

Swimming Pool Heat Pump

	Model	ISS-04SPI	ISS-07SPI	ISS-10SPI	ISS-13SPI	ISS-20SPI	ISS-25SPI
Air /Water 24°C/26°C	Output Power (KW)	18	33	40	52	90	105
	Input Power (KW)	3.21	6.2	7.5	9.8	17	20
	COP	5.6	5.3	5.3	5.3	5.3	5.3
	Current	15.36	11	13.37	17.47	30.3	35.65
	Water Cooling Capacity(KW)	14.4	26.4	32	41.6	72	84
Refrigerant	R410A	R410A	R410A	R410A	R410A	R410A	
Electric Power	220V/50Hz/1PH			380V/50Hz/3PH			
Heating/Cooling Water Range	10~45°C						
Compressor	Panasonic/scroll						
Heat Exchange	Titanium Tube Heat Exchanger						
Auto Defrost	Included						
Water Connection Port (mm)	Exterior 50mm/ Interior 40mm			Exterior 70mm/ Interior 60mm			
Noice dB(A)	49	58	58	58	65	65	
Water Flow Rate (m³/h)	10~12	15~18	20~25	25~30	40~50	50~60	
Water Pressure Drop (Kpa)	14	15	16	18	30	35	
Product Dimension(mm)	810*810*1050	830*830*1350	1580*910*1180	1580*910*1380	2000*1100*2300	2000*1100*2300	
Packing Dimension(mm)	950*950*1250	950*950*1550	1650*980*1340	1650*980*1540	2200*1300*2500	2200*1300*2500	
Net/ Gross Weight (Kgs)	112/122	160/190	250/280	280/310	620/540	650/570	
Cold & Hot Feature	Optional	Optional	Optional	Optional	Optional	Optional	



Hybrid System
(Solar Combine
With Heat Pump)

- To optimise the entire range of benefits that Inter Solar Heat Pumps have to offer, we provide the domestic and commercial markets with a complete air source energy package that is custom-made to suit the individual needs of each application.
- This package is completely unique and includes the highest level of customer support from initial advice, professional planning and design, through to installation, technical and after sales support.
- The use of an Inter Solar Air Source Heat Pump can also be combined with solar thermal water heating. The package is suitable for both new and existing properties.
- In New Built homes Inter Solar air source normally will provide space heating whereas DHW will be heated by solar collectors, such as Inter Solar heat pipe or U pipe Vacuum tube panels.

