## SOLAR WATER HEATER MAKE YOUR LIFE GREEN



#### ZHEJIANG SIDITE NEW ENERGY CO., LTD

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www.sidite-solar.com













# MAKE YOUR LIFE GREEN







## Solar Heater Comfort Life



Zhejiang Sidite New Energy Co., Ltd. was founded in 2000, which locates in Jiaxing city, Zhejiang province. Sidite is specialized in solar water heater, solar collector, solar hot water system, and solar power system.

We have the production line, with 19 years' experience in product manufacturing, 50% of our prod

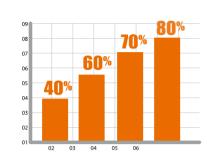
ucts be exported to overseas market.

Our products have got certificates INMETRO, Solar Keymark, CE, CCC, ISO9001 and ISO14001 till now, and have been exported to more than 100 countries such as Germany, Netherland, Poland, Russia, Danmark, Finland, USA, Canada, Mexico, Brazil, Argentina, Australia, Middle East, Africa and so on. The best satisfaction of the customer is our target. We will continue to uphold the principle of "Customer and Prestige first" to establish and develop mutual benefit relationship with customers all over the world.

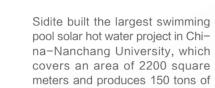


## Company Overview

# History



### 2008



hot water per day.

### 2000

Zhejiang Sidite New Energy Co., Ltd was founded, it is a national high-tech enterprise.

### 2010

Sidite moved to a new plant that has a total construction area of 32000 square meters and introduced the solar energy production equipments from domestic and abroad. It's a modern, hightech park with R&D, production and sales as one set. The annual production capacity exceeds 300 thousands units.



Sidite solar products have been exported to more than 100 countries and regions, such as Europe, America, etc.

### 2014

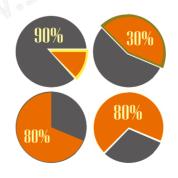
Sidite applied for the Madrid International Registration of Trademark (of Belgium, the Netherlands, Luxembourg, Germany, Kenya, the Russian Federation and Australia).

### 2009

Sidite went abroad the first time to attend the China (Jordan) Commodities Fair. From then on, each year Sidite attends the International Solar Energy Exhibition in Munich, Germany, the United States Dallas International Solar Power Exhibition, Sao Paulo International Fair, Crocus Expo., Moscow, Dubai International Convention & Exhibition Centre, Canton Fair, etc. Sidite constantly develops new customers in international market. In the same year,Sidite was identified as " the National High-tech Enterprise" .

 $201^{\circ}$ 

Sidite set up a solar-thermal laboratory.



### 2005

Sidite got ISO9001:2008 Quality Management System Certificate, ISO14001 Environment Management System Certificate. We obtained Solar Keymark, CCC Certificate, EU Export CE Certificate, SGS and SRCC Certificate, etc.

### 2018

Successful development of pressurized double inner tanks solar water heater.









SOLAR WATER HEATER 08



ISO9001 ISO14001 CE INMETRO

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# Certification





### Green Management

### Green products Green environmental management

The company introduces the automatic production lines, including automatic production line, multi-station NC machining line, Italy high pressure foaming line, automatic packing line.

99.5% One-time pass rate

100%

**Resolve customer** 

complaints rate

We have a lectors, tan quality. The report ognized by

11 SOLAR WATER HEATER

### Certification of enterprises solar thermal lab

We have a technical laboratory. The lab can test the tubes, solar collectors, tanks and the whole system to ensure our products with high

The report issued by Sidite test center has the qualifications that recognized by 62 countries and regions, reach the objective of producing high quality solar products.



Pressurized Double Innér Tanks Solar Water Heater

NEW

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# TwoInner Tanks Double Comfortable

### Feature

Suitable water temperature
2. Big water flow
3. Rapid heat water
4. Convenient installation

### SD-P Pressurized Double Inner Tanks Solar Water Heater

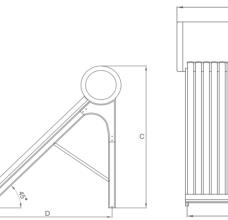
### The characteristic:

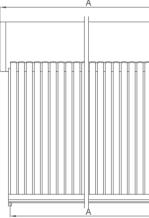


- 2. It takes the advantage of the tap water's pressure.
- 3. Completely automatic operation.
- 4. The water can be heated rapidly.
- 5. Use the non-pressurized inner tank as the heat exchanger, simple to install and use.
- Directly connected with city water without a circulation pump.
- 7. Working pressure (0.6MPa)



#### Structure Drawing:



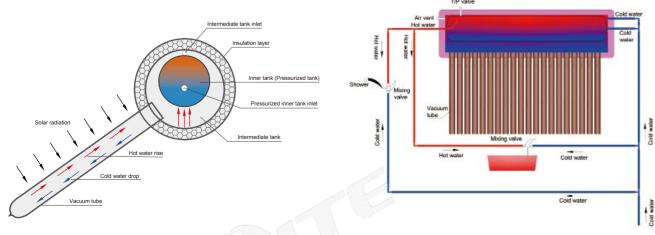


Model	SD-P-15	SD-P-20	SD-P-25	SD-P-30					
Tube Quantity (pcs)	15	20	25	30					
Water Tank									
Net Capacity (L)	130	165	205	240					
Gross Capacity (L)	165	215	265	315					
Diamater Of Inner/Outer Tank(mm)		Φ360	/Φ470						
Length Of Outer Tank L(mm)	1380	1755	2130	2505					
Length Of Middle Tank L(mm)	1290	1665	2040	2415					
Length Of Inner Tank L(mm)	1250	1625	2000	2375					
Material Of Outer Tank		Color Steel							
Material Of Middle Tank	SUS304								
Material Of Inner Tank	SUS304								
Material Of Insulation		Polyur	ethane						
Vacuum Tube									
Diameter/Length(mm)		Φ58	/ 1800						
Material		High Borosili	cate Glass3.3						
Frame	2 Feets ( Le	eft-To-Right )	3 Feets ( Left	-Middle-Right)					
Material		Stainless Steel /	Galvanized Steel						
Angle		4	5°						
Item Size									
A (mm)	1380	1755	2130	2505					
B (mm)	1110	1485	1860	2235					
C (mm)	1750	1750	1750	1750					
C/2 (mm)			930	1117.5					
D (mm)	1600	1600	1600	1600					

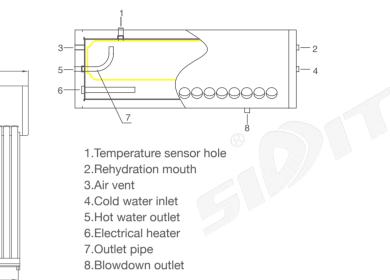
### Working principle:

The vacuum tube absorbs the sunlight and turns it into the heat energy, heating the water in the tubes. Depending on the thermosiphon principle, the hot water from the tubes goes into water tank, while the cold water from the tank goes down to the tubes. There are double inner tanks, first inner tank is non pressurized, the second inner tank is pressurized.

User do not use the water from the non-pressurized tank directly. The cold water goes into the pressurized inner tank, be heated, then comes out from other side for user being.







