

# Adsorption Chiller powered by AQSOA™

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**Cooling Capacity 10kW**

It works using low temp. heat around 60C(140F)

Refrigerant is water (non-Freon)

Using adsorption phenomena as compressing

Easy maintenance and low cost

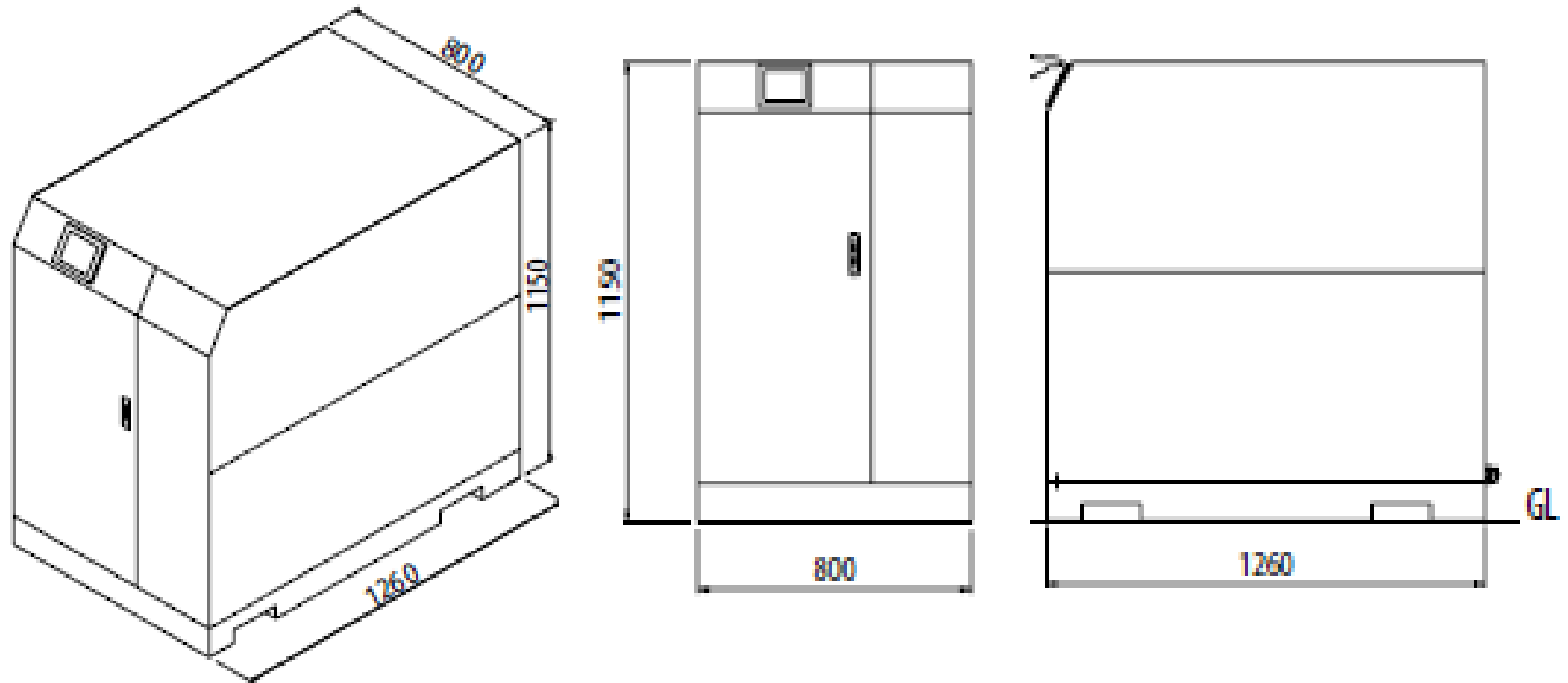
Manufactured at Union Industry Co., Ltd.

