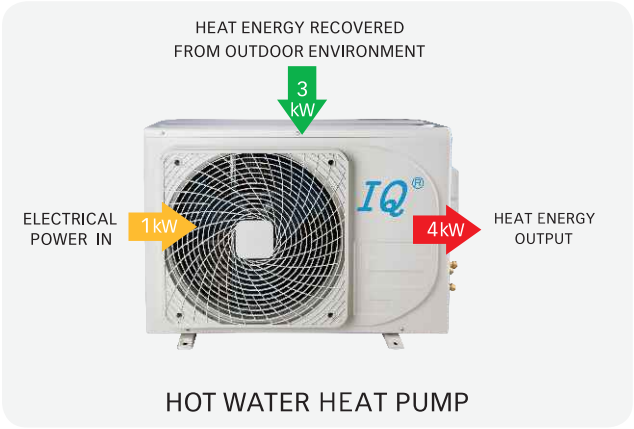
Air Source Hot Water Heat Pump

Hybrid AC/DC Solar Optional

IQA1-ACDC-41/200N1
IQA1-ACDC-41/300N1
IQA1-ACDC-55/500N1

How Efficient Is A Hot Water Heat Pump?

A Co-Efficient of Performance (COP) is a ratio of heat energy produced compared to electrical energy consumed by an appliance. The higher the COP, the less energy is consumed to produce the same amount of heat. A comparison of COPs shows that electric heating has a COP of 1; meaning for every 1kW of energy consumed only 1kW of heat is produced. Gas heating is even lower at 0.85, which means for every 1kW consumed only 0.85kW of useful heat is produced.



Deye Air Source Hot Water Heat Pumps are extremely energy efficient and can achieve COPs between 3-4, meaning they can produce 3-4kW of heat for every 1kW consumed. As no fossil fuels are directly burnt in the operation of a heat pump.

Why Choose A Hot Water Heat Pump?

According to the Energy Efficiency and Conservation Authority (EECA), hot water usage accounts for up to 30% of a home's annual power bill. Hot Water Heat Pumps can provide energy efficient solutions for all applications where water is heated or cooled.

Energy Efficiency

Hot water heat pumps offer the highest levels of energy efficiency with the ability to provide 3-4kW of heat energy for every 1kW used.

Lowest Running Costs

The more energy efficient a heating system is, the cheaper it is to run. Hot water heat pumps offer the cheapest available kW/h rate for hot water heating.

Weather Compensation

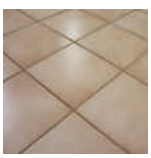
Weather compensation can detect changes in outdoor ambient conditions, allowing the hot water heat pump to adjust the water temperature. This ensures the right comfort temperature is produced without excess energy wastage.

Convenient Comfort

Hot water heat pumps supply hot water which delivers radiant heat energy to floor and potable water systems. Easy to use controls allow you to adjust temperature settings at the touch of a button.

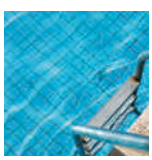
Multi Functional

Hot water heat pumps can be installed for a range of applications, from swimming pool and spa pool heating, to sanitary hot water, under floor heating and fan coil cooling.



Unobtrusive Heating

There is no need to worry about furniture placement or wasting valuable floor space, as heat produced from a radiant floor slab warms evenly no matter how the room is arranged.



Year Round Heating

Hot water heat pumps provide energy efficient water heating year round, operating effectively in both high and low outdoor ambient temperatures.

Safety

Hot water heat pumps are the perfect option when you have children and pets. As there are no hot surfaces, they are an extremely safe heating option.

Features of Split Hot Water Heat Pump

Split Design

Split design allows you to install the outdoor unit outsite, which is much quieter. The installatoin can be also flexible.

Enamel water Tank

The Enamel is brushed inside the water tank which is of high resistance and of great pressure bearing, because the enamel makes the welding line of the stainless panel separate with the water. That prolongs the working life for the unit

Indirect Micro Channel Coil

Water and exchanger is separated. The indirect microchannel coils make longer life and more stable of the system. The water quality can also reach drinking water level. Because of microchannel coil has high thermal conductivity, the performance can reach same as direct tank.

Max Water Temperature can Reach 60°C

Water and exchanger is separated. The indirect copper coils make longer life and more stable of the system. The water quality can also reach drinking water level. Because of copper coil has high thermal conductivity, the performance can reach same as direct tank.