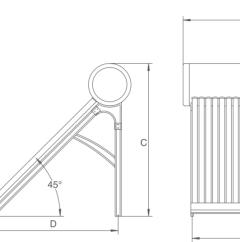
### SD-T Non-Pressurized Solar Water Heater With Assistant Tank

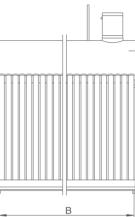
### The characteristic:

- 1. With high quality assistant tank and automatic wa-
- ter supply.
- Easy to install for flat roof and pitched roof, auxiliary heating by electrical heater.
- 3. High pressure polyurethane foaming with thickness 55mm.
- 4. Stable and reliable performance, well wind resistance.
- 5. SUS304-2B inner tank, silicon seals.
- 6. High strength galvanized steel bracket.
- 7. Eco and economical, improves the environment and save your fuel cost.



#### **Structure Drawing:**

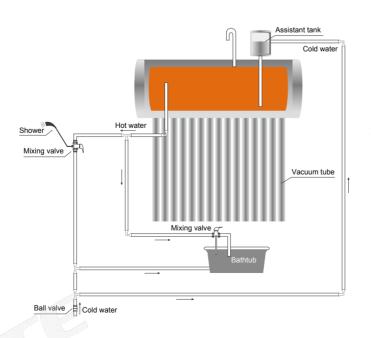




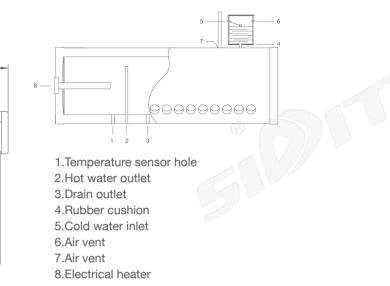
Model	SD-T-10	SD-T-15	SD-T-18	SD-T-20	SD-T-24	SD-T-25	SD-T-30		
Tube Quantity (pcs)	10	15	18	20	24	25	30		
Water Tank									
Net Capacity (L)	80	120	140	155	185	195	230		
Gross Capacity (L)	105	155	185	205	245	255	305		
Material Of Inner Tank (mm)			SL	IS304-2B / SUS31	6L				
Material Of Outer Tank			SUS	304 / Color Steel I	Plate				
Material Of Insulation	Polyurethane								
Vacuum Tube									
Diameter/Length(mm)				Φ58 / 1800					
Material			High	Borosilicate Glas	s3.3				
Frame		2 Feets ( Le	eft-To-Right )		3 Fee	ets ( Left-Middle-R	ight )		
Angle				45°					
Item Size									
A (mm)	935	1310	1535	1685	1985	2060	2435		
B (mm)	735	1110	1335	1485	1785	1860	2235		
C (mm)	1700	1700	1700	1700	1700	1700	1700		
C/2 (mm)					892.5	930	1255		
D (mm)	1430	1430	1430	1430	1430	1430	1430		

### Working principle:

This model operates to feed water automatically. Using thermosiphon system-depending on the different density between solar hot water and cold water, a water flowing cycle is created in the tubes. Hot water flows automatically upwards while the cold water flows down. The water in the storage tank will be heated from this natural circulation.







### SD-S(SD-G) | Non-pressurized Solar Water Heater

### The characteristic:

iary heating by electrical heater.

5. SUS304-2B inner tank, silicon seals.

and save your fuel cost.

2. Easy to install for flat roof and pitched roof, auxil-

3. High pressure polyurethane foaming with thick-

4. Stable and reliable performance, well wind re-

6. SUS304-2B/BA outer tank, against rust and cor-

7. Eco and economical, improves the environment

1. With intelligent controller.

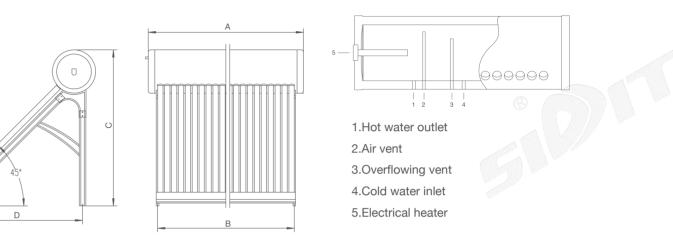
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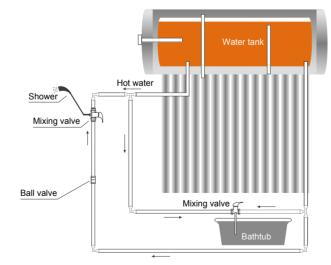
### **Structure Drawing:**



Model	SD-S-10 (SD-G-10)	SD-S-15 (SD-G-15)	SD-S-18 (SD-G-18)	SD-S-20 (SD-G-20)	SD-S-24 (SD-G-24)	SD-S-25 (SD-G-25)	SD-S-30 (SD-G-30)		
Tube Quantity (pcs)	10	15	18	20	24	25	30		
Water Tank									
Net Capacity (L)	80	120	140	155	185	195	230		
Gross Capacity (L)	105	155	185	205	245	255	305		
Diamater Of Inner/Outer Tank (mm)				Φ360/Φ470					
Length Of Outer Tank L (mm)	935	1310	1535	1685	1985	2060	2435		
Length Of Inner Tank L (mm)	795	1170	1395	1545	1845	1920	2295		
Material Of Inner Tank (mm)		SUS304-2B / SUS316L							
Material Of Outer Tank		Stainless Steel Plate / Color Steel Plate							
Material Of Insulation				Polyurethane					
Vacuum Tube									
Diameter/Length(mm)				Φ58 / 1800					
Material			High	Borosilicate Glas	\$\$3.3				
Frame		2 Feets ( Le	eft-To-Right)		3 Fee	ets ( Left-Middle-R	light )		
Material			Stainles	s Steel / Galvaniz	ed Steel				
Angle				45°					
Item Size									
A (mm)	935	1310	1535	1685	1985	2060	2435		
B (mm)	730	1110	1335	1485	1785	1860	2235		
C (mm)	1700	1700	1700	1700	1700	1700	1700		
C/2 (mm)					892.5	930	1255		
D (mm)	1430	1430	1430	1430	1430	1430	1430		

### Working principle:

This model operates to feed water automatically. Using thermosiphon system-depending on the different density between solar hot water and cold water, a water flowing cycle is created in the tubes. Hot water flows antomatically upwards while the cold water flows down. The water in the storage tank will be heated from this natural circulation.

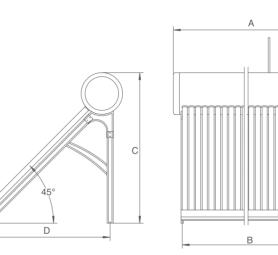




- 1. It takes the advantage of the tap water's pres-
- 2. Completely automatic operation.
- 3. The water can be heated rapidly.
- 4. Use the copper coil as the heat exchanger, simply install and use.
- 5. No risk for corrosion or scale deposit, suitable for inferiority water area.
- 6. Easy to install for flat roof and pitched roof, auxiliary heating by electrical heater.
- 7. High pressure polyurethane foaming with thickness 55mm.