 **MITSUBISHI PLASTICS**

## Nominal Specification

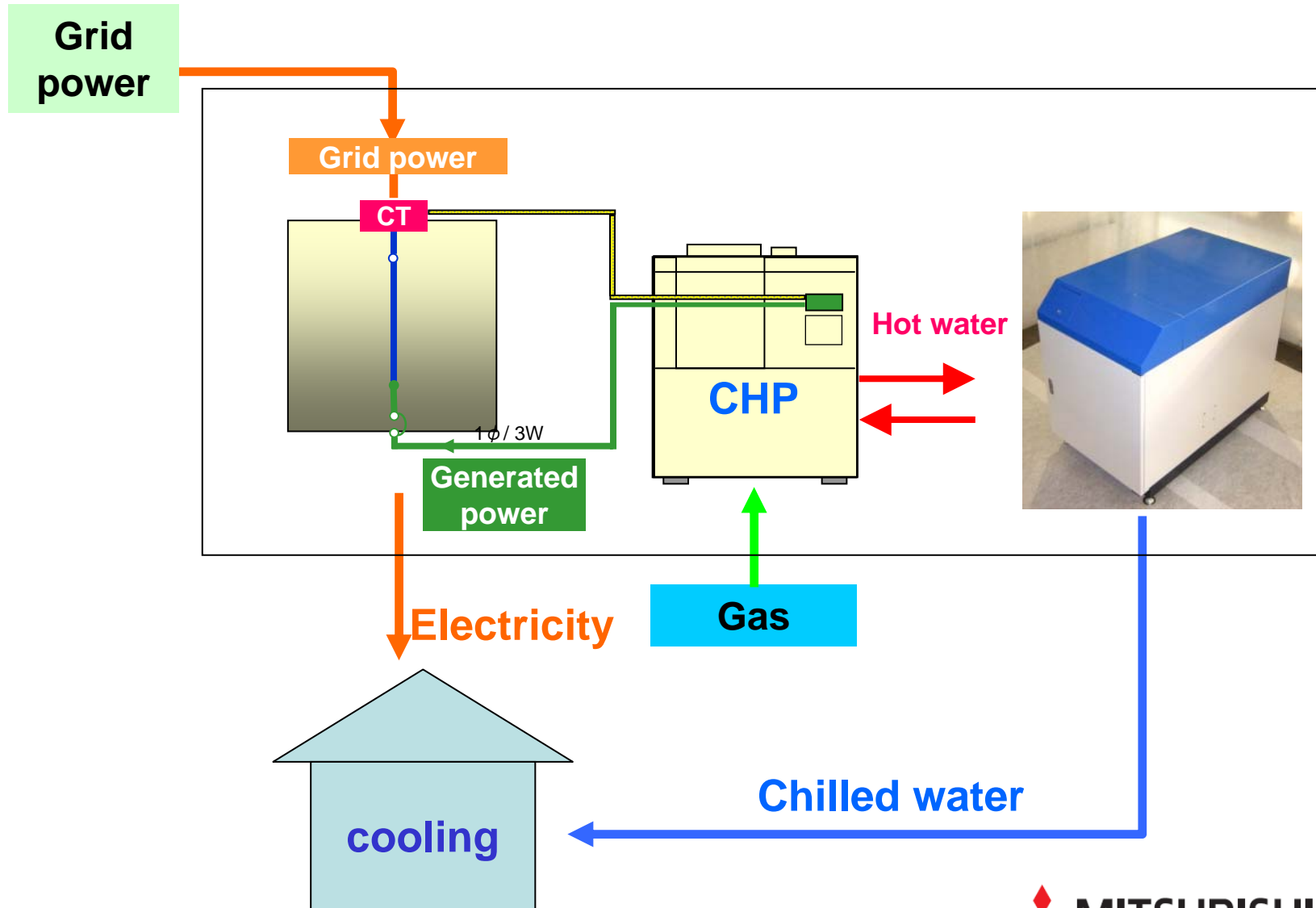
Type		Adsorption Chiller powered by AQSOA		
Items	Unit	Hot Water	Chilled Water	Cooling Water
Inlet-Outlet Temperature	°C	70.0→65.1	16.0→11.0	32.0→37.2
Flow Rate	L/min	64.0	28.2	127
	m <sup>3</sup> /h	3.84	1.69	7.62
Pres Drop	kPa	27.5	42.3	69.8
Operating Pressure Max	MPa	1.0		
Connection External Thread		G1"	G1"	G1 1/4"
Performance Value	kW	21.8	9.8	46.5
COP of thermal conversion		0.45		
Power Supply		3Φ 200V 50/60Hz		
Total Power Consumption	W	36		
Dimensions	mm	L 1230 × W 800 × H 1,120		
Operating Weight	kg	350		
Protective System		Auxiliaries Overcurrent Freeze Proofing		
Controlled Operation		ON/OFF control by coolant temperature		