Introducing
SUPERIA⁺
Series

Engineered in Australia

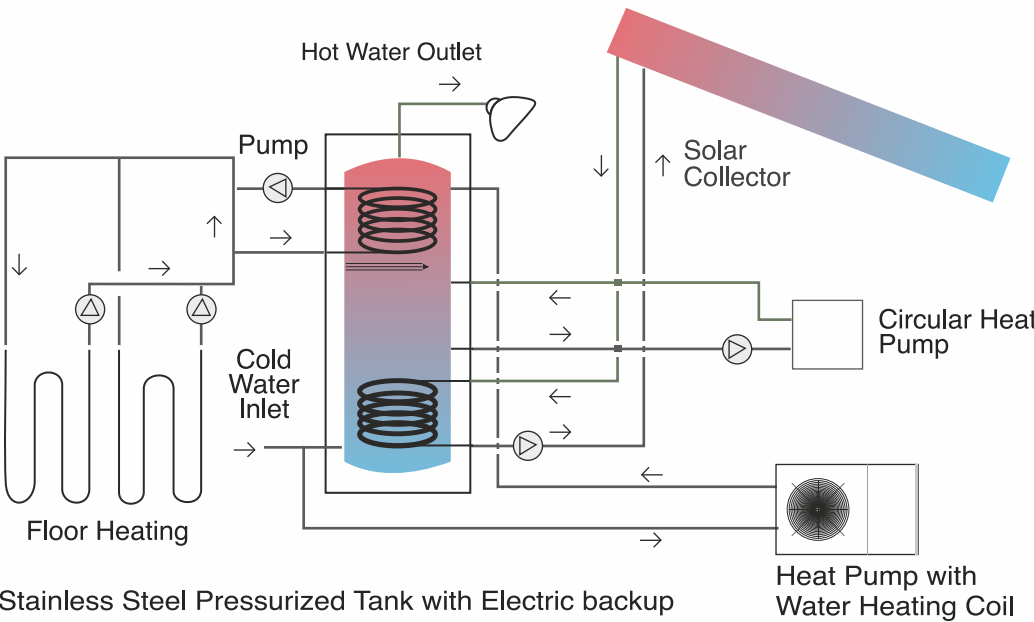


EVI Heat Pump Series

Model	ISS-03LD		ISS-04LD		ISS-05LD		ISS-10LD	
Power Supply	V/Ph/Hz 220-240V/1PH/50HZ		220-240V/1PH/50HZ		380-415V/3PH/50HZ		380-415V/3PH/50HZ	
*Ambient Temp. (Dry Bulb/Wet Bulb) : 7°C/6°C , Water Temp. (In/Out) : 30°C/35°C								
Output	KW	7.85	12.16		16.48		33	
Input	KW	1.9	3		4.01		8	
COP	W/W	4.1	4.12		4.11		4.12	
*Ambient Temp. (Dry Bulb/Wet Bulb) : -7°C/-8°C , Water Temp. (In/Out) : 30°C/35°C								
Output	KW	4.5	7		9.51		19	
Input	KW	1.9	2.96		4.01		8.02	
COP	W/W	2.3	2.37		2.36		2.37	
*Ambient Temp. (Dry Bulb/Wet Bulb) : -15°C/-16°C , Water Temp. (In/Out) : 30°C/35°C								
Output	KW	3.4	5.3		7.22		14.5	
Input	KW	1.85	2.87		3.89		7.8	
COP	W/W	1.86	1.85		1.83		1.86	
Compressor	N/A	Copeland Scroll EVI	Copeland Scroll EVI		Copeland Scroll EVI		Copeland Scroll EVI	
Compressor QTY	pc	1	1		1		2	
Fan Motor	N/A	Side Blowing	Side Blowing		Side Blowing		Side Blowing	
Fan Motor QTY	pc	1	1		2		2	
Refrigerant	N/A	R407C	R407C		R407C		R407C	
Max. Water Temp.	°C	60						
Refrigerant Control		Electric Expansion Valve						
Defrosting		4-way valve reverse auto defrosting						
Working Temp.		Min. : -25/ Max.: +43						
Nozzles Size		Inch	1	1	1	1.5		
Water Flow Rate		m³/h	2.5~3.0	3.5~4.0	3.5~4.0	6.0~6.5		
Noise		dB(a)	60	65	65	68		
Unit Demension		cm	850*520*123	1305*505*1245	1305*505*1245	1565*575*1710		
N.W/G.W:		Kgs	100/120	145/170	145/170	330/370		
Cold & Hot Feature		Optional	Optional	Optional	Optional	Optional		



Solar Hot Water & Space
Heating Overall Concept



Works Upto -25°C
Ambient Temperature



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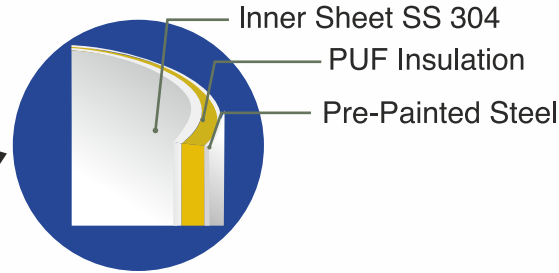
Unlimited
HOT & COLD Water all year long

Enhance the Luxury of bathing with
Inter Solar Heat Pumps

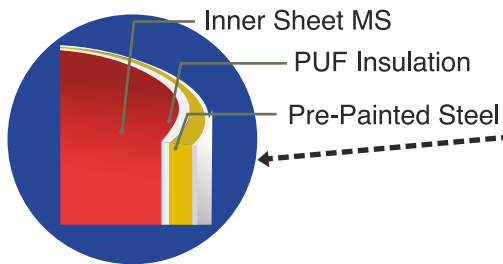
With Cold Feature*



SUPERIA Series



Features	Superia+	Superia	Imperia
Hot & Cold	Optional	Optional	Optional
S.S. Outer	✓		
S.S. Inner	✓	✓	
M.S. Inner			✓
Pre-Painted Steel		✓	✓
Puf Installation	✓	✓	✓



IMPERIA Series

With Hot Feature*



Engineered in Australia

*T & C Apply

Introduction

Established in 1997 Inter Solar is an ISO 9001 & 14001 Certified Company. We strive to optimize the performance & efficiency at lower cost. Our research team tests new materials, manufacturing methods & improved distribution systems. New technologies are evaluated as it develops. Besides improving existing products & systems, Inter Solar explores exciting new ideas as it develops. Inter Solar has now introduced High performance Air Source Heat Pumps for the area having space constraints to install.

