



## How Do the Flat Plate Solar Collector works?

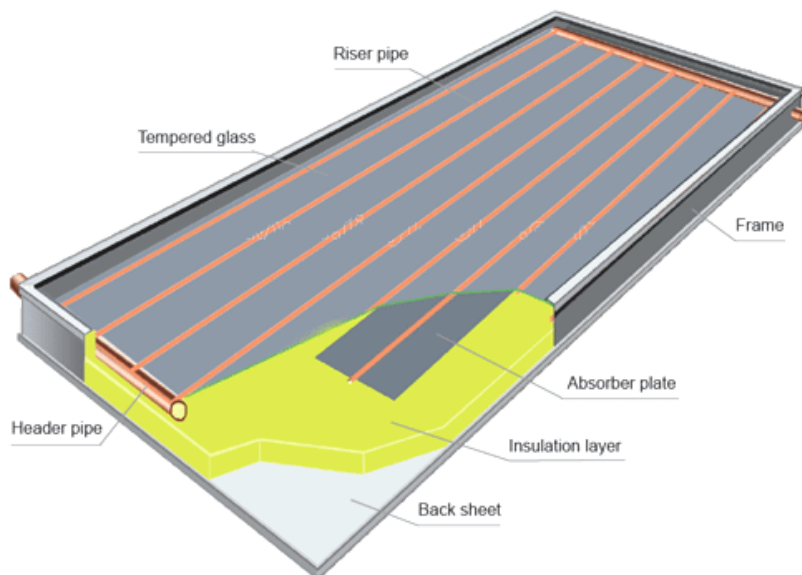
- 1) Connect with pressure water tank and workstation. Water is circulated through the header via intermittent pump cycling. Each time the water circulates through the header, the temperatures is raised by 5-10°C. Throughout the day, the water in the tank is gradually heated.
- 2) Solar absorption: solar radiation is absorbed by the solar tubes and converted into heat.
- 3) Solar heat transfer: heat pipes conduct the heat from within the solar tube up to the header pipe

## Features:

- 1) Cover a window on heat pipe solar collector, has better appearance.
- 2) Reliable and efficient twin-glass solar tubes
- 3) Copper heat pipes for rapid heat transfer
- 4) Easy plug-in installation
- 5) Free maintenance
- 6) Work pressure: 8bars
- 7) Stable solar conversion during the day
- 8) The perfect solar collector for domestic solar water heater systems
- 9) Ideal for commercial solar water heating applications

# Flat Plate Solar Collector

# Model No:SC Series



Flat plate solar collector is a metal box with a glass cover (called glazing) on top and a colored absorber plate at the middle. The sides and bottom of the collector are usually insulated to minimize heat loss. Sunlight passes through the glazing and strikes the absorber plate, which heats up, changing solar energy into heat energy. The heat is transferred to liquid passing through pipes attached to the absorber plate.

Flat plate solar collectors are an excellent solution for your solar hot water heating requirements. Utilize the power of the sun to heat your domestic hot water. JinYI flat plate collectors are also suitable for commercial applications including residential buildings, car washes, and boiler systems.

flat Plate collectors can be integrated with your existing hot water system to accommodate up to 80% of your hot water requirements. In addition to domestic hot water system, our collectors may also be used in radiant floors and base board heating systems.

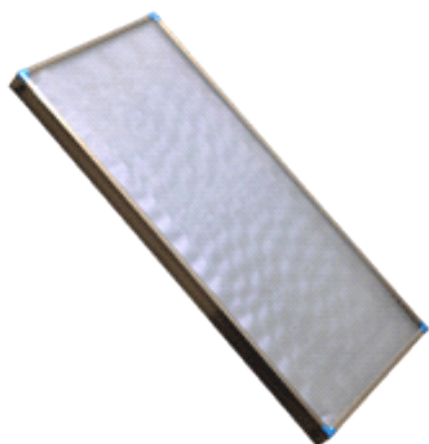
Solar Flat Plate collectors are typically recommend for use in warmer climates simply because they are designed with larger absorber areas that are not insulated from the colder weather. The JinYI vacuum tube solar collector prove to be more efficient in colder climates and are recommended for use is these areas.