### Structure Drawing:

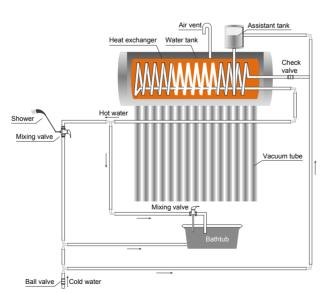


Model	SP-C-15	SP-C-18	SP-C-20	SP-C-24	SP-C-25	SP-C-30				
Tube Quantity (pcs)	15	18	20	24	25	30				
Water Tank										
Net Capacity (L)	120	140	155	185	195	230				
Gross Capacity (L)	155	185	205	245	255	305				
Material Of Inner Tank (mm)			SUS304-2B	/SUS316L						
Material Of Outer Tank		SUS304 / Color Steel Plate								
Material Of Insulation		Polyurethane								
Heat-Transfer Coil										
Coil Material		Copper / SUS304								
Coil Diameter (mm)		Φ12 / Φ20								
Heat Transfer Area (m²)	0.75/1.50	1.13/2.26	1.13/2.26	1.32/2.64	1.32/2.64	1.32/2.64				
Vacuum Tube										
Diameter/Length (mm)			Φ58/0	<b>⊅</b> 1800						
Material			High Borosilio	cate Glass3.3						
Frame	2	Feets ( Left-To-Righ	nt )	3 Fe	ets ( Left-Middle-Rig	ght )				
Material			Galvaniz	ed Steel						
Angle			4	5°						
Item Size										
A (mm)	1310	1535	1685	1985	2060	2435				
B (mm)	1110	1335	1485	1785	1860	2235				
C (mm)	1700	1700	1700	1700	1700	1700				
C/2 (mm)				892.5	930	1255				
D (mm)	1430	1430	1430	1430	1430	1430				

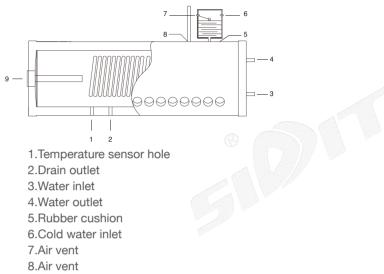
### Working principle:

The vacuum tube absorbs the sunlight and turns it into the heat energy, heating the water in the tubes. Depending on the thermosiphon principle, the hot water from the tubes goes into water tank, while the cold water from the tank goes down to the tubes.

User do not use the water from the water tank directly. The cold water comes into the copper exchanger, being heated, then goes out from other side for use.







9.Electrical heater

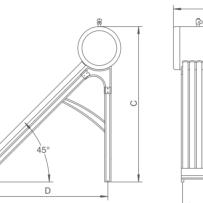
### SP-H Integrated Pressurized Solar Water Heater

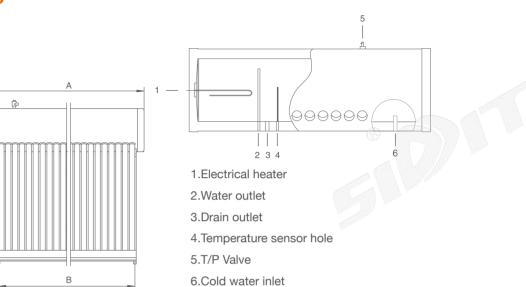
### The characteristic:

- 1. The water will not flow into the tubes directly, the
- system will still work even the tube broken.
- 2. With intelligent controller.
- 3. Anti-freezing, all-year-round service even in extremely cold area.
- 4. Adopting the metal-copper (heat pipe).
- 5. Directly connected with city water without a circulation pump.
- 6. Working pressure (0.6MPa).



### Structure Drawing:

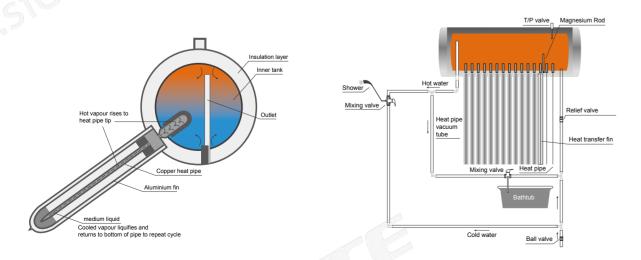




### Working principle:

Integrative pressurized type is a renovation model for the solar hot water, which adopts heat pipe technology, combines heat pipe solar collector with pressurized tank to form a compact model.

The vacuum tubes absorb and convert solar energy into thermal energy, and transfer to the central heat pipe via the aluminum fin. The heat pipes have tiny amount of purified water sealed inside at depressurized condition. When heated, the medium inside the heat pipes vaporizes at low temperature (about 30°C), the vapor rises to the condenser and heat energy is conducted to water (inside the tank). When vapor is cooled down, and becomes condensate, falling to the bottom of heat pipe. By continuously circulating in this way, heat is carried from outside to the water inside the tank.



Model	SP-H-10	SP-H-15	SP-H-18	SP-H-20	SP-H-24	SP-H-25	SP-H-30	
Tube Quantity (pcs)	10	15	18	20	24	25	30	
Water Tank								
Net Capacity (L)	83	123	144	160	190	200	235	
Material Of Inner Tank (mm)		SUS304-2B / SUS316L						
Material Of Outer Tank		SUS304 / Color Steel Plate						
Material Of Insulation		Polyurethane						
Vacuum Tube								
Diameter/Length(mm)				Φ58 / 1800				
Material			High	Borosilicate Glas	ss3.3			
Frame		2 Feets ( Le	eft-To-Right )		3 Fee	ets ( Left-Middle-R	light )	
Angle				45°				
Item Size								
A (mm)	1010	1385	1610	1760	2060	2135	2510	
B (mm)	735	1110	1335	1485	1785	1860	2235	
C (mm)	1700	1700	1700	1700	1700	1700	1700	
C/2 (mm)			—		892.5	930	1255	
D (mm)	1055	1430	1430	1430	1430	1430	1430	

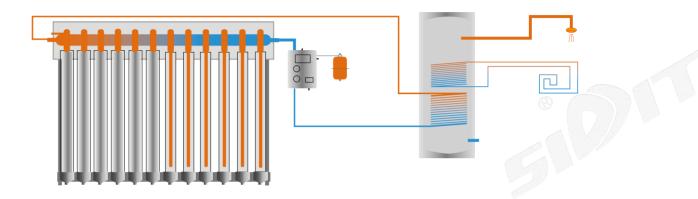


### SS-M Split Pressurized Solar Water Heater



### The characteristics:

- 1. The solar collector and water tank can be placed separately, easy to install, easy for building integration.
- 2. The water tank is indirect tank with copper coil exchangers, completely solve the problem of collector in freezing and hard water area.
- 3. Copper coil exchangers can realize the cycle of solar energy and the cycle of electric heater or gas for supplementary energy.
- 4. Reliable electric back-up with protection against dry heating and thermal cut-out.
- 5. Low breakdown rate and easy maintenance.
- 6. Easy operation and intelligent control.



### Working principle:

The SS-M series, in streamline closed circuit systems which are recommended for frost prone and poor water quality situations. Antifreeze fluid is used to circulation through the collectors. The heat collected from the panels is transferred from the fluid pipes to the water tank by a heat exchanger. The circulator is regulated by a control unit on the water heater. This ensures the optimum use of the sun's free energy. Copper coils exchanger can realize the cycle of solar energy and the cycle for electric heater or gas for supplementary energy to ensure you always have hot water on tap at any weather.

Model	SS-M-15	SS-M-20	SS-M-25	SS-M-30	SS-M-40	SS-M-50		
Tank Capacity (L)	150	200	250	300	400	500		
Copper Coil Qty			0 /	1/2				
Solar Collector Model	SC-H-15	SC-H-20	SC-H-25	SC-H-30	SC-H-20	SC-H-25		
Solar Collector Qty			1		2			
Work Station Model			SF	8961S				
Expansion Tank	12L			3L	:	24L		
Rated Pressure	0.6Mpa							



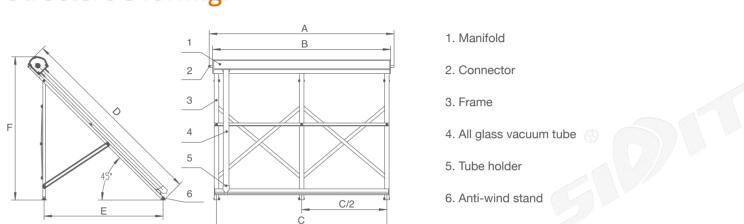
### SC-HP(SC-H) | Heat Pipe Solar Collector

### The characteristic:

- 1. Twin-glass vacuum tubes: Reliable, efficient, high temperature resistant, anti-freezing.
- 2. There is no water in the vacuum tube, the system willstill work even the tube broken.
- 3. Red copper heat pipe, one-way transferring, fast heat transfer, less heat loss, low temperature resistance, it can be used in -35℃.
- Aluminum alloy manifold and bracket, corrosion resistance, easy to install. It's suitable for flat and sloping roof.
- 5. High temperature resistant polyurethane foaming / rock wool high density, good thermal insulation properties.
- 6. High quality copper manifold, its testing pressure is 1MPa.
- 7. Solar Keymark certification approved .
- 8. Eco and economical, Improves the environment and save your fuel cost.