# Drawing



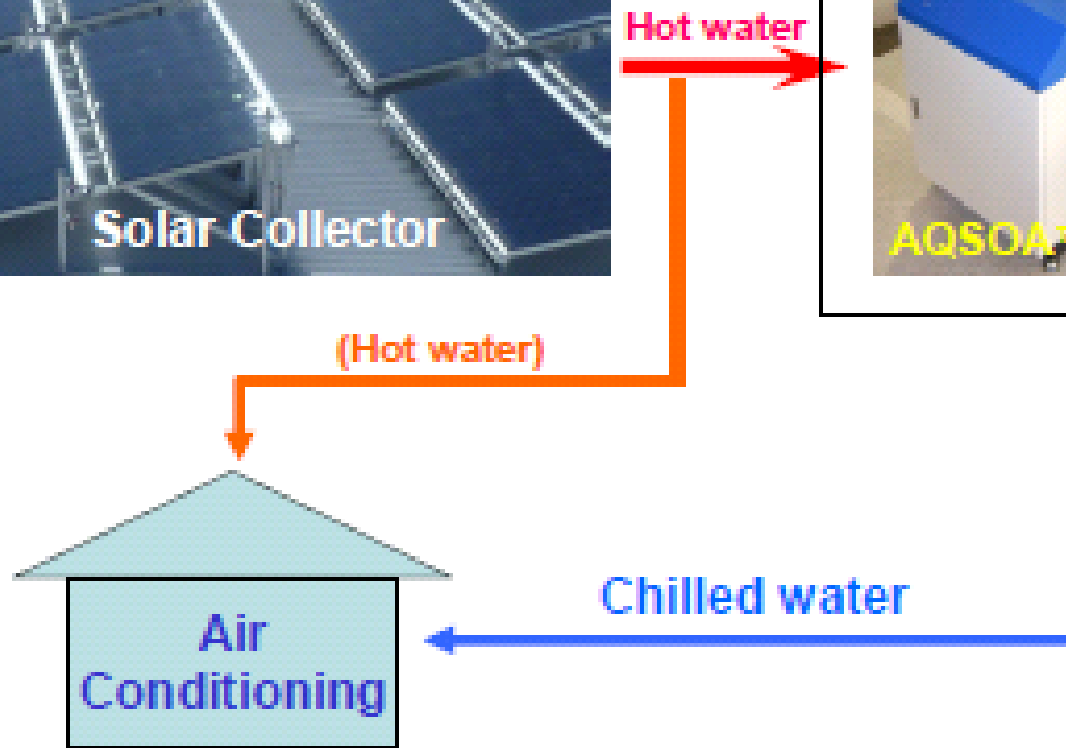
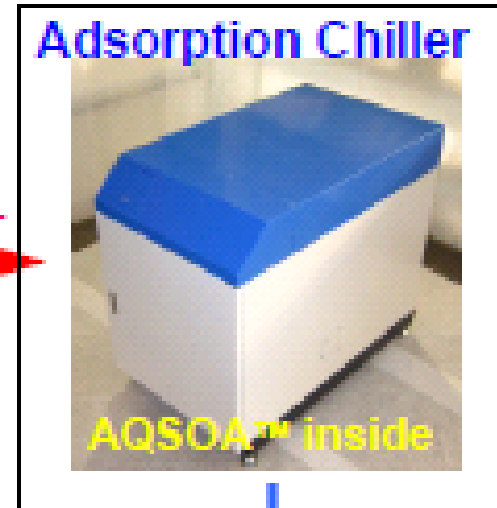
# Example

## CHP + AHP



# Example

## Solar + AHP



# Compact AQSOA Chiller

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U-type



M-type



MPI has developed 10kW Adsorption chiller. We are planning to design 5RT and 10RT for residential use and small building application.