## Specification:

MADEL	Dimensions W×L×H(mm)	Cross area (m2)	Daily output(L)	Packing dimension	Loading Qty (set)		
					20'	40'	40'HQ
SC-3-80-2	2000*1060*80	2	120-160	2020*1100*90	145	306	346
SC-4-80-2	2000*1560*80	2	120-160	2020*1100*90	145	306	346

# Flat Plate Solar Collector

# Model No:SC Series



Model: SC-3

Flat plate solar collectors

Coating: Black chrome

Absorptance:  $\geq 92\% \pm 2\%$

Emittance:  $\leq 8\% \pm 2\%$

Material & thickness of glass: Tempered glass, 4mm

Material & thickness of frame: Aluminum alloy,  $\delta=0.8-1.2\text{mm}$

Insulation layer: Glass wool

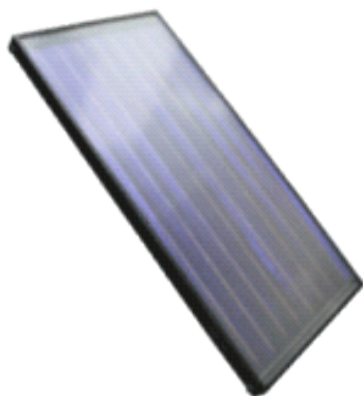
Fluid content: 2.22L

Working pressure: 0.6MPa

Riser pipe: 8pcs

The characteristic of Flat plate solar collector ( BLACK CHROME)

1. Using the entire core copper plate, black chrome coating. Absorption rate of  $\geq 92\%$ , the launch rate of  $\leq 8\% \pm 2\%$ ; with a high efficiency, the use of reliable characteristics;
2. Glass cover the use of tempered glass, transmittance  $\geq 85\%$ ;
3. solar Collector has a high pressure capacity, and thermal insulation performance is better than the Flat plate solar collector ( Cu-Al composite) and Flat solar collector ( All copper) series, commonly used in the northern region of the pressure of domestic solar water heaters, as well as large-scale central solar hot water project.
4. At  $0\text{ }^{\circ}\text{C}$  and above the environment, water can be directly heated to  $0\text{ }^{\circ}\text{C}$  below freezing measures must take into account the Environment.



Model: SC-4

Flat plate solar collector

Coating: Blue titanium

Absorptance:  $\geq 95\% \pm 2\%$

Emittance:  $\leq 5\% \pm 2\%$

Material & thickness of glass: Low iron tempered glass, 3.2mm

Material & thickness of frame: Aluminum alloy,  $\delta=0.8-1.2\text{mm}$

Insulation layer: Glass wool

Fluid content: 2.22L

Workig pressure: 0.6MPa

Riser pipe: 8pcs

The characteristic of Flat Plate Solar Collector ( Selective titanium-coating)

1. Using the entire core copper plate, highly selective titanium-coating. Absorption rate of  $\geq 95\% \pm 2\%$ , the launch rate of  $\leq 5\% \pm 2\%$ ; with a high efficiency, the use of reliable characteristics;
2. Glass cover the use of tempered glass, transmittance  $\geq 85\%$ ;
3. solar Collector has a high pressure capacity, and thermal insulation performance is better than the Flat plate solar collector ( Cu-Al composite) and Flat solar collector ( All copper) series, commonly used in the northern region of the pressure of domestic solar water heaters, as well as large-scale central solar hot water project.
4. At  $0\text{ }^{\circ}\text{C}$  and above the environment, water can be directly heated to  $0\text{ }^{\circ}\text{C}$  below freezing measures must take into account the environment.