

# THERMOSIPHON SYSTEMS

The Right Choice

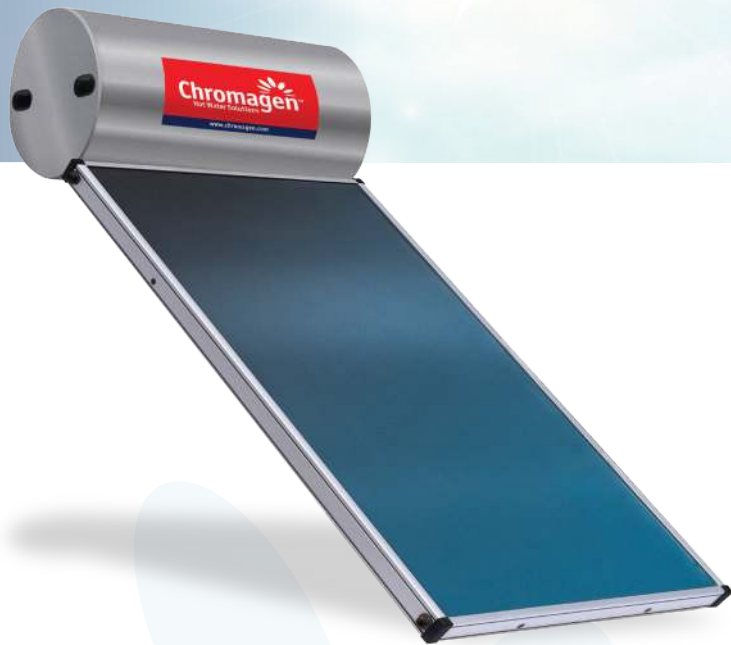
## The Right Choice

EVERY HOUR, EVERY DAY

Chromagen is a leading global company that develops, manufactures and sells advanced hot water, energy-saving solutions which promote environmental sustainability.

Founded in 1962 in Israel, the company has invested the last years in bringing innovation, quality and cost-saving solutions to a diverse range of projects worldwide – including single homes, multi-story apartment buildings, hotels, hospitals, industrial plants, and other commercial projects.

Since its establishment, Chromagen has continuously expanded and established two subsidiaries in Australia and Spain, as well as a solid network of distributors who help serve customers in over 40 countries worldwide. Today, Chromagen is recognized as a pioneer of hot water energy saving solutions and is positioned as one of the top 10 largest flat plate collector manufacturers in the world.



The right choice  [chromagen.com](http://chromagen.com)

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# Thermosiphon Systems

Chromagen's Thermosiphon solar heating system delivers high efficiency and low-maintenance. The system provides hot water after only a few hours of sunlight. This is the eco-friendly answer to a family's hot water needs. This streamlined system uses natural water circulation and doesn't require a pump or control unit. It includes a solar collector and a storage tank. All Chromagen systems are supplied complete with connection fittings.



## Thermosiphon Systems

### Solar Collector

Highly efficient, coated absorber plate, painted galvanized steel or aluminum case, tempered solar glass and polyurethane insulation. Net area: 1.5 – 3.5 m<sup>2</sup>.

### Steel Stand

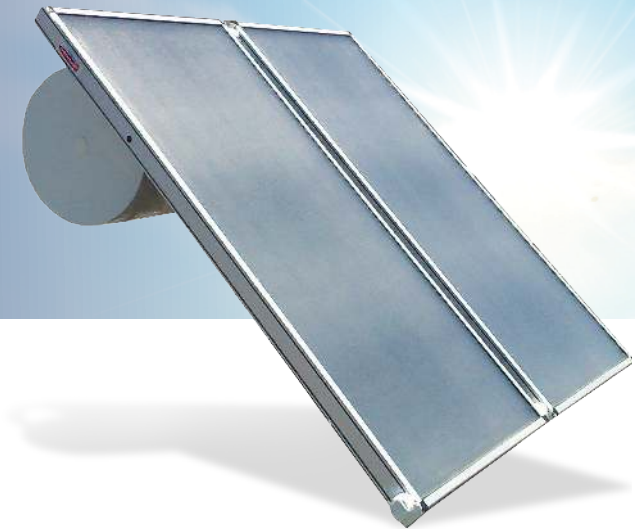
Chromagen supplies a variety of stands and racks for flat or inclined roof installations. Chromagen stands are made of galvanized painted steel to ensure high durability in harsh conditions.

### Solar Storage Tank

Solar storage tanks range from 80-300 liters, which have internal steel casing over enamel coating. The external shells are polyester-coated, galvanized steel or aluminum. Also included are the polyurethane insulation and electric backup. Specific to closed-loop systems are heat-exchangers.

### Connecting Kit

All Chromagen systems are supplied with a connecting kit that includes all the required accessories for installation.



## Meeting Your Needs

Chromagen meets customer requirements and provides appropriate collectors and storage tanks according to size. The following table indicates efficient configurations. There may be variations according to output demands and climate.

Tank Size	Collector Model	Collector's Gross Area
120liter	K or D	1.65 m <sup>2</sup> / 2.02 m <sup>2</sup>
150liter	D or E	2.02 m <sup>2</sup> / 2.34 m <sup>2</sup>
200liter	F or 2x K	2.77 m <sup>2</sup> / 2x 1.65 m <sup>2</sup>
300liter	2x D or 2x E	2x 2.02 m <sup>2</sup> / 2x 2.34 m <sup>2</sup>

## Open-loop or Closed-loop

**Open-loop** systems are both simple and economical. They are best suited for warm regions, because they operate with potable water only. Hot water from the collector mixes with the supply water in the storage tank, so a single freeze could destroy the system. Open-loop systems are not recommended in extreme hard-water areas, since scale buildup in the collectors is likely to hinder their operation.

Daily water consumption per individual is 30 - 50 L



**Closed-loop** systems prevent freezing and scale buildup. Heated anti-freeze solution from the collector flows into the tank's heat-exchanger and then returns to the collector. An electric backup makes up the energy deficiency during periods of cloudy weather.