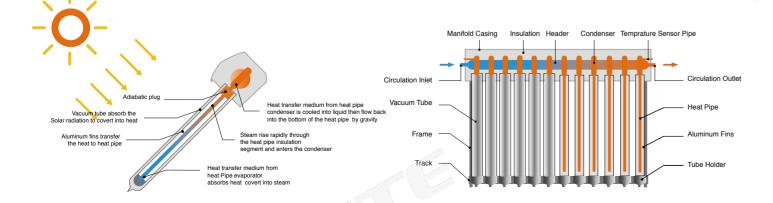
### Structure Drawing:



Model	SC-HP-10 (SC-H-10)	SC-HP-15 (SC-H-15)	SC-HP-18 (SC-H-18)	SC-HP-20 (SC-H-20)	SC-HP-24 (SC-H-24)	SC-HP-25 (SC-H-25)	SC-HP-30 (SC-H-30)
Tube Quantity (pcs)	10	15	18	20	24	25	30
Vacuum Tube Diameter/Length (mm)				Φ58 / 1800			
Vacuum Tube Material			High	Borosilicate Glas	ss 3.3		
Heat Pipe (mm)				Φ14/1700			
Insulation Material/Thickness (mm)			Polyuretha	ne Foaming / Roc	ck Wool /40		
Rated Pressure (mpa)				0.6			
Aperture Area (m²)	1	1.5	1.8	2	2.4	2.5	3
Gross Area (m²)	1.56	2.3	2.74	3.04	3.63	3.77	4.51
Power (w) 1000w/m <sup>2</sup>	620	870	1047	1165	1401	1457	1748
Net Weight (kg)	38.25	50.75	59.75	64.75	79	83.35	98.7
A (mm)	895	1270	1495	1645	1945	2020	2395
B (mm)	800	1175	1400	1550	1850	1925	2300
C (mm)	725	1100	1325	1475	1775	1850	2225
C/2 (mm)					887.5	925	1112.5
D (mm)	1980	1980	1980	1980	1980	1980	1980
E (mm)	1240	1240	1240	1240	1240	1240	1240
F (mm)	1470	1470	1470	1470	1470	1470	1470

### Working principle:

The vacuum tubes absorb solar radiation and transfer into heat, pass to the fin by the tube wall, and then transfer to the heat pipe by the fin, after heat pipe absorbs heat, heat pipe end (evaporation section) vaporization, transfer to condenser, then circulation because of gravity, heating the water(medium) in the manifold.





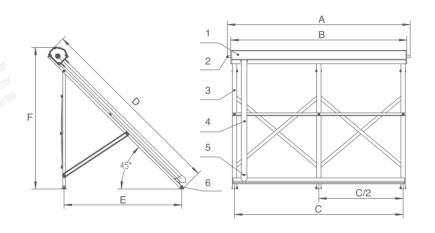
### SC-H24 24mm Condenser Heat Pipe Solar Collector

### The characteristic:

- 1. Twin-glass vacuum tubes: reliable, efficient, high temperature resistant, anti-freezing.
- 2. There is no water in the vacuum tube, the system will stillwork even the tube broken.
- 3. Red copper heat pipe, one-way transferring, fast heat transfer, less heat loss, low temperature resistance, it can be used in -35℃.
- Aluminum alloy manifold and bracket, corrosion resistance, easy to install. It's suitable for flat and sloping roof.
- 5. High temperature resistant rock wool / glass wool, high density, good thermal insulation properties.
- 6. High quality copper manifold, its testing pressure is 1MPa.
- 7. Solar Keymark certification approved.
- 8. Eco and economical, improves the environment and save your fuel cost.
- 9. Condenser 24\*70mm, large heat exchange area, higher heat transfer power.



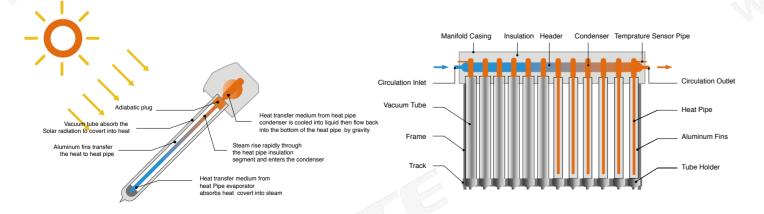
### Structure Drawing:



Model	SC-H24-10	SC-H24-15	SC-H24-18	SC-H24-20	SC-H24-24	SC-H24-25	SC-H24-30
Tube Quantity (pcs)	10	15	18	20	24	25	30
Vacuum Tube Diameter/Length (mm)				Φ58 / 1800			
Vacuum Tube Material			High	Borosilicate Glas	s 3.3		
Heat Pipe (mm)				<b>Ф</b> 24 / 1700			
Insulation Material/Thickness (mm)				Rock Wool / 55			
Rated Pressure (mpa)				0.6			
Aperture Area (m²)	1	1.5	1.8	2	2.4	2.5	3
Gross Area (m²)	1.6	2.21	2.81	3.12	3.72	3.87	4.8
Power (w) 1000w/m <sup>2</sup>	744	1044	1256	1398	1681	1748	2098
Net Weight (kg)	40.25	52.75	61.75	66.75	81.00	85.35	100.70
A (mm)	895	1270	1495	1645	1945	2020	2395
B (mm)	800	1175	1400	1550	1850	1925	2300
C (mm)	725	1100	1325	1475	1775	1850	2225
C/2 (mm)					887.5	925	1112.5
D (mm)	2010	2010	2010	2010	2010	2010	2010
E (mm)	1240	1240	1240	1240	1240	1240	1240
F (mm)	1505	1505	1505	1505	1505	1505	1505

### Working principle:

The vacuum tubes absorb solar radiation and transfer into heat, pass to the fin by the tube wall, and then transfer to the heat pipe by the fin, after heat pipe absorbs heat, heat pipe end (evaporation section) vaporization, transfer to condenser, then circulation because of gravity, heating the water(medium) in the manifold.





- 1. Manifold
- 2. Connector
- 3. Frame
- 4. All glass vacuum tube
- 5. Tube holder
- 6. Anti-wind stand

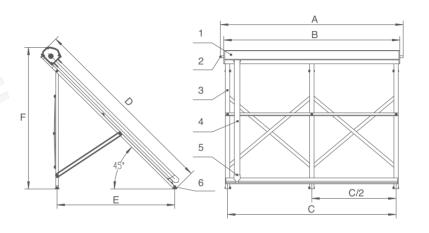
### SC-HD Inlet And Outlet At The Bottom Of Manifold Solar Collector

### The characteristic:

- 1. Twin-glass vacuum tubes: reliable, efficient, high temperature resistant, anti-freezing.
- 2. There is no water in the vacuum tube, the system will stillwork even the tube broken.
- 3. Red copper heat pipe, one-way transferring, fast heat transfer, less heat loss, low temperature resistance, it can be used in -35℃.
- 4. Aluminum alloy manifold and bracket, corrosion resistance, easy to install. It's suitable for flat and sloping roof.
- 5. The inlet and outlet are on the bottom of manifold; It looks more artistic than traditional manifold.
- 6. Good sealed in end of cover, It can provide higher insulation efficiency.
- 7. The advantage is that It can empty the medium( water or deicing fluid) in the manifold.