Save the Environment

Traditional fossil fuel reserves all over the world such as oil, coal & gas are fast getting exhausted. When fossil fuels are burned to produce energy, carbon dioxide (CO2) is released into the atmosphere and this, in turn, adds significantly to the global concerns over climate change. The Inter Solar Air Source Heat Pump installed in the home, Hotels, Hospitals, Industries as the main source of heating and hot water can reduce CO2 emissions to zero. As there are no emissions from the system so there is no local pollution from the installation property. The inconvenience and cost of fuel storage as with oil, LPG & solid fuel is also removed. With its best in class thermal performance, Inter Solar water heater system delivers more heating power with less energy consumption, and at the same time reducing your carbon footprint.

Advantages of Air Source Heat Pump water heater



LONG OPERATING LIFE

Advanced stainless steel/titanium metal water heat exchanger.



INTELLIGENT

Smart computer control and LCD display controller.



SUITABLE FOR ALL CLIMATES

Not effected by weather & ensure 24/7 constant hot water supply.



ECONOMICAL AND HIGH - EFFICIENCY

Using water heat pump technology compared with other ordinary hot water equipment (for example, oil, gas, electric and so on), reduces operation costs by 65-80%.



BRIGHT DESIGN, EASY INSTALLATION & REPLACEMENT

Unit design separated for main model & water unit model, the unit is remarkable, compact, with pump and flow switch inside.



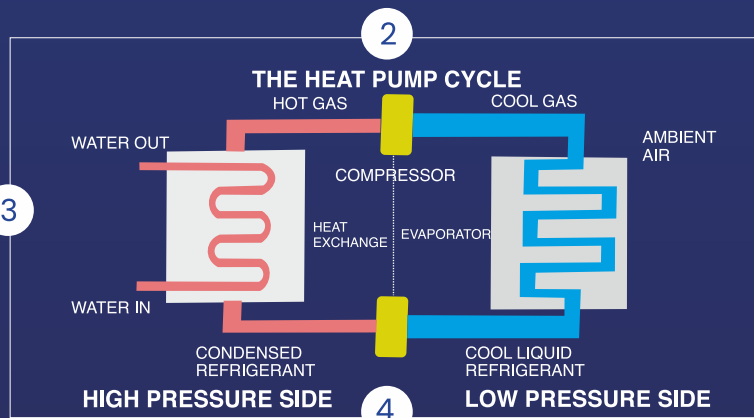
SUPERIOR QUALITY

Multi protections to protect from water temperature, compressor exhaust pressure, compressor temperature, evaporator temperature and so on.

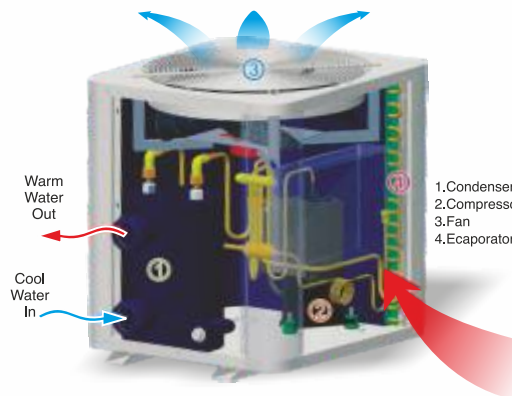
Introduction

The heat pump evaporator contains an environmentally-friendly liquid.

1. The heat pump transfers the heat absorbed in the environment to the refrigerant.
2. In the compressor, the compressing procedure increases the pressure and temperature, and the refrigerant turns into gas.
3. In the condenser (the heat exchanger) the hot gas transfers the heat to the water cycle used to heat the water.
4. After the gas has transferred the heat to the water, it is condensed and changes its state into a liquid phase.



