

Hi-AquaSmart Series



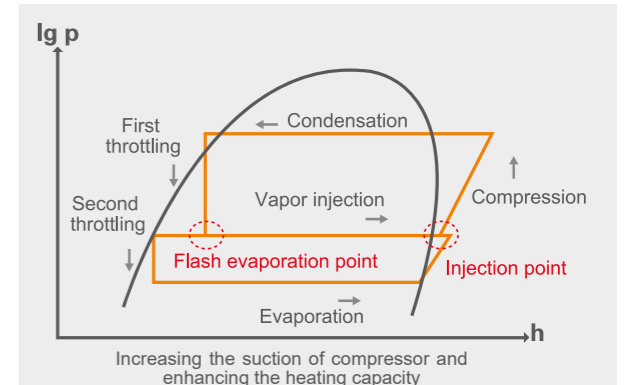
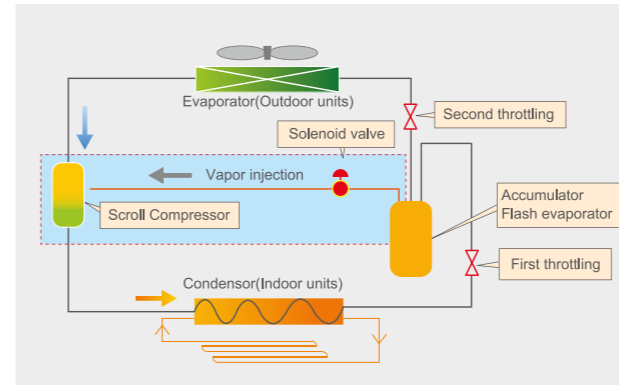
7/9/12kW 14/16kW

Hisense air to water heat pump system absorbs the free energy from outside atmosphere, which only consume less electricity to generate more heat energy. Hi-AquaSmart Series have better performance, high efficiency, high energysaving, less CO₂ emissions. This Series can be easy to install on new building or existing building. High efficient Hisense air to water heat pumps can obviously reduce the energy consumption of the building. In addition, it can work with a traditional heating source, such as oil or gas boiler.



Enhanced Vapor Injection

Hisense adopts vapor injection scroll compressor, which provides higher compression ratio, smoother oil supply and lower noise level.



The vapor injection system and stepless inverter technique greatly improve the refrigerant cycle system. It effectively increases refrigerant flow through vapor injecting, thus substantially enhancing the heating capacity.

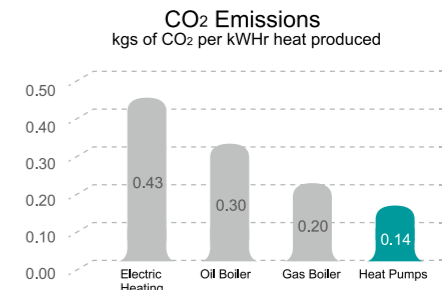
Less CO₂ Emissions

Using a heat pump can significantly reduce CO₂ emissions.

Lower CO₂ emissions

Because heat pumps collect free energy from the air, they produce much less CO₂.

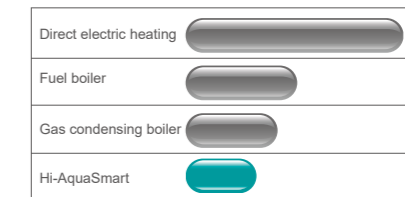
- 66% less than Electric Heating
- 50% less than Oil Heating
- 30% less than Gas Heating



Economical

Compared to the other heating modes, such as electricity, gas, coal/oil, solar, and so on, the heat pump system is more efficient and the annual cost reduction is obvious.

Average annual running cost

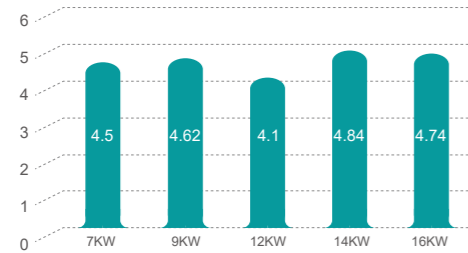


High Efficient Water Pump (DC)

Hi-aquasmart Series is equipped with a high efficient DC(inverter) water pump, which can minimize energy consumption during operating time. It has a better linear controllable for capacity output and wider adaptability for many application places compared with AC water pump.



COP up to 4.84



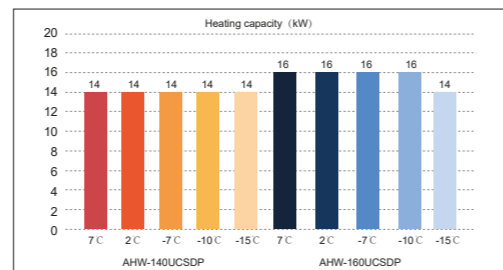
Hi-AquaSmart Series is efficient, all products' COP is higher than 4.1, successfully meeting customers' requirements.