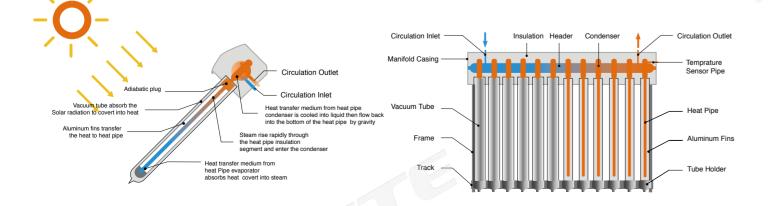
### Structure Drawing:



Model	SC-HD-10	SC-HD-15	SC-HD-18	SC-HD-20	SC-HD-24	SC-HD-25	SC-HD-30
Tube Quantity (pcs)	10	15	18	20	24	25	30
Vacuum Tube Diameter/Length (mm)				Φ58 / 1800			
Vacuum Tube Material			High	n Borosilicate Glas	s 3.3		
Insulation Material/Thickness (mm)				Rock Wool / 40			
Rated Pressure (mpa)				0.6			
Aperture Area (m²)	1	1.5	1.8	2	2.4	2.5	3
Gross Area (m²)	1.56	2.3	2.74	3.04	3.63	3.77	4.51
Power (w)1000w/m <sup>2</sup>	620	870	1047	1165	1401	1457	1748
Net Weight (kg)	38.25	50.75	59.75	64.75	79	83.35	98.7
A (mm)	895	1270	1495	1645	1945	2020	2395
B (mm)	800	1175	1400	1550	1850	1925	2300
C (mm)	725	1100	1325	1475	1775	1850	2225
C/2 (mm)					887.5	925	1112.5
D (mm)	1980	1980	1980	1980	1980	1980	1980
E (mm)	1240	1240	1240	1240	1240	1240	1240
F (mm)	1470	1470	1470	1470	1470	1470	1470

### Working principle:

The vacuum tubes absorb solar radiation and transfer into heat, pass to the fin by the tube wall, and then transfer to the heat pipe by the fin, after heat pipe absorbs heat, heat pipe end (evaporation section) vaporization, transfer to condenser, then circulation because of gravity, heating the water(medium) in the manifold.





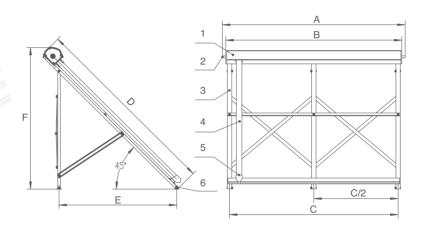
1.	Manifold

- 2. Connector
- 3. Frame
- 4. All glass vacuum tube
- 5. Tube holder
- 6. Anti-wind stand

- 1. Glass metal seal type heat pipe vacuum tube, high temperature resistant, anti-freezing, vacuum insulation.
- 2.  $\Phi$ 70 mm vacuum tubes, metal absorber, large aperture area, high efficiency, high temperature, fast heat transfer.
- Aluminum alloy manifold and bracket, surface oxidation or spray anti-corrosion treatment, corrosion resistance, light and easy to install.
- Thick heat preservation layer, use high temperature resistant rock wool / glass wool, molding, high density, low coefficient of heat conductivity.
- 5. Pressure inner liner, corrosion resistance, high purity and high quality brass processing, its testing pressure is 1MPa.
- Suitable for cold regions, hot water, heating, air conditioning and other solar energy heat collector application.



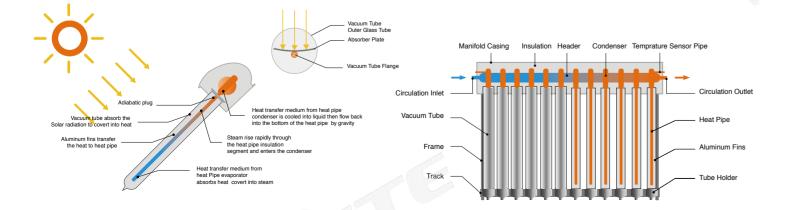
### Structure Drawing:



Model	SC-HM-10	SC-HM-15	SC-HM-18	SC-HM-20	SC-HM-24	SC-HM-25	SC-HM-30
Tube Quantity (pcs)	10	15	18	20	24	25	30
Tube Diameter/ Length (mm	)			Φ70 / 2000			
Material Of Vacuum Tube			High	Borosilicate Glas	s 3.3		
Insulation Material/Thickness (mm)	s old			Rock Wool / 40			
Collecting Area (m <sup>2</sup> )	1.37	2.05	2.46	2.73	3.28	3.41	4.1
Total Area (m²)	2.2	3.28	3.92	4.35	5.21	5.43	6.5
Flow Rate (L/min)	1.06	1.49	1.79	2	2.4	2.5	3
Power (w) 1000w/m <sup>2</sup>	744	1044	1256	1398	1681	1748	2098
N.w (kg)	40.25	52.75	61.75	66.75	81	85.35	100.7
A (mm)	1115	1615	1915	2115	2515	2615	3115
B (mm)	1025	1525	1825	2025	2425	2525	3025
C (mm)	950	1450	1750	1950	2350	2450	2950
C/2 (mm)			875	975	1175	1225	1475
D (mm)	2150	2150	2150	2150	2150	2150	2150
E (mm)	1375	1240	1240	1240	1240	1240	1240
F (mm)	1590	1590	1590	1590	1590	1590	1590

### Working principle:

The vacuum tubes absorb solar radiation and transfer into heat, the metallic absorber plate will transfer heat to heat pipe, after heat pipe absorbs heat, heat pipe end (evaporation section) vaporization, transfer to condenser, then circulation because of gravity, heating the water(medium) in the manifold.



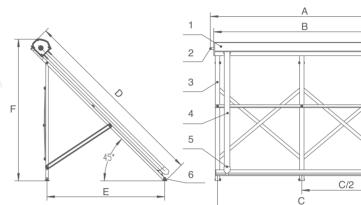


- 1. Manifold
- 2. Connector
- 3. Frame
- 4. All glass vacuum tube
- 5. Tube holder
- 6. Anti-wind stand

- 1. Twin-glass vacuum tubes: reliable, efficient, high temperature resistant, anti-freezing.
- 2. There is no water in the vacuum tube, the system will still work even the tube broken.
- 3. U pipe, most efficient.
- Aluminum alloy manifold and bracket, corrosion resistance, easy to install. It's suitable for flat and sloping roof.
- Flexible Installation, installation angle from 0° to 90°, roof and wall hanging installation.
- 6. High temperature resistant rock wool / glass wool, high density, good thermal insulation properties.
- High quality copper manifold, its testing pressure is 1MPa.
- 8. Eco and economical, improves the environment and save your fuel cost.



