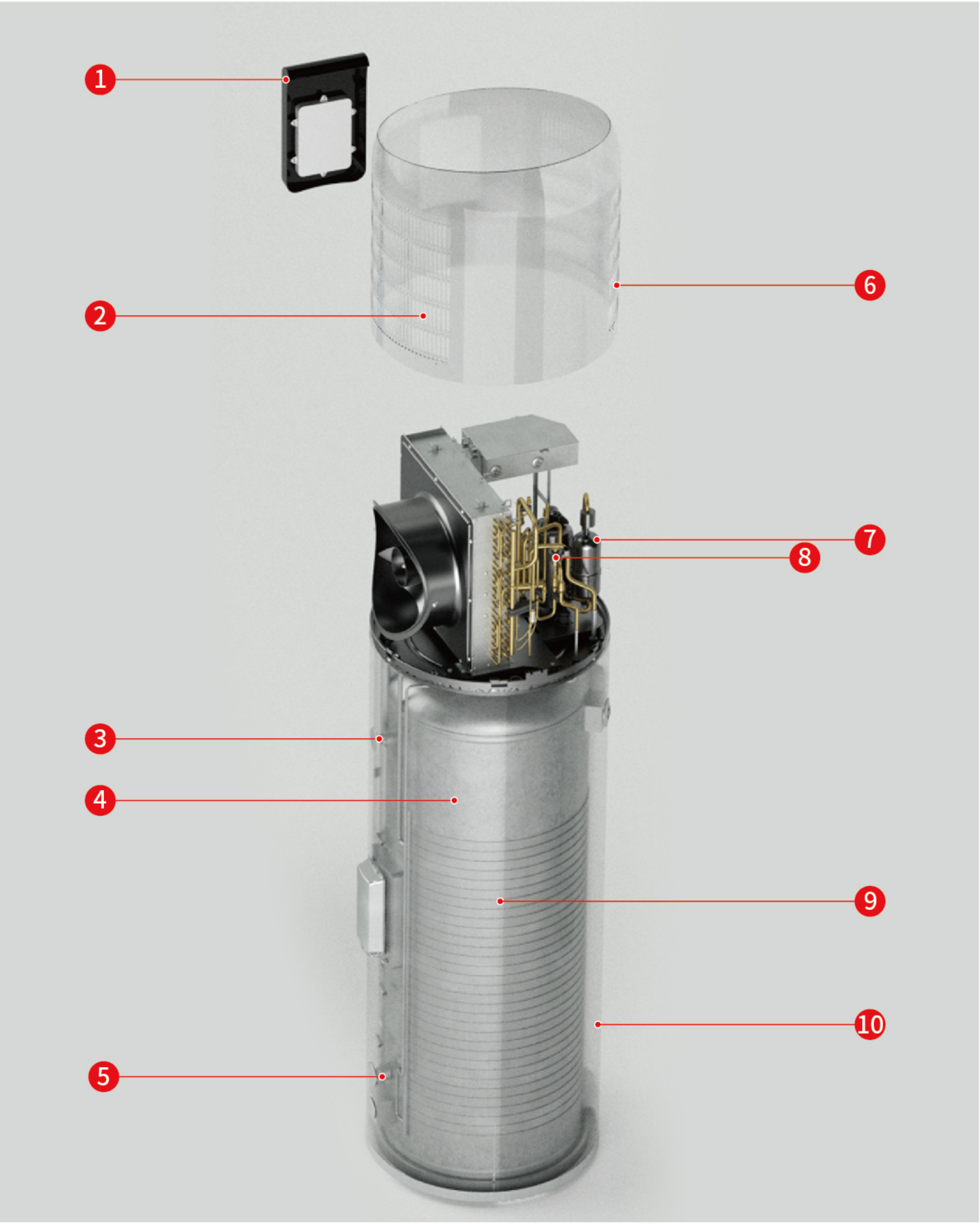
Integrated DTU & Wi-Fi modules, supporting remote control via app anytime, anywhere to ensure a comfortable hot water experience.
- 

Built-in DRED with smart peak-load adjustment for energy saving and full compliance, ensuring stable hot water supply.

Product Overview



Exploded View



Components

- 1 Control panel
- 2 Air outlet
- 3 Water outlet
- 4 Tank
- 5 Water inlet
- 6 Air inlet
- 7 Compressor
- 8 Electronic expansion valve
- 9 Microchannel heat exchanger
- 10 Foam insulation layer

AeroSTAR Series

Reliable, proven hot water performance. Durable, cost-effective for daily needs.



