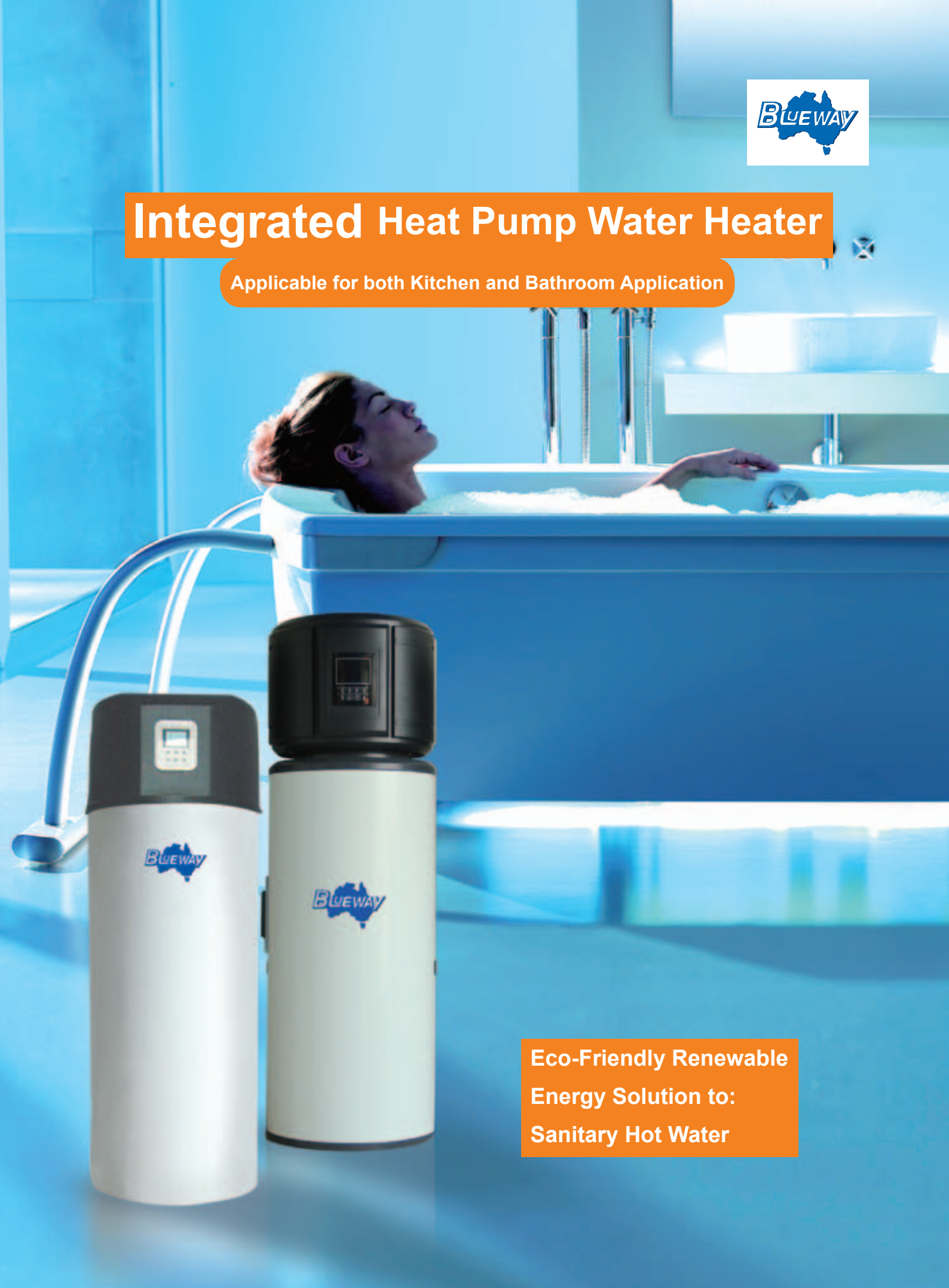


Integrated Heat Pump Water Heater

Applicable for both Kitchen and Bathroom Application

Eco-Friendly Renewable Energy Solution to:

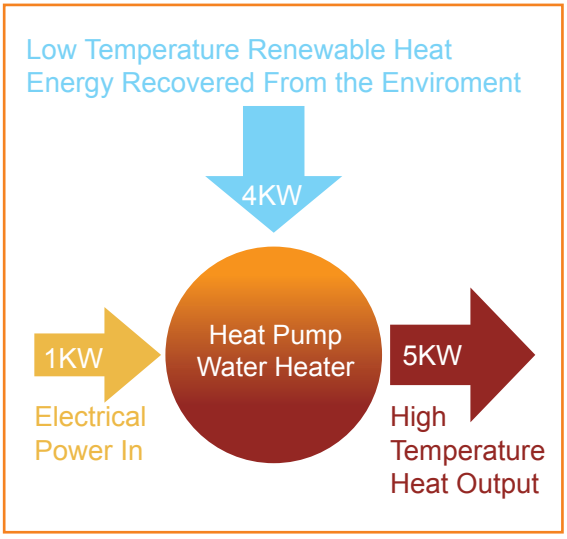
Sanitary Hot Water

ENERGY FROM THE NATURE

Blueway Integrated Heat Pump Water Heater (IHWH) is specially designed for the need of sanitary hot water, applicable for kitchen and bathroom application. It uses CFC free refrigerant to absorb energy from the air, heating the water to a temperature adjustable between 30°C to 60°C.