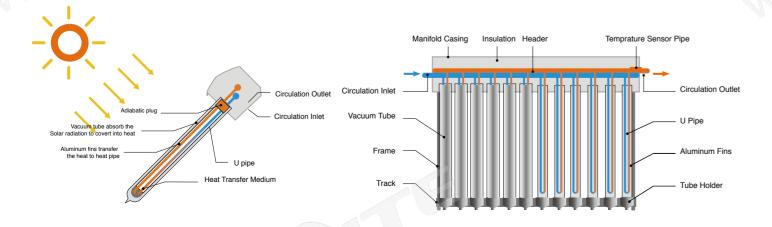
### Structure Drawing:



Model	SC-U-15
Tube Quantity (pcs)	15
Diameter/Length Of Vacuum Tube (mm)	
Material Of Vacuum Tube	
Insulation Material/Thickness (mm)	
Rated Pressure (mpa)	
Aperture Area (m²)	1.5
Gross Area (m²)	2.3
Power (w)1000w/m <sup>2</sup>	870
Net Weight (kg)	50.75
A (mm)	1270
B (mm)	1175
C (mm)	1100
C/2 (mm)	
D (mm)	1980
E (mm)	1240
F (mm)	1470

### Working principle:

The vacuum tubes absorb solar radiation and transfer into heat, pass to the fin by the tube wall, and then transfer to the U pipe by the fin, U pipe absorbs heat then transfer to medium, cold medium continuously flow into inlet and heated by U pipe, then flow out from the outlet, so that obtain the heat of solar energy heating water.







#### 1. Manifold

- 2. Connector
- 3. Frame
- 4. All glass vacuum tube
- 5. Tube holder
- 6. Anti-wind stand

SC-L	J-18	SC-U-20
18	3	20
Φ58/	1800	
High Borosilic	ate Glass3.3	
Rock Wo	ool / 40	
0.6	6	
1.8	8	2
2.7	74	3.04
104	47	1165
59.7	75	64.75
149	95	1645
140	00	1550
132	25	1475
	_	
198	30	1980
124	40	1240
147	70	1470

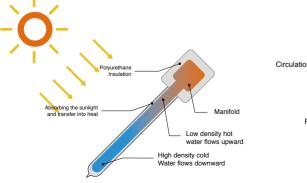
- Unpressurized,can be used for natural circulation system,large collector area,easy to assemble and install.
- Polyurethane insulation, high pressure foaming process, small heat conductivity coefficient, not easy to loss heat.
- Designed for commercial buildings, Suitable for schools, dormitories, hotel, bath center and other public construction.
- 4. Can be used in large swimming pool heating,industrial hot water and other hot water system.
- 5. High efficient all glass vacuum tube, high collect thermal efficiency, high heat preservation efficiency.

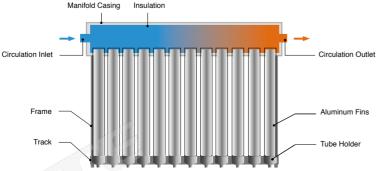


### Working principle:

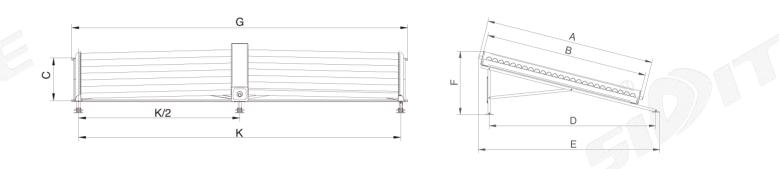
This model operates to feed water automatically.

Using thermosiphon system- depending on the different density between hot water and cold water, a water flowing cycle is created in the tubes. Hot water flows antomatically upwards while the cold water flows down. The water in the manifold will be heated from this natural circulation.





### Structure Drawing:



Model	SC-V-15	SC-V-20	SC-V-25	SC-V-30	SC-V-50	SC-V-60	
Tube Quantity (pcs)	15	20	25	30	50	60	
Tube Diameter/ Length (mm)	Φ58 / 1800						
Vacuum Tube Material	High Borosilicate Glass3.3						
Inner Tank Material			SUS	304			
Insulation Material/ Thickness (mm)			Polyureth	nane / 40			
Collecting Area (m <sup>2</sup> )	1.4	1.9	2.4	2.9	4.8	5.8	
Gross Area (m²)	2.36	3.12	3.86	4.62	7.72	8.24	
Collector Net Weight (kg)	45.75	50.75	59.75	64.75	120.5	129.5	
Horizontal Installation Size							
Angle	45°			15°			
A (mm)	1310	1685	2060	2435	2060	2435	
B (mm)	1185	1560	1974	2349	1974	2349	
C (mm)	1110	1485	1860	2335	1860	2335	
C/2 (mm)			930	1168			
D (mm)	2012	2012	2012	2012	2023	2360	
E (mm)	1265	1265	1265	1265	2200	2550	
F (mm)	1560	1560	1560	1560	770	860	
G (mm)					3715	3715	
H (mm)					3560	3560	
H/2 (mm)					1780	1780	

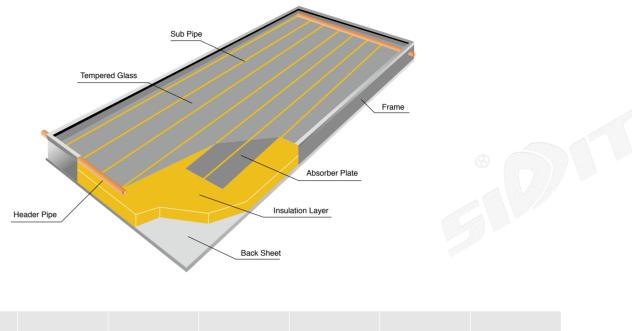


### SC-F | Flat Plate Solar Collector

### The characteristic:

- 1. High selective blue/black chrome coating applied for the absorber;
- 2. Laser welding between full aluminum absorber and copper tubes ensure good conductivity of heat and firm structure;
- 3. Tempered textured glass with high transmittance up to 92%;
- 4. Super large effective heat absorption area offers higher heating efficiency and more energy saving;
- 5. Mechanical load, freeze resistace, rain penetration, exposure, hail impact, external and internal shock tested etc.
- 6. 25 years life span with max 0.8Mpa pressure.

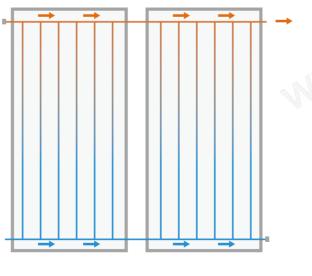




Model	SC-F-C/A	SC-F-C/A1	SC-F-C/BC	SC-F-C/BC1	SC-F-C/VC	SC-F-C/VC1		
Dimension:L*W*T		2000 X 100	00 X 80mm	mm				
Material Of Cover	Tempered Glass							
Thickness Of Cover			4n	nm				
Area (m²)			2.0	0m²				
Weight	36kg	37kg	37kg	38kg	38kg	38kg		
Dimension Of End Pipe	22 ×0.6mm	22 ×0.6mm	22 ×0.6mm	22 ×0.6mm	22 ×0.6mm	22 ×0.6mm		
Coating Material	Ultrasonic Welding	Aluminum Composite	Copper Belt Ultrasonic Welding	Aluminum Belt Laser Welding	Aluminum Belt Laser Welding	Aluminum Belt Laser Welding		
Material Of End Pipe	Copper Tp2	Coppertp2	Coppertp2	Coppertp2	Coppertp2	Coppertp2		
Size Of Fin	125mm*0.3mm	122mm*0.55mm	125mm*0.15mm	950mm*0.3mm	950mm*0.3mm	950mm*0.3mm		
Coating Of Surface	Anodic Oxidation	Anodic Oxidation	Black Chrome	Black Chrome	Chinese Blue Film	Germany Blue Film		
Max Working Pressure	0.6mpa							
Thickness Of Insulation Layer	Back: 30 mm Side:20 mm							
Max Temp Of Operation		≤200						
Material Of Insulation Layer	Glass Wool 6063 Aluminum Alloy							
Material Of Frame								
Material Of Back Cover			Embossed	Embossed Aluminum				
Seal Material	Epdm							

### Working principle:

Flat plate solar collector is a device for absorbing solar radiation and transferring heat to the medium, which is a kind of special heat exchanger, the medium in the collector heat exchanges with the sun. Flat plate solar collector is composed of absorbing plate core, shell, transparent cover plate, insulation materials and other related parts. Then heating circulation pipe and water tank, become a absorbing solar radiation equipment to heat the cold water.





