

Non Pressurized solar water heater

For water heating available with 100-300 L tank :

Non-pressurized solar water heater is a cost-effective system for residential hot water applications. This system is designed according to thermosiphon principle and operating with proportion difference between cold water and hot water. The water heated by vacuum tube is held in the storage tank where the insulation preserves the heat.

Installation types :

Pitched roof , flat roof .

Advantages and benefits :

- Cost-effective solar water heating solution
- Long operating life time but low in maintenance and repair requirements.
- Customized solar water heating solutions.
- High energy yield and low heat loss due to the high vacuum of the evacuated tubes and PU insulation.
- High-quality stainless steel in the inner tank to continuously maintain a good water quality.

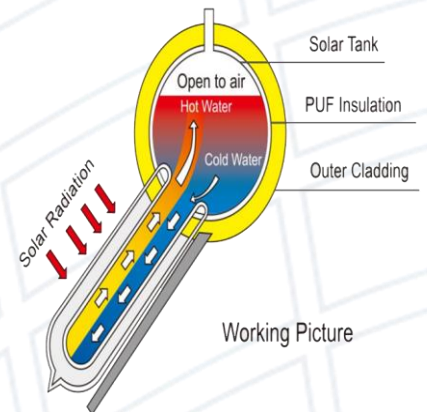
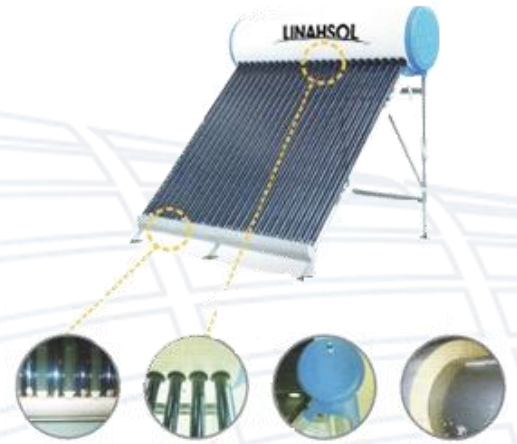
Scope of delivery :

tank , aluminum bracket , vacuum tubes.

Solar water heater based on thermosiphon principle :

This type of solar water heater use the sun to heat the working fluid (mostly water) in the vacuum tubes. The solar collector absorb solar radiation, converts the sunlight to heat and transfers it to the water. The heated water naturally rises through the solar collector into the tank where the cooler water at the base of the tank is forced out and descends to the bottom of the collector (thermosiphon circulation). The circulation will be interrupted when there is no solar radiation.

Whereas active solar water heating system rely on electric pumps, valves, and controllers to circulate the water through the vacuum tube collector, a thermosiphon system relies on gravity and tendency for water to naturally circulate as it is heated . Since complex mechanical liquid pumps are not necessary, this types of systems are a reliable and cost-effective solution for hot water generation. Thermosiphon systems are mainly used in regions with high solar radiation and good water quality.



certifications standards :



Data sheet :

Series (standard)			LP-100L	LP-200L	LP-300L
General info	Rated operating pressure	Mpa	0.06	0.06	0.06
	Gross surface area	m ²	1.44	2.64	4.42
	Aperture area	m ²	0.92	1.62	2.70
	Installation dimensions (LxWxH)	mm	1053x 1976 x 1342	2086 x 2005 x 1342	2713 x 1976 x 1342
Water tank	Tank dimensions	mm	φ 472 x 1503	φ 472 x 1883	φ 472 x 2713
	Tank weight	kg	19	30	40
	Insulation of tank	material / mm	Polyurethane / 45	Polyurethane / 45	Polyurethane / 45
	Material inner tank	material		Stainless steel SUS304-2B	
	Diameter / thickness inner tank	mm		φ 385 / .5	
	Material outer tank	material		White painted steel	
	Diameter / thickness outer tank	mm		φ 472/ 0.4	
tube	Type of vacuum tubes			φ 58x1800 mm vacuum tube	
	Evacuated tubes	no.	10	20	30
Bracket	Bracket	material / colour		Aluminum alloy / Silver white	
	Bracket inclination	degree		30	
	Weight	kg	6	9.5	11.5
Others	Electric heating	w		1500 , with thermostate	
	TP valve Temp. / Pressure	°c / Mpa		85 / 0.6	
	DIN CERTCO regisration number			011-752715A	