



evergreen power limited

2009 - 2010 edition

## Solar Thermal System Non-Pressurized System

*your valued solar partner*



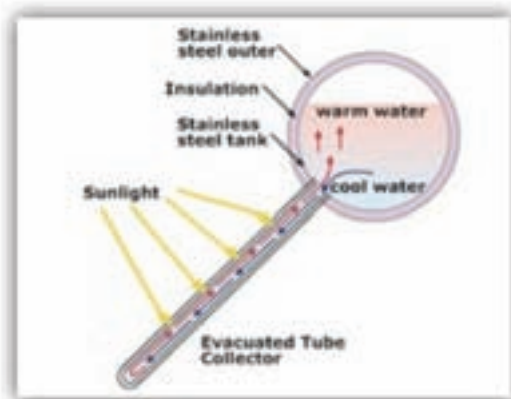
[www.evergreenpower.com.hk](http://www.evergreenpower.com.hk)

**Evergreen Power Limited (EPL)** is Asia's leading supplier of solar lighting, heating and power system. We specialize in delivering practical solar applications for our customers and partners. Based in Hong Kong, EPL believes solar green energy will become inevitable part of life in the 21st century and beyond. **Our aim is to deliver cost effective solar solution.** During these years, we have acquired strong technical expertise and experience working with agencies and distributors in Asia, Europe and Africa. We believe in long term, mutually beneficial relationships with our customers and create value through collaboration to enhance customer competitiveness. **Quality is what we built in each and every of our products which are backed by our extended warranty.** We have successfully delivered systems for powering computers, mobile phones and lightings to schools and communities in Africa and street illumination in Asia and other remote locations where electricity is not readily available.

**Clean. Green. Efficient.** Household heating is the major consumer of energy in most homes. Installing a solar hot water system will not only help the environment by reducing CO2 emission, it can also reduce your heating bill by up to 80%.

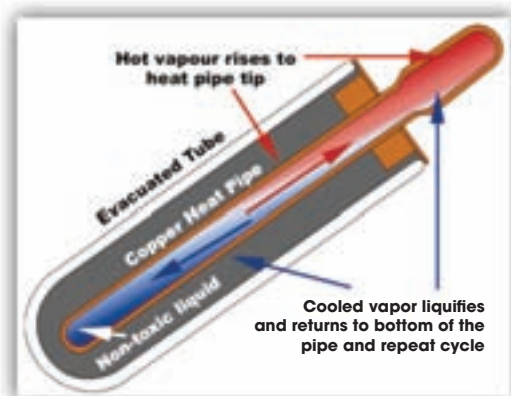


**EPL Solar Water Heater** is a clean, cost effective solution that uses the sun's energy to heat your water. The appliance is attractive, safe, and reliable with minimal maintenance required over its long operational life. Our solar water heating systems are backed by a 5 year limited warranty. By choosing to install a solar water heating system in your home, you can also increase the property value of your home and reducing your monthly electricity bills.



**Thermosiphon Solar Water Heater** relies on the natural circulation of water between the collector and the tank or heat exchanger. As water in the vacuum tubes is heated, it rises naturally into the elevated tank while cooler heavier water in the tank flows down to the bottom of the vacuum tubes, causing circulation throughout the system.

For best results, place the top of the collectors at least one foot (30 cm) below the bottom of the tank. Greater height differential will result in greater flow. Larger pipe, shorter runs, and gentle bends will make for an adequate flow rate.



**Evacuated Tube** technology delivers significantly better performance than traditional absorbers in the market today. Their advanced design incorporates tubes that consist of 2 layers of borosilicate glass with a vacuum layer between them. This vacuum acts like a thermos flask, retaining up to 97% of the thermal energy, resulting in increased efficiency. The Sun's thermal energy is then transferred to the manifold via the heat pipe located inside each tube.

The small amount of evaporative liquid in each tube is super heated by the Sun's energy and forms a vapor. The vapor rises to the top of each pipe; this heat is then transferred to the water flowing through the manifold. The heated water is then returned to the tank. The cylindrical design of the tubes ensures effective collection of the Sun's thermal energy throughout the day.