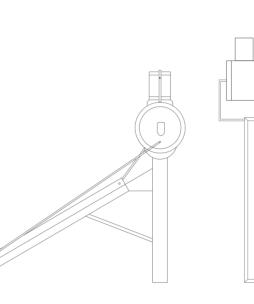
### SN-FT | Non Pressurized Flat Plate Solar Water Heater

### The characteristic:

- 1. Elegant and smart appearance, easy installation.
- Reliable electric back-up with protection against dry heating and thermal cut-out.
- 3. Easy operation and intelligent control.
- 4. Stainless steel inner tank SUS304 for good anti-corrosion.
- 5. With high quality flat solar collector with long service life.
- 6. Polyurethane insulation with good heat reservation.
- 7. Totally copper flow channels achieve low defect rate and easy maintenance, long service life.



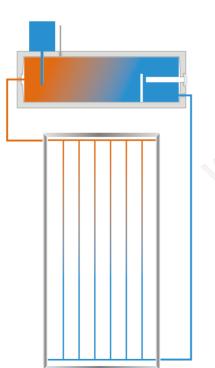
### Structure Drawing:



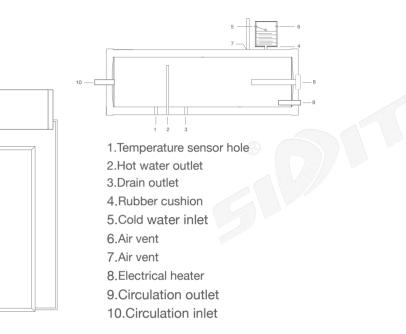


### Working principle:

Under normal operating conditions the potable water within the potable storage tank is heated by the solar collectors. For example, in an close circuit system where the household hot water is in the collector circuit, cold water is pushed downwards via the long external pipe from the storage tank to the bottom of the solar collector. As the water is heated in the absorber by the sun, it rises to the top of the collector then travels through the short external pipe into the storage tank.







N-FT -300A	SN-FT -150	SN-FT -200	SN-FT -300					
2	1	1	2					
	Sloping Roof(15°~30°)							
300	150	200	300					
SUS30	14							
r Steel Plate / Stai	inless Steel Plate							
Polyureth	blyurethane							
2000 X 100	0 X 80							
Black Chrome / Blue Film								
Steel Plate T1.2 /	Galvanized Steel							
		0°						

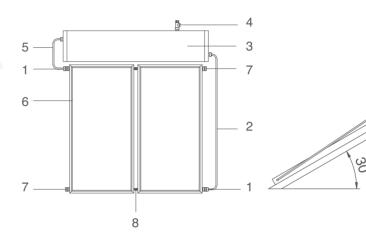
### SP-F | Flat Plate Pressurized Solar Water Heater

### The characteristic:

- 1. Thermosiphon direct system, easy piping work, higher efficiency.
- 2. Intelligent control, automatic water filling.
- Reliable electric back-up with protection against dry heating and thermal cut-out.
- 4. Pressurized water tank with SUS304-2B inner tank, good at anti-corrosion.
- 5. Operation under pressure to ensure comfortable shower water.
- Polyurethane layer foaming insulation for keeping temperature of water.
- Totally copper flow channels achieve low defect rate and easy maintenance, long service life.



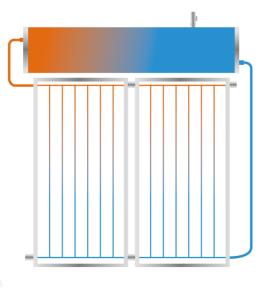
### Structure Drawing:



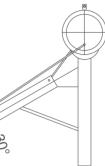
Model	SP-F-150A	SP-F -200A	SP-F -300A	SP-F -150	SP-F -200	SP-F -300		
Flat Plate Quantity (pcs)	1	COI	2	1	1	2		
Installing Type			Flat Roof / F	Pitched Roof				
Water Tank								
Water Tank Net Capacity (L)	150	200	300	150	200	300		
Inner Tank Material		SUS304						
Outer Tank Material		Color Steel Plate / Stainless Steel Plate						
Thermal Insulation Material		Polyurethane						
Rated Pressure	0.6mpa							
Flat Plate Solar Collector								
Dimensions (mm)	2000 X 1000 X 80							
Film	Black Chrome / Blue Film							
Material		Color Steel Plate / Galvanized Steel						

### Working principle:

Under normal operating conditions the potable water within the potable storage tank is heated by the solar collectors. For example, in an close circuit system where the household hot water is in the collector circuit, cold water is pushed downwards via the long external pipe from the storage tank to the bottom of the solar collector. As the water is heated in the absorber by the sun, it rises to the top of the collector then travels through the short external pipe into the storage tank.



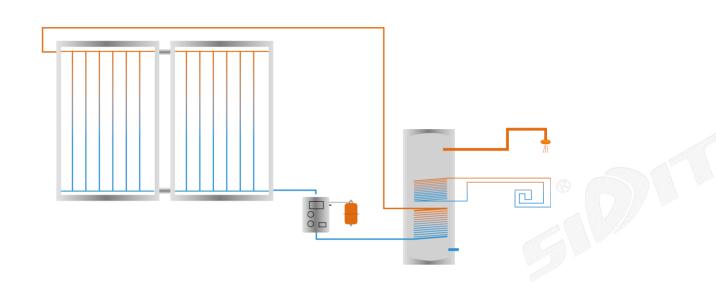




- 1.Circulation inlet/oulet
- 2.Circulation pipe
- 3.Tank
- 4.T/P valve
- 5.Circulation inlet/oulet
- 6.Flat plate collector
- 7.Copper plug
- 8.Copper connector

### SS-F Split Flat Plate Solar Water Heater





### Working principle:

The SS-F series, in streamline closed circuit systems which are recommended for frost prone and poor water quality situations. Antifreeze fluid is used to circulation through the collectors. The heat collected from the panels is transferred from the fluid pipes to the water tank by a heat exchanger. The circulator is regulated by a control unit on the water heater. This ensures the optimum use of the sun's free energy. Copper coils exchanger can realize the cycle of solar energy and the cycle for electric heater or gas for supplementary energy to ensure you always have hot water on tap at any weather.

