



OneWave



High Efficiency



0% Heat Loss



Leak Prevention



German Technology

Residential | Commercial | Industrial

Solar Water Heater



Advancing Solar Water Heating With Innovative Technology

OneWave, inspired by advanced technology, delivers a superior solar water heating solution that combines performance with sustainability.

Sustainable Hot Water Solutions

By leveraging innovative Evacuated Tube and Heat Pipe technologies, OneWave efficiently harnesses solar energy to provide a reliable hot water supply, significantly reducing environmental impact and embodying a forward-thinking approach to contemporary home living.

Solar Collector For Enhanced Heat Retention

OneWave Solar Collector is comprised of dual glass layers with vacuum insulation sandwiched in between to mitigate heat loss. Sunlight penetrates the outer layer and is absorbed by the inner layer, which is coated with three layers of low-emissivity, high-absorption material.

Optimizing Heat Transfer Efficiency

Heat Pipe Evacuated Tube Collectors are meticulously crafted to achieve the pinnacle of heat transfer efficiency. They boast a design that minimizes heat loss through both convection and conduction, ensuring that captured solar energy is maximally utilized. By utilizing heat pipes made entirely of copper, these collectors enhance conductivity, further optimizing heat transfer.





Independent Operation Leak Prevention

In the OneWave system, each evacuated tube operates independently, ensuring that there is no leakage even if a tube is removed or broken.

This closed-loop system means that no water passes through the hot water tank, significantly reducing the risk of leaks.

Additionally, the active tank protection feature, employing a magnesium rod, effectively prevents rust and eliminates odours, thus significantly extending the lifespan of the storage tank.



Enhancing Solar Absorption Tank Longevity

The solar absorber, positioned within the evacuated tube, features an absorber coating consisting of a base layer of aluminium on the exterior of the inner glass tube, followed by aluminium/copper nitride (AlN) material.

Solar Absorptance Of 94%

The vacuum serves as a superior insulator against heat loss, while the aluminium silver coating minimizes heat reflection, resulting in a solar absorptance of 94%.

Installation Location

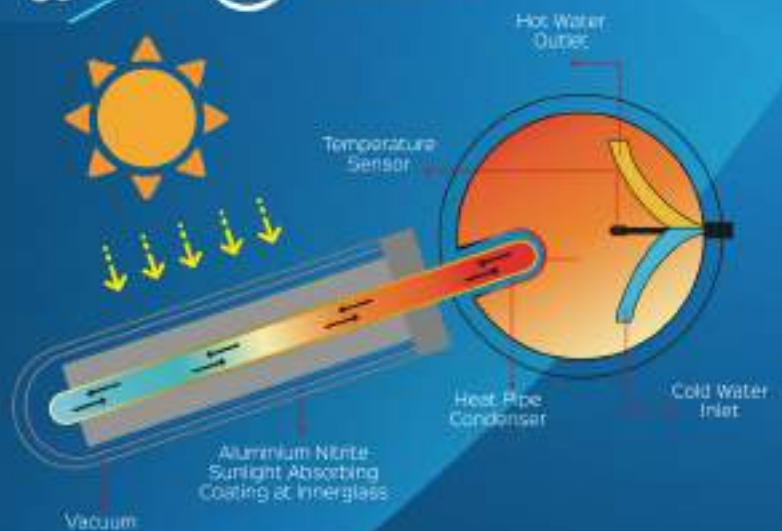


Efficient Heat Pipe Technology

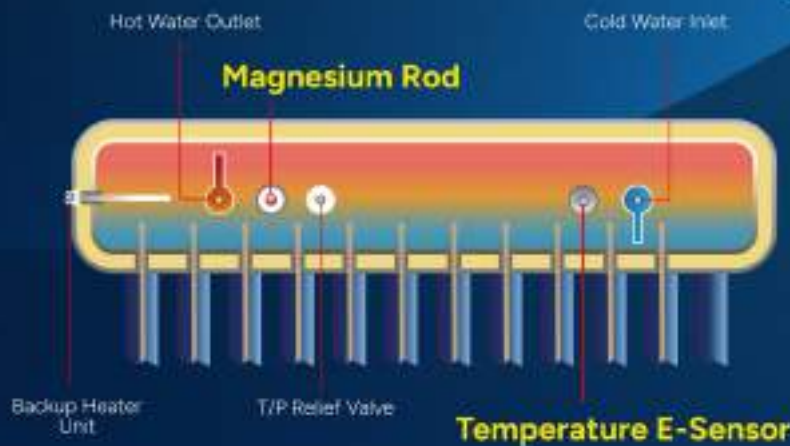


Heat pipe pressurized solar heater tank operates without an exhaust hole, thus it must withstand the pressure from both the tap water and the heated water. When in use, the hot water is dispensed due to this pressure.

Vacuum tube absorbs solar energy, and a conductive copper pipe transfers this heat into the pressurized solar water heater tank, causing the water inside to become hot. Because there is no water within the heat pipe itself, the entire system is capable of withstanding high pressure.