It consumes **70-80% less** electrical energy than a conventional electric water heater, as the electrical power it consumes is only to operate the compressor and fan.

Every 1kW electrical energy it consumes will drive the unit to generate 3-5kW heat energy.



TWO TYPES OF COIL HEAT EXCHANGER

TYPE A: EXTERNAL WARPING COIL HEAT EXCHANGER
(available for water tank capacity 150-300L)

Instead of being immersed in the tank water, the copper pipe heat exchanger is wrapped around the outer wall of the inner stainless steel water tank, which means no direct contact with potable water.

This design ensures no potential risk of contamination to the tank water due to corrosion or refrigerant leakage, and therefore guarantees the water quality.

The copper pipe heat exchanger is wrapped around the outer wall of the inner stainless steel water tank.

TYPE B: INTERNAL COIL HEAT EXCHANGER
(available for water tank capacity 150-300L)

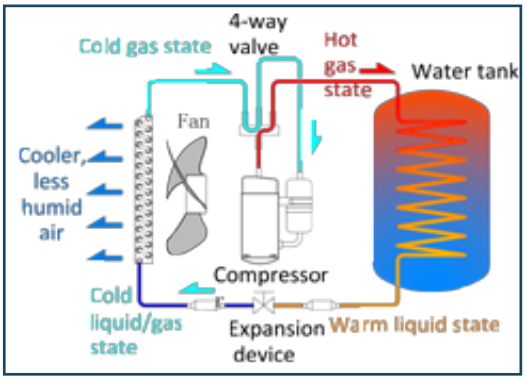
This design adopts two internal SUS 316 pipe coil heat exchangers, one of which is for refrigerant (refrigerant heat exchanger), and the other one is for water (water heat exchanger) and is connected to tap or shower water. The refrigerant heat exchanger will first heat the water stored in the water tank to the setting temperature.

Then the heated water in the tank will act as a heat transfer medium and transfer heating to the water heat exchanger, in which the shower water or tap water is running through. For this design, the refrigerant heat exchanger does not contact potable water as well, thus ensures the safety of the water to be used in kitchen and bathroom.

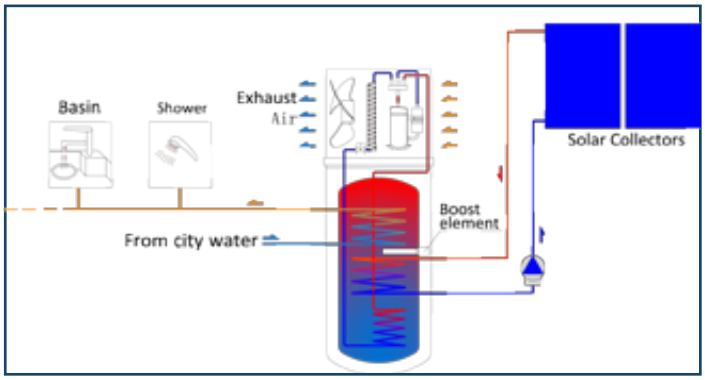
Blueway produces two types of designs and both designs ensure no potential risk of contamination to potable water.

DIAGRAM

Working Principle Diagram



Application Diagram



HIGHLIGHTS

- Micro processor based digital controller with LCD display
- Hot water temperature setting: 30-60°C
- No potential risk of contamination to potable water
- High efficiency rotary compressor ensures quiet operation
- CFC free R134A or R410A refrigerant , without ozone depletion
- Energy saving, the running cost is only 1/3 of the conventional electric water heaters
- **Safety:** complete isolation between water and electricity, no potential danger of any inflammable, gas poisoning, explosion, fire, electrical shock which are associated with other heating systems
- **Easy Installation:** be easily installed by a plumber or electrician, no need for a specialist refrigeration engineer
- **Easy Operation:** operates like a simple domestic appliance