Capacity	Hisense	Brand A	Brand B
7kw	4.5	4.4	4.4
9kw	4.62	4.23	4.65
12kw	4.1	4.49	4.45
14kw	4.84	4.44	4.22
16kw	4.74	4.2	4.1

* Peak value at standard condition working at heating capacity at +7°C (heating water at 35°C)

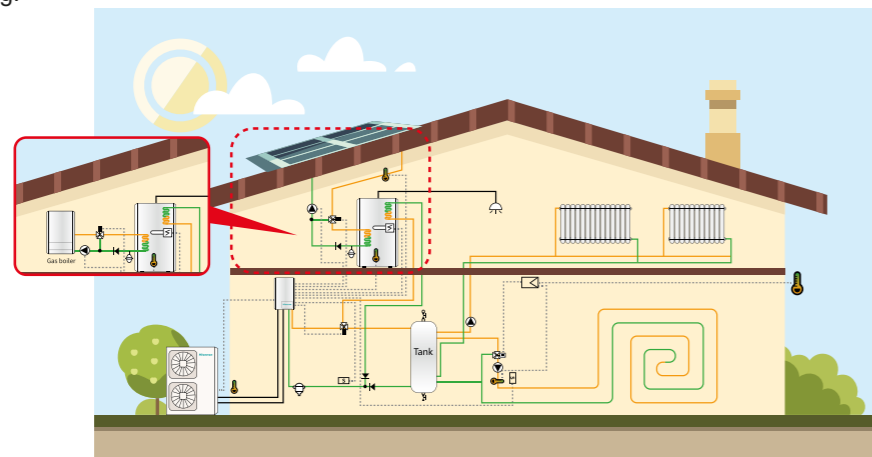
Strong Heating Capacity Under Low Ambient

Hi-AquaSmart 14kw outdoor unit can maintain the same nominal capacity even at -15°C without electrical booster heater, and 16kw outdoor unit also can maintain the same nominal capacity even at -10°C without electrical booster heater. So designer don't need to oversize the heat pump's capacity even at outdoor temperatures as low as -15°C.



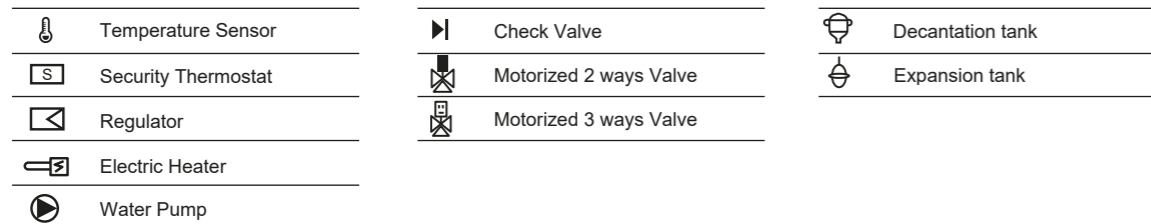
Assembly Various Heat Source

Hi-AquaSmart is allowed to combine with existing boiler or solar, so undoubtedly Hi-AquaSmart will be the best alternative to traditional boiler system in old building, and also as a hot water back-up solution to the existing boiler. In case that one heating unit was not working due to some unforeseen problem, this system can ensure heating system no stopping.



Operation system

- Underfloor heating
- Domestic hot water
- Low temperature radiators
- Hi-aquasmart+solar/boiler(optional)



Specification for Outdoor unit

Outdoor unit	AHW-070UCSDP	AHW-090UCSDP	AHW-120UCSDP	AHW-140UCSEP	AHW-160UCSEP
Indoor unit	AHM-070UXCSAPA3		AHM-160UXCSAPA3		
Refrigerant	R410A				
Power supply	AC1Φ,220~240V/50Hz				
Compressor	Double-rotor compressor			Scroll compressor with Vapor-injected	
Condition 1 Ta7/6°C LWC35°C (DT=5°C)	Heating capacity kW	7	9	12	14
	COP	4.50	4.62	4.10	4.84
Condition 2 Ta7/6°C LWC45°C (DT=5°C)	Heating capacity kW	6.2	8.1	10.8	12.5
	COP	3.87	3.97	3.53	3.70
Cooling Ta35°C LWE18°C (DT=5°C)	Cooling capacity kW	6.5	8	10.5	12
	EER	3.00	2.90	2.80	2.77
Dimensions	H*W*D mm	800×950×370			1380×950×370
Operation Ambient Range	Heating °C	-20~35			
	DHW °C	-20~43			
	cooling °C	10~43			
Heating Sound pressure	dB(A)	51	52	54	51
Cooling Sound pressure	dB(A)	50	51	53	50

Note:

The cooling and heating performance in agreement with EN14511.
 Heating condition: Outdoor Air Temperature 7°C DB/6°C DB, Inlet/Outlet water temperature 30°C/35°C.
 Cooling condition: Outdoor Air Temperature 35°C, Inlet/Outlet water temperature 12°C/7°C.
 Piping length:7.5 meter; Piping lift:0 meter



Specification for Indoor unit

Capacity	AHM-070UXCSAPA3	AHM-160UXCSAPA3
Power supply	AC1Φ,220~240V/50Hz	
Heating capacity	kW	7
Hot water capacity	kW	7
Power input	kW	0.245
Dimensions	H*W*D mm	890×520×320
Net Weight	kg	55
Heat Exchanger	plate heat exchanger	
Hot water temperature	Heating °C	15~55
	DHW °C	15~55
Sound pressure level	cooling °C	5~25
	dB(A)	33
Piping connections	gas mm	9.53
	liquid mm	15.88
Water pump	type	DC
	brand	Grundfos
Booster heating	kw	3