Heat Pump Working Diagram



- Digital Temperature Readout
- Self Diagnostic Controller
- Super Corrosion-Proff Titanium Tubular Heat Exchanger
- Quiet / Engineered Low Noise
- Longer Swimming Season
- 300%-500% Heat Efficiency



Automatic Defrost

Domestic Heat Pump Series

Model	ISS-140 D		ISS-03 C	
Refrigerant	R417A/R410A/R22			
Compressor Brand	Copeland			
Testing Condition	1. Dry-bulb temperature 20°C 2. Wet-bulb temperature 15°C 3. Water temp. rises 40°C."			
Features	1. Environment Temp. for Working: -5°C to 43°C 2. Max. Water Outlet Temp.: 60°C			
Outdoor Unit Air Outlet	Side Discharge Air Outlet		Top Discharge Air Outlet	
Rated Water Heating Capacity	KW	6.5 Domestic		11 Domestic
	BTU/h	22100		37400
Rated Water Cooling Capacity	KW	4.2		8
	BTU/h	14459		27200
Rated Outlet Heating Temp.	°C	55		55
Max. Outlet Water Temp.	°C	60		60
Rated Water Heating Capacity	L/h	140		230
Rated Input	KW	1.62		2.7
Rated Working Current	A	7.7		12.7
COP	W/W	4		4
Power Supply	V/PH/Hz	220~240V/1PH/50Hz		380~415V/3PH/50Hz
Auto Defrost	Included			
Compressor QTY	Unit	1		1
Fan QTY	Unit	1		1
Sound Level	dB(a)	55		65
Water Inlet/Outlet Diameter	Inch	G1¾"		G1¾"
Water Flow Rate	m³/h	2		2.5
Circulation Pump		Inbuilt		External Circulation Pump
Condenser	Copper Pipe In Steel Case Heat Exchanger			
Outline Dimension	LxWxH(mm)	930*360*560		710*710*850
Packing Dimension	LxWxH(mm)	1045*375*570		840*840*1030
Net Weight	KG	55		100
Water Flow Rate	KG	58		115
Cold & Hot Feature		Optional		Optional



Commercial Heat Pump Series

Model	ISS-05 C		ISS-10 C		ISS-15 C		ISS -20 C	
Refrigerant	R417A		R417A		R417A		R417A	
Compressor Brand	Copeland		Copeland		Copeland		Copeland	
Testing Condition	1. Dry-bulb temperature 20°C 2. Wet-bulb temperature 15°C 3. Water temp. rises 40°C		1. Dry-bulb temperature 20°C 2. Wet-bulb temperature 15°C 3. Water temp. rises 40°C		1. Dry-bulb temperature 20°C 2. Wet-bulb temperature 15°C 3. Water temp. rises 40°C		1. Dry-bulb temperature 20°C 2. Wet-bulb temperature 15°C 3. Water temp. rises 40°C	
Features	1. Environment Temp. for Working: -5°C to 43°C		2. Max. Water Outlet Temp.: 60°C		1. Environment Temp. for Working: -5°C to 43°C		2. Max. Water Outlet Temp.: 60°C	
Outdoor Unit Air Outlet	Top Discharge Air Outlet		Top Discharge Air Outlet		Top Discharge Air Outlet		Top Discharge Air Outlet	
Rated Water Heating Capacity	KW	19	39	56	70			
	BTU/h	65000	133400	190000	238700			
Rated Water Cooling Capacity	KW	14	29	45	56			
	BTU/h	48200	99800	153000	191000			
Rated Outlet Heating Temp.	°C	55		60				
Max. Outlet Water Temp.	°C	60		60				
Rated Water Heating Capacity	L/h	410	840	1200	1500			
Rated Input	KW	4.31	8.47	12.73	16.6			
Rated Working Current	A	7.68	15	20	32			
COP	W/W	4.4	4.61	4.4	4.2			
Power Supply	V/PH/HZ	380~415V/3PH/50HZ		380~415V/3PH/50HZ				
Auto Defrost		Included		Included				
Compressor QTY	Unit	1	2	2	4			
Fan QTY	Unit	1	2	2	2			
Sound Level	dB(a)	65	65	68	68			
Water Inlet/Outlet Diameter	Inch	G1"	G1 1/2"	G1 1/2"	G1 1/2"			
Water Flow Rate	m³/h	4	7	15	13.8			
Circulation Pump		External Circulation Pump (Optional)		External Circulation Pump (Optional)				
Condenser		Copper Pipe in Steel Case Heat Exchanger		Copper Pipe in Steel Case Heat Exchanger				
Outline Dimension	LxWxH(mm)	810*810*1050	1580*910*1180	1750*1050*1900	2000*1100*2300			
Packing Dimension	LxWxH(mm)	890*890*1250	1650*980*1340	1900*1160*2110	2200*1300*2500			
Net Weight	KG	147	300	460	560			
Gross Weight	KG	170	350	510	620			
Cold & Hot Feature		Optional	Optional	Optional	Optional			