**For: Commercial, Residential, Business  
Solar Water Heating Systems**

**Go Solar NOW!**



**Our certified solar water heating systems qualify for federal & state tax incentives**

- Virtually Unbreakable Collectors
- Freeze-Protected Systems
- 10 Year Limited Warranty
- 26 Trim Colors to Choose From
- Energy Star Certified Systems



To Find a Dealer/Installer in your State, Visit:



**PowerPartnersSolar.com**  
**Always Made in the USA!**

**Residential Example:**

You purchase a **\$6,200** solar system (components and installation).  
The State gives you a **35% Credit** ( $\$6,200 \times .35 = \$2,170$ )  
Your income is increased by **\$1750**

The Federal Gov't gives you a **30% Credit** ( $\$5,000 \times .30 = \$1500$ )  
The \$2,170 is taxed as income (using 30% here) reducing your savings by \$651 leaving you with **\$2,725 net savings** on your Solar Water Heating System.

Your System Only Cost You:

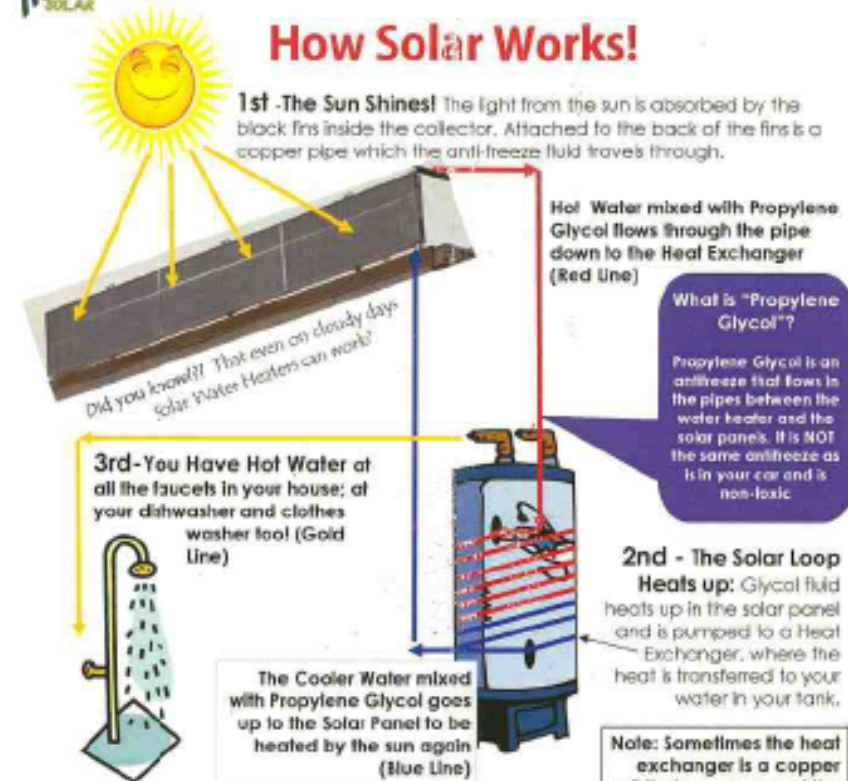
**\$2,821**

\*For information on your Federal and State Tax incentive programs visit [www.dsireusa.org](http://www.dsireusa.org)  
\*\* Each property is different, verify all savings with your tax professional.



To Find a Dealer/Installer in your State, Visit: [PowerPartnersSolar.com](http://PowerPartnersSolar.com)

**How Solar Works!**



**What happens at night or when it is too cloudy for the Solar Water Heater to work?**

Once you have used up all the solar heated water in your tank then your existing water heating source (electric/gas/propane) would kick on and start heating the water.

**You will never be without hot water.** The solar water heating system is there so you don't have to pay to heat water when the sun is shining!

According to the Dept of Energy, solar water heating systems reduce your water heating bills by 50% — 80 % and you never have to worry about the rising cost of fuel since they systems last 20+ years!