ELITE MODELS

Integrated Heat Pump Water Heater

Technical Specifications

Model			IHP03-200EA	IHP03-250EA	IHP03-250EB
Power Supply	-	V/Hz/Ph	220/50/1, 220/60/1		
Hot Water Performance	Heating capacity	kW/Hr	2.8	2.8	2.8
	Power consumption	Watts	780	780	700
	COP	-	3.6	3.6	4.0
	Current	A	3.39	3.39	3.04
	Hot water production	litter/hours	60	60	60
		Gallon/hour	16	16	16
Tank capacity	Capacity	Litter	200	250	250
		Gallon	53	66	66
	Internal tank	Materials	SUS 304	SUS 304	SUS 304
	Insulation thickness	mm	50	50	50
Hot Water Temp. Range	Rated	°C	55	55	55
	Max.	°C	65	65	65
Noise level	-	dB(A)	48	48	48
Controller	-	-	LCD digital wire controller		
Compressor	Type		Rotary		
	Qty	Nos.	1		
	Refrigerant	-	R410A / R134A		
Heat exchanger (water side)	Type	-	External wrapping coil		Internal coils
	Qty	Nos.	1		2
Condenser fan	Type	-	Axial		
	Airflow	m³/h	450		
	Air direction	-	Horizontal		
	Material	-	Plastic		
Electric Heater (Optional)		KW	2		
Hot gas defrost		-	Yes		
Anodized rod		-	Yes		
Electric expansion valve (EEV)		-	Yes		
Relieve/safety valve		-	Yes		
Additional coil heat exchanger		-	Optional		
Water Connection	Inlet	Inch	G1"		
	Outlet	Inch	G1"		
Dimmension: W×H×D	Net	mm	Φ570x1750	Φ570x2100	Φ570x2100
	Shipping	mm	645x645x1850	645x645x2200	645x645x2200
Weight	Net	Kg	47	55	58
	Shipping	Kg	52	60	63
Stack	-	Layer(s)	1	1	1
Loading Qty	20'/40'/40'HQ	Set(s)	27/57/57	27/57/57	27/57/57

Test Conditions:

Hot Water Performance: Air 15/12°C (DB/WB), Water 15/55°C (Inlet/Outlet);

The design and specfications are subject to change without notice. Please refer to the label on the product.

Hot Water Application

HEAT REVOVERY MODELS

Recovering wasted energy from ventilated air and transferring it to water, heat recovery models can be installed in various locations like laundry room, basement, attic, garage, boiler room etc., where a lot of waste air is generated. The unit is supplied with two duct connectors, one of which is used to supply and duct the wasted cool and less humid air discharged from the heat pump to locations that need ventilation or dehumidification, the other one is used to duct air from warm places to the heat pump unit to recover energy for hot water production.

1. Air ventilation

Indoor warm air is ducted to heat pump from basement, storage room and laundry room. These places will always have fresh air after several hours recirculating.

2. Dehumidification

The system can be installed in the laundry room or other moist locations to prevent home appliance and properties being damaged by high humidity.

3. Heat recovery

The system can be operated by extracting heat energy from lighting, domestic appliance, showers and bathrooms etc.

Integrated Heat Pump Water Heater(**Heat Recovery**) Technical Specifications

Model			IHP03-150HRA	IHP03-200HRA	IHP03-250HRA	IHP03-300HRA	IHP03-250HRB	IHP03-300HRB
Power Supply	-	V/Hz/Ph	220/50/1, 220/60/1					
Hot Water Performance	Heating capacity	kW/Hr	2.8	2.8	2.8	2.8	2.8	2.8
	Power consumption	Watts	730	730	730	730	730	730
	COP	-	3.6	3.6	3.6	3.6	4.0	4.0
	Current	A	3.17	3.17	3.17	3.17	3.17	3.17
	Hot water production	Litter/hour	60	60	60	60	60	60
		Gallon/hour	16	16	16	16	16	16
Tank capacity	Capacity	Litter	150	200	250	300	250	300
		Gallon	39	53	66	79	66	79
	Internal tank	Materials	SUS 304	SUS 304	SUS 304	SUS 304	SUS 304	SUS 304
	Insulation thickness	mm	50	50	50	50	50	50
Hot Water Temp. Range	Rated	°C	55	55	55	55	55	55
	Max.	°C	65	65	65	65	65	65
Noise level	-	dB(A)	48	48	48	48	48	48
Controller	-	-	LCD digital wire controller					
Compressor	Type		Rotary					
	Qty	Nos.	1					
	Refrigerant	-	R410A / R134A					
Heat exchanger (water side)	Type	-	External wrapping coil				Internal coils	
	Qty	Nos.	1				2	
Hot gas defrost			Yes					
Anodized Rod		-	Yes					
Electric Expansion Valve (EEV)		-	Yes					
Electric Boosting Element(Optional)		-	2KW					
Relief Valve		-	Yes					
Additional coil heat exchanger		-	Optional					
Water Connection	Inlet	Inch	G1"					
	Outlet	Inch	G1"					
Dimmension: W×H×D	Net	mm	Φ620 x 1120	Φ620 x 1370	Φ650 x 1810	Φ650 x 1960	Φ650 x 1810	Φ650 x 1960
	Shipping	mm	760x730x1270	760x730x1520	680x650x2010	680x650x2160	680x650x2010	680x650x2160
Weight	Net	Kg	75	87	95	103	95	103
	Shipping	Kg	79	91	100	108	100	108
Loading Qty	20'/40'/40'HQ	Set(s)	24/48/96	24/48/96	27/54/54	27/54/54	27/54/54	27/54/54

Test Conditions:

Hot Water Performance: Air 15/12°C (DB/WB), Water 15/55°C (Inlet/Outlet);

The design and specfications are subject to change without notice. Please refer to the label on the product.

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