■ Technical Data

Model			QAMF-3.5HGAAB/220HX	QAMF-3.5HGAAB/270HX	QAMF-3.5HGAAB/320HX
Power Supply		V/Hz/Phase	220~240/50/1		
Water Tank Volume		L	220	270	320
Optional Running Modes			Economic/Standard/Boost/E-Heater		
Heating Capacity	Economic Mode	kW	3.3	3.3	3.3
Rated Input Power		kW	0.66	0.65	0.64
COP			5	5.08	5.15
Recharge Rate Per Hour①		L/h	62	62	62
Recharge Rate Per Hour②		L/h	71	71	71
Sound Level Min/Max		dB(A)	44/50	44/50	44/50
Heating Capacity	Standard Mode	kW	3.5	3.5	3.5
Rated Input Power		kW	0.72	0.71	0.7
COP			4.86	4.93	5.00
Recharge Rate Per Hour①		L/h	65	65	65
Recharge Rate Per Hour②		L/h	76	76	76
Sound Level Min/Max		dB(A)	44/53	44/53	44/53
Heating Capacity	Boost Mode	kW	4.7	4.7	4.7
Rated Input Power		kW	1.92	1.91	1.9
COP			2.45	2.46	2.47
Recharge Rate Per Hour①		L/h	88	88	88
Recharge Rate Per Hour②		L/h	101	101	101
Recharge Rate Per Hour③		L/h	115	115	115
Sound Level Min/Max		dB(A)	44/53	44/53	44/53
Heating Capacity		E-Heater Mode	kW	1.2	1.2
Rated Input Power	kW		1.2	1.2	1.2
COP			1	1	1
Recharge Rate Per Hour①	L/h		23	23	23
Recharge Rate Per Hour②	L/h		25.8	25.8	25.8
Sound Level			/	/	/
Electric Heating Element	kW		1.2		
Maximum Current Input	A	9.8			
Maximum Power Input	kW	2.15			
Refrigerant	g	R290/395			
Compressor		Fixed-speed rotary			
Inner Tank		Enamel (optional Duplex 2205)			
Inner Tank Design		Concave			
Tank Protection		Magnesium rod			
Heat Exchanger		Microchannel			
Outer Casing		Painted galvanized steel sheet			
PTR Valve	kPa	850			
Rated Outlet Water Temperature	℃	55			
Max Outlet Water Temperature	℃	70			
Working Range	℃	-7~45			
IP Class		IPX4			
Net Dimensions	mm	φ640×1965	φ640×2025	φ640×2240	
Packaging Dimensions	mm	695×695×2100	695×695×2160	695×695×2375	
Net Weight	kg	103	112	123	
Gross Weight	kg	122	131	142	

*All the above unannotated data are based on test conditions of ambient temperature 20°C/15°C and water heated from 9°C to 55°C.

①Test conditions: ambient 20°C/15°C, water heated from 9°C to 55°C.

②Test conditions: ambient 20°C/15°C, water heated from 15°C to 55°C.

③Test conditions: ambient 20°C/15°C, water heated from 15°C to 50°C.

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

AeroSTAR+ Series

All DC inverter technology for ultra-efficient and quiet operation. Smart control for enhanced comfort and energy savings.



■ Technical Data

Model			QAMV-4.0HGAAB/220GX	QAMV-4.0HGAAB/270GX	QAMF-3.5HGAAB/320HX
Power Supply		V/Hz/Phase	220~240/50/1		
Water Tank Volume		L	220	270	320
Optional Running Modes			Economic/Standard/Boost/E-Heater		
Heating Capacity	Economic Mode	kW	3.5	3.5	3.5
Rated Input Power		kW	0.65	0.64	0.62
COP			5.38	5.47	5.65
Recharge Rate Per Hour ^①		L/h	65	65	65
Recharge Rate Per Hour ^②		L/h	75	75	75
Sound Level Min/Max	Standard Mode	dB(A)	43/48	43/48	43/48
Heating Capacity		kW	4	4	4
Rated Input Power		kW	0.77	0.76	0.74
COP			5.19	5.26	5.40
Recharge Rate Per Hour ^①		L/h	75	75	75
Recharge Rate Per Hour ^②	Boost Mode	L/h	86	86	86
Sound Level Min/Max		dB(A)	44/52	44/52	44/52
Heating Capacity		kW	5	5	5
Rated Input Power		kW	0.97	0.96	0.94
COP			5.15	5.21	5.32
Recharge Rate Per Hour ^①	E-Heater Mode	L/h	93.5	93.5	93.5
Recharge Rate Per Hour ^②		L/h	107.5	107.5	107.5
Recharge Rate Per Hour ^③		L/h	123	123	123
Sound Level Min/Max		dB(A)	46/55	46/55	46/55
Heating Capacity		kW	1.2	1.2	1.2
Rated Input Power	E-Heater Mode	kW	1.2	1.2	1.2
COP			1	1	1
Recharge Rate Per Hour ^①		L/h	23	23	23
Recharge Rate Per Hour ^②		L/h	25.8	25.8	25.8
Sound Level			/	/	/
Electric Heating Element			kW	1.2	
Maximum Current Input			A	7.3	
Maximum Power Input			kW	1.2	
Refrigerant			g	R290/450	
Compressor				DC inverter rotary	
Inner Tank				Enamel (optional Duplex 2205)	
Inner Tank Design				Concave	
Tank Protection				Magnesium rod	
Heat Exchanger				Microchannel	
Outer Casing				Painted galvanized steel sheet	
PTR Valve			kPa	850	
Rated Outlet Water Temperature			°C	60	
Max Outlet Water Temperature			°C	70	
Working Range			°C	-7~45	
IP Class				IPX4	
Net Dimensions	mm		φ640×1965	φ640×2025	φ640×2240
Packaging Dimensions	mm		695×695×2100	695×695×2160	695×695×2375
Net Weight	kg		103	112	123
Gross Weight	kg		122	131	142