### Galvanized Steel:

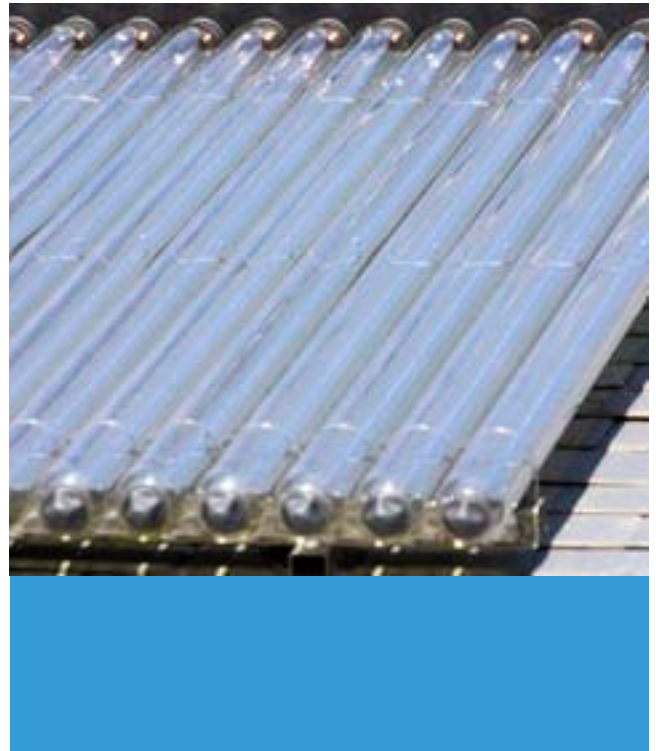


### Stainless Steel:



### KEY FEATURES

1. Easy to install – no electricity required – no more bills
2. Internationally certified solar thermal system- solar mark and TUV-mark
3. Available in galvanised and stainless steel models
4. Reliable and efficient with adjustable frame height suitable for all roof angles
5. Factory tested to work in varied angle between 25 to 65 degree
6. Double wall high quality evacuated tubes – 25mm hail impact rated
7. No pump - no mechanical movement – Five years limited Warranty
8. Works on natural convection currents of hot water
9. Double walled insulated SUS-304-2b food grade water tank
10. Optional water fill float valve for automatic operation
11. Optional digital temperature readout



## SPECIFICATIONS

Model	Number of Tubes	Dimension (mm)					Tank Capacity (litres)
		Outer Tank Diameter	Tube Length	Tube Diameter	Width	Overall Weight (kg) (empty tank)	
EPL-12-1500	12				701	40.80	80
EPL-15-1500	15				863	48.00	100
EPL-18-1500	18	420	1500	47	1025	55.20	120
EPL-20-1500	20				1133	61.00	130
EPL-24-1500	24				1349	71.60	150
EPL-30-1500	30				1673	85.00	200
EPL-12-1800	12				844	59.00	120
EPL-15-1800	15				1042	69.50	150
EPL-18-1800	18	470	1800	58	1240	82.00	180
EPL-20-1800	20				1372	90.00	200
EPL-24-1800	24				1636	110.50	240
EPL-30-1800	30				2032	137.00	300

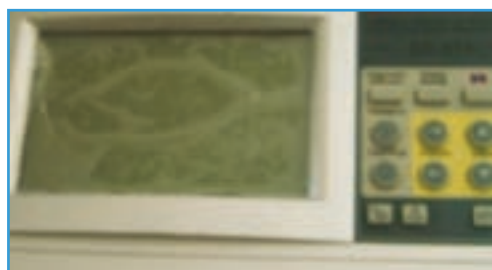
## RECOMMENDED TANK SIZE

100 litres 1 - 2 persons

200 litres 3 - 4 persons

300 litres 5 - 6 persons

## SYSTEM OPTIONS



**System Controller** with clear LCD display of time, relays, errors and temperatures



**Back-up Electric Heater** to provide constant hot water during cloudy and low sunlight period 1000W~1500W available



**System Assistant Tank** to provide automatic operation