DC Inverter type

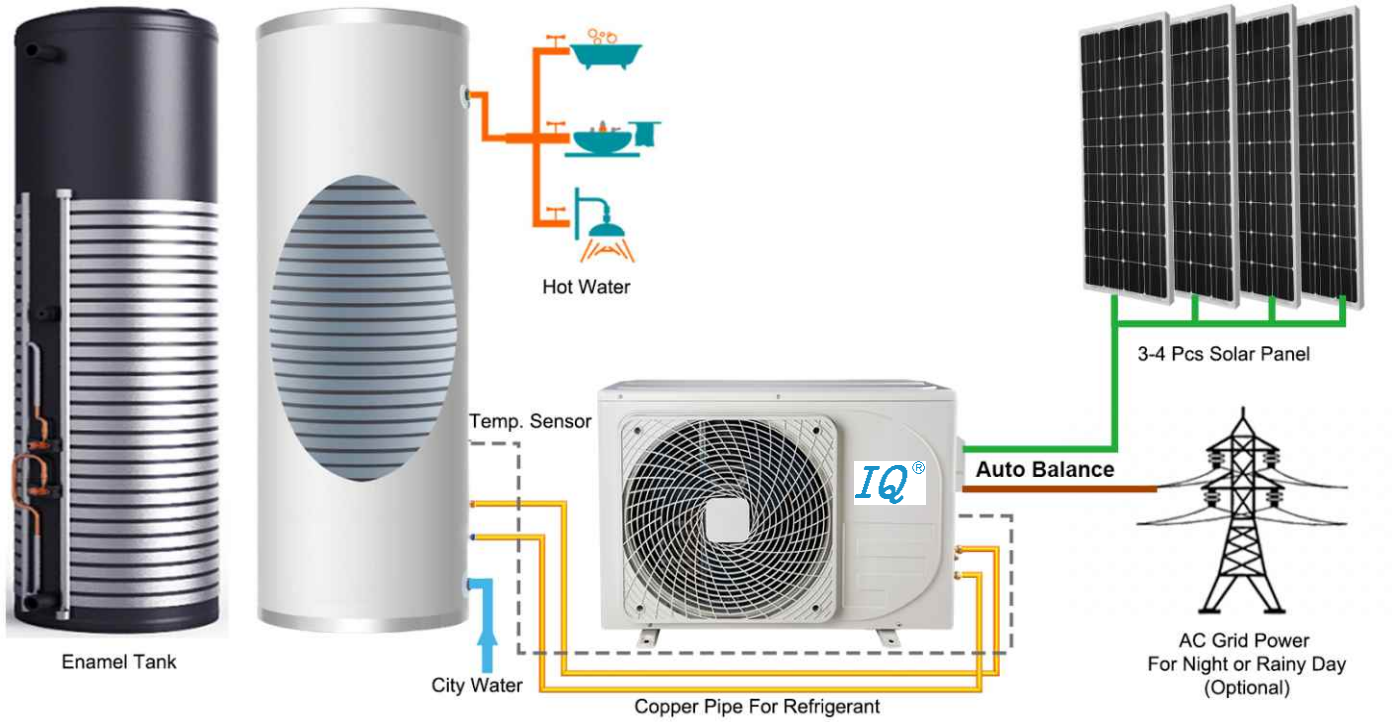
DC Motor

EEV

Deye Inverter Controller

Twin Rotary DC compressor

Hybrid AC/DC Split Hot Water Heat Pump



COP:420%

4.2KW Heating to the Water = 3.2KW From Free Air Source + 1KW Electricity From Grid AC or Solar DC

Hybrid AC/DC Solar Features

High Tracking Efficiency
MPPT tracking efficiency can reach 99.8%

100% Solar Driven
Pure solar DC power driven DC compressor and motor in the day without grid or battery backup

High Safety Protection
PV input lightning protection
Residual current monitoring unit
Output over current Protection
Output over voltage Protection

Auto Balance
Always solar DC priority, AC/DC auto balance when there is grid backup

Built-In Solar Controller
No Need extra inverter no need battery backup

Grid AC Power Limiter
1 touch limit or lock electricity consumption

Solar Panel Capable through MC4 connector
With MC4 connector to easily connect solar panel

APP Power Monitor
Check power data by app anytime anywhere

Wide MPPT Voltage
VMP 80-380V, VOC 390V

Specifications

SOLAR AC/DC AIR SOURCE HEAT PUMP			
Model Name	IQA1-ACDC-41/200N1	IQA1-ACDC-41/300	IQA1-ACDC-55/500
Water Tank Model	DSX-200G	DSX-300G	DSX-500G
Water Tank Volume	200L	300L	500L
Heating Capacity	4100W	4100W	5500W
Rated AC Grid Power	208-240V/50-60Hz	208-240V/50-60Hz	208-240V/50-60Hz
Solar Panel Power(DC)	80V-380V	80V-380V	80V-380V
Electric Shock Prevention	Class I	Class I	Class I
Water Heating 15℃ to 55℃	88.1L/H	88.1L/H	115L/H
Rated Power Consumption	972W	972W	1310W
Rated Current	4.5A	4.5A	6.0A
COP	4.22	4.22	4.2
Max Current(AC)	7.4A	7.4A	8.8A
Max Current(DC)	12.0A	12.0A	12.0A
Max Power consumption	1600W	1600W	1900W
Noise Level	52dB(A)	52dB(A)	54dB(A)
Refrigerant	R410A	R410A	R410A
Water Proof Level	IPX4	IPX4	IPX4
Outdoor Net/Gross Weight	33.5/37.5kg	33.5/37.5kg	37/42kg
Outdoor Net Dimention	802*323*564mm	802*323*564mm	802*323*564mm
Outdoor Package Dimention	910*405*622mm	910*405*622mm	910*405*622mm
Water Tank Net/Gross Weight	60/68kg	80/92kg	138/152kg
Water Tank Dimention	Φ520×1600mm	Φ580×1810mm	Φ710×1865mm
Water Tank Package Dimention	550*550*1665mm	605*605*1915mm	740*740*1940
Water Inlet/Outlet Connector Size	DN20	DN20	DN20
Heat Exchanger Max. Pressure	4.4MPa	4.4MPa	4.4MPa
Max Discharge/Suction Pressure	4.4/1.8MPa	4.4/1.8MPa	4.4/1.8MPa
Test Condition: Ambient Temp.(DB/WB): 20℃/15℃, Water Temp.(In/Out): 15℃/55℃			