*All the above unannotated data are based on test conditions of ambient temperature 20°C/15°C and water heated from 9°C to 55°C.

①Test conditions: ambient 20°C/15°C, water heated from 9°C to 55°C.

②Test conditions: ambient 20°C/15°C, water heated from 15°C to 55°C.

③Test conditions: ambient 20°C/15°C, water heated from 15°C to 50°C.

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



COMPANY ADVANTAGE

Company Profile

AMITIME, established in 2003, is a professional Chinese manufacturer and a leading supplier of energy-saving heat pumps and cost-efficient solutions for the global market.

AMITIME has built an efficient and dynamic R&D and manufacturing platform, forming strategic partnerships with ES, Parker Davis, and other international heat pump and HVAC companies. With a global perspective, these collaborations have proven highly competitive and commercially successful, further solidifying our leading position in overseas markets.

With over 20 years of experience in R&D, 3 production bases, 16 standard laboratories, over 900 employees including 20% of engineers and technicians, AMITIME specializes in DC inverter air to water heat pump technologies. As one of the pioneers in DC inverter heat pump development, we have successfully launched four product ranges: residential heat pumps, swimming pool heat pumps, heat pump water heaters, commercial heat pumps, etc.

AMITIME is always committed to meeting customer demands, offering flexible and professional OEM/ODM solutions to international partners. Our mission is to deliver eco-conscious, smart and reliable heat pump products to contribute to the sustainable development of human society.

AMITIME ELECTRIC CO., LTD.

Zhongshan Factory:

Add: Yandong 5th Road, Dayan Industrial Zone, Huangpu Town, Zhongshan, Guangdong, China

Tel: +86 13652220180
Email: info@amitime.com

Foshan Factory:

Add: No. 6, Shilong West Road, Shilong Intensive Industrial Zone, Xintang Village, Lunjiao Subdistrict, Foshan, Guangdong, China

EuroHP Thermal Technologies Industry and Trade, Inc.

Turkey Factory:

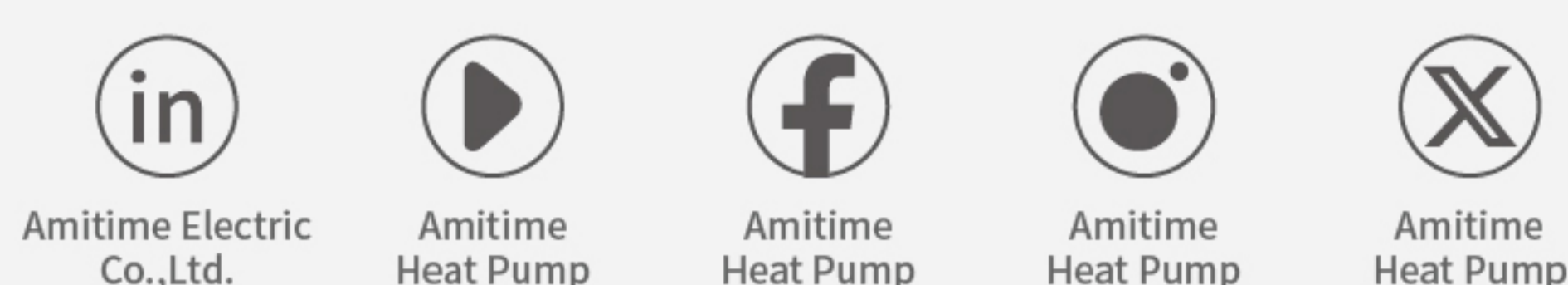
Add: Ferhatpaşa Sb, Ortanca Sk No:20, 34540 Çatalca/Istanbul, Türkiye

Spanish Representative Office

Add: No. 35, La Hacienda, Calle Bajamar, Nerja, Spain

Tel: +34 872 263 646
Email: brian@amitime.com

Stay Tuned with Us



Enterprise Certification



Heat Pump Catalog



Official Website