Front View (Tank)



Solar Heater Essentials

In a solar tube water heater, the **Magnesium Rod** prevents corrosion inside the tank by attracting corrosive elements, thereby protecting the tank and extending its lifespan. The **Temperature E-Sensor** monitors the water temperature to ensure efficient heating and prevent overheating, providing safe and consistent hot water. Both components are crucial for maintaining the system's efficiency and longevity.

Why Choose OneWave?



Durable

Pressurized tank is crafted with hydraulic machine welding, offering enhanced strength and precision compared to hand-welded tanks from other brands.



0% Leaking for heats collector

The heat collector ensures 0% leakage, as it operates without water in the heat pipes, eliminating the risk of copper toxicity found in water-filled solar panels.

Heat Pipe Technology

It achieves 30% higher efficiency in hot water production compared to conventional solar panels.



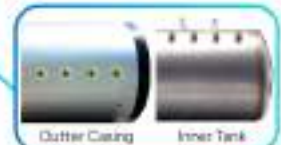
Strong Bracket

Many others brands do not come with the bracket, causing the roof tiles below the heavy tank to break easily, causing rain water to leak into the house.



Tank Protection

Magnesium ROD protects from rust & resolves odor. Also, a pressure temperature valve (PTV) is installed on the tank to prevent overheating. Prolonging the storage tank's lifespan.



Quality

Utilize 304-grade stainless steel for both the inner tank and outer casing, whereas other brands often use aluminum or galvanized iron (GI).



0% Heat Loss

There is 0% heat loss on the collection panels, ensuring efficient nighttime heating.



OneWave Controller

can add on controller for backup heater.

Exploring Differences Together



Comparing Evacuated Tube Systems with Flat Plate Heat Systems



Flat Plate Heat Systems



No Such Feature

Don't have display and sensor.



Manual

Manual switches need human input, but forgetting to use them can lead to less effective heating or wasted energy.



No Protection

No Such Feature.



Open loop System

Corrosion in the flat plate's copper riser tubes can result in copper toxicity and blockages, impacting water flow.



Preventing Water Leakage Problems

The copper compression fittings that connect the pipes between the flat plate and the tank may experience leaks due to thermal expansion and contraction in outdoor conditions.



Old System

Older flat plate panel solar water heater systems may face reduced efficiency and reliability from outdated technology, leading to higher maintenance and lower performance in solar energy utilization.



Low Heat Retain

Heat loss occurs because of uninsulated copper plates and glass in flat plate panel heat collectors.



Evacuated Tube Systems



Temperature Display

Flat panels are a common material used in constructing solar collectors.



Smart Controller

Boosts efficiency and user convenience by automatically managing water temperature.



Active Protection

Magnesium rods maximize anti-corrosion protection, extending the lifespan of water heaters.



Close Loop System

The closed-loop solar water heater system efficiently transfers heat using a fluid, improving efficiency and reliability.



Leaking Protection

There are no pipe fittings linking the tank and the evacuated tube, virtually eliminating any possibility of water leakage.



Most Efficient

This cutting-edge evacuated tube system maximizes heat absorption and minimizes loss, ensuring superior performance and sustainability in solar water heating.



High Heat Retain

Heat loss is at 0%. The Evacuated Tubes are insulated by the vacuum between the inner and outer glass layers.

SPECIFICATIONS

Model Name :

Tank Capacity (Liters) :

Overall Dimension (W x L x H) :

Overall Weight (Empty / Full) :

Number of User :

Pressurized :

System :

OW 150

150

1500 x 2000 x 520

68kg / 223kg

4 Users

OW 300

300

2400 x 2000 x 520

108kg / 416kg

7 Users

OW 300 Xtreme

300

2400 x 2000 x 520

118kg / 426kg

9 Users

Yes

Sealing System

SOLAR TUBE COLLECTORS

Vacuum Tube Quantity :

Efficiency :

Tube Material :

System :

Tube Length :

Outer / Inter Tube Diameter :

Tube Coating :

Heat Pipe :

Accessories :

12

90% - 94%

2 Layers Borosilicate Glass 1.6mm

Closed Loop System

1900 mm

58 mm / 47 mm

SS-CU-ALN/AIN Absorptive Coating

Φ 8mm TU1 Copper

Back-Up Heater , Non Return Valves , Thermostat and Magnesium Rods

STORAGE TANK

Model Name :

Inner Tank Diameter & Material :

Heat Exchange Socket :

Outer Tank Diameter & Material :

Insulation Material :

Tank Protector :

T&P Relief Valves :

Water PIPE Inlet/Outlet :

Backup Heater System :

Solar Controller :

System :

Pressurized Tank :

OW 150

Φ 360mm, SUS304L

SUS304L Stamping Molding

Φ 460mm, 304 Stainless Steel

50mm High Density Pressure Injected Polyurethane Foam

Magnesium Rod

6 Bar / 99°C

3/4 IN. Stainless Steel Socket

3kW DN25 Incoloy 800 Backup Heating Element

Water Temperature Reading / Automatic Backup Heater

Indirect System

850 kPa

OW 300

OW 300 Xtreme

Φ 360mm, SUS316L

SUS316L Stamping Molding

Authorized Agent :



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