



# SUN EARTH INC.

Quality Solar Energy Products

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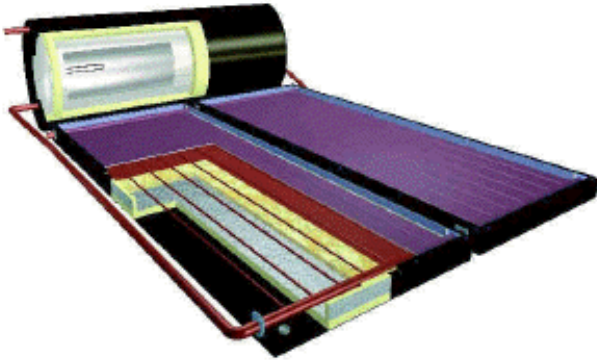
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## SunSiphon Thermosiphon Unit



*Cutaway of Open-Loop SunSiphon System*



*SunSiphon Installed on Tiled Residential Roof*

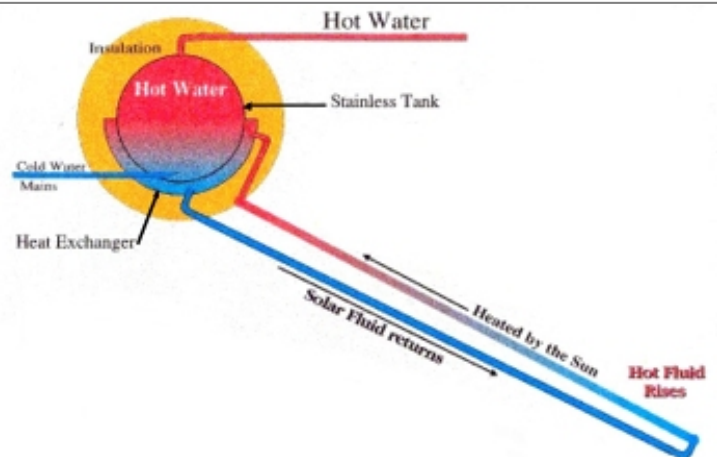
Since 1992 SunEarth has teamed with Edward's Energy Systems of Perth, Australia, a world leader in the manufacture of 316L stainless steel storage tanks and boilers, to market a packaged thermosiphon system under the brand name of 'SunSiphon' in North America and the Pacific Basin. The SunEarth/Edward's collaboration offers the best of two continents – the world's finest thermosiphon storage tank and rugged, high performance SunEarth flat plate solar collectors. The SunSiphon is available in both open-loop and jacketed closed-loop configurations to serve in any climate.

### How Does a Thermosiphon System Work?

A Thermosiphon unit is a completely passive design that relies on buoyancy effects to circulate fluid through the collectors as opposed to the pumps and controllers found in active systems.

When sunlight strikes the collectors in the SunSiphon system it heats the food-grade antifreeze within them, which then rises due to buoyancy into the jacket-style heat exchanger on the bottom of the storage tank. Here the antifreeze transfers heat into the tank, becomes cooler, and sinks to the bottom of the collectors to repeat the process.

During periods of no sun, the cool fluid in the base of the collectors is not heated, does not rise, and thereby stops circulation of the antifreeze. In this manner, thermosiphon units achieve the operational characteristics of active systems but without the pumps and controls



*Diagram courtesy Edward's Energy Systems*

## Storage Tank Specifications

Tank Model Number	Capacity (US gal)	Diameter (in)	Length (in)	Dry Weight (lbs)	Booster (Watts)
GX48	48	22	48	88	2,400
GX80	80	22	75	128	4,800
GX116	116	22	108	194	4,800

## Total System Specifications

SunEarth Model Number	Collector Model	No. of Collectors	Overall Width (in)	Overall Length (in)	Collector Area (sq. ft.)	Max Pressure (psig)	Total Wet Weight (psig)
EPGX48-21	EP21	1	48	98	21.21	150	564
EPGX48-24	EP24	1	48	120	24.61	150	572
EPGX48-32	EP32	1	48	120	32.79	150	602
EPGX80-40	EP40	1	75	144	40.81	150	941
EPGX80-42	EP21	2	82	98	42.42	150	946
EPGX80-48	EP24	2	75	120	49.22	150	963
EPGX80-63	EP21	3	122	98	63.63	150	1,022
EPGX80-64	EP32	2	98	120	65.58	150	1,021
EPGX116-63	EP21	3	123	98	63.63	150	1,388
EPGX116-64	EP32	2	108	120	65.58	150	1,389
EPGX116-80	EP40	2	108	144	81.62	150	1,480

**Note:** For Imperial collectors substitute an 'I' for the 'E' in the model number prefix,



[SunSiphon Specification Sheet \(88 kB\)](#)



[SunSiphon Warranty \(88 kB\)](#)



[SunSiphon Manual \(1,244 kB\)](#)



[SunSiphon System Ratings \(OG-300\)](#)