Model	SS-F-150	SS-F-200	SS-F-250	SS-F-300	SS-F-400	SS-F-500	
Tank Volume (L)	150	200	250	300	450	500	
Panel Qty (pcs)	1	1	2	2	2	3	
Work Station	SR961S						
Expansion Tank	12	2L	11	BL	24L		
Recommend Flow	1.0~2.0L/min	1.2~2.5L/min	1.5~3.0L/min	3.0~5.0L/min	4.0~7.0L/min	5.0~8.0L/min	
Rated Pressure	0.6MPa						

### The characteristics:

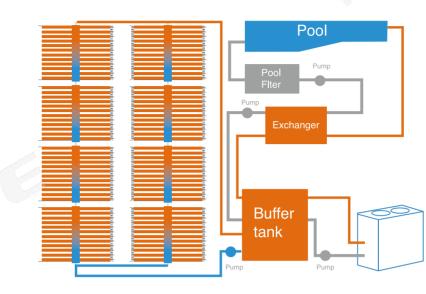
- 1. The solar collector and water tank can be placed separately, easy to install, easy for building integration.
- 2. The water tank is indirect tank with copper coil exchangers, completely solve the problem of collector in freezing and harsh water area.
- 3. Copper coil exchangers can realize the cycle of solar energy and the cycle of electric heater or gas for supplementary energy.
- 4. Reliable electric back-up with protection against dry heating and thermal cut-out.
- 5. With high quality flat solar collector and stainless steel water tank for long service life.
- 6. Totally copper flow channels achieve low defect rate and easy maintenance, long service life.

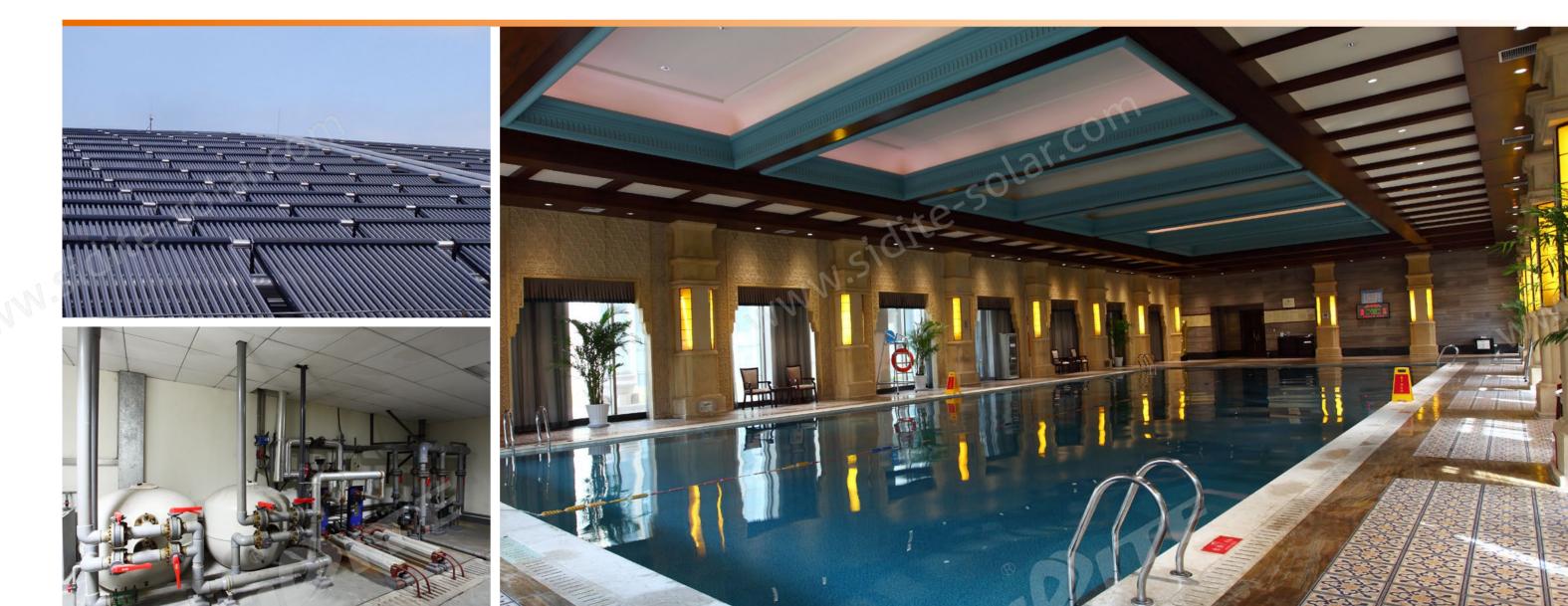


### SOLAR HOT WATER SYSTEM FOR SWIMMING POOL

#### Working Principle:

This system adopt centralized heating, centralized heat accumulation; solar collector be installed centralized and also install big thermal storage tank, swimming pool heat exchanger, solar controller system, circulation equipments and other auxiliary equipments on the equipment room or top roof. solar collector absorb the solar radiation and rise the temperature ,solar controller realize intelligent control, The heat transfer fluid of solar collector be heated and flow to swimming pool heat exchanger of hot water storage tank ; the heat exchanger heat the water of swimming pool; Based on the water temperature of swimming pool to set the solar control system, and solar hot water system and electricity, air source heat pumps and other equipment combine to achieve the Constant temperature of swimming pool.





#### System Characteristic:

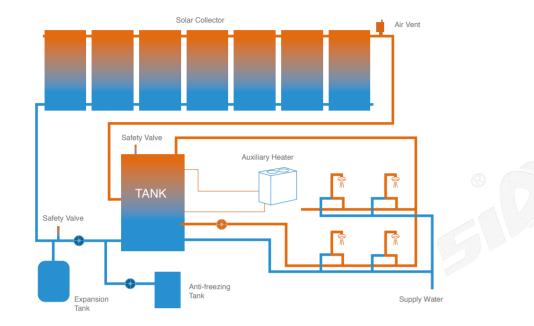
1. Solar collector be combined with a variety of architectural forms, to achieve the integration design of the building.

2. The solar hot water system be combined with solar collector, pipeline, circulation pump, solar water tank(with heat exchanger) and swimming pool heat exchanger ,solar controller system, adopting forced circulation and temperature difference control.

3. The solar hot water system use the water as the heat transfer fluid and the cost lower and easy to supplement , the system be open system, simple structure, easy installation. Circulating water of solar collector and circulating water of swimming pool make heat exchange through heat exchanger, isolated from each other, protect solar hot water system against corrosion, the system running more stable.

4. Optimal combination of various forms of energy, achieved constant temperature control of solar swimming pool;

### FLAT PLATE COLLECTOR SOLAR HOT WATER SYSTEM



#### Working Principle:

The solar hot water system adopt centralized heating, centralized heat accumulation; flat-plate collector be installed centralized and also install big thermal storage tank, solar controller system, circulation equipments and other auxiliary equipments on the equipment room or top roof.

Flat plate collector absorb the solar radiation and rise the temperature, solar controller realize intelligent control, The heat transfer fluid of flat plate collector be heated and flow to heat exchanger of hot water storage tank; the heat exchanger heat the water in the storage water tank so that the temperature of water in the water tank gradually increased, thereby obtaining hot water. Solar hot water systems and electricity, air source heat pumps and other equipment combine to achieve 24-hour hot water supply.

#### System Characteristic:

Flat plate Collector be combined with a variety of architectural forms, to achieve the integration design of the building.
The solar hot water system be included flat plate collector, pipeline, circulation pump, expansion tank, solar water tank(with heat exchanger) or other type heat exchanger combine with hot water tank, solar controller, adopting forced circulation and achieve variety of control functions.

3. Flat-plate collector cover with tempered glass , safety and unbreakable, and solar hot water system run under the pressure , the collector pipeline and hot water storage tank is indirect heat exchange form, and form independent heating circulation system, the system run more stable.

- 4. Achieving the 24hours solar hot water supply.
- 5. Optimal combination of various forms of energy.
- 6. Used in various large-scale centralized heating project.





### SOLAR HOT WATER SYSTEM FOR VILLA

#### Working principle:

The solar collector and water tank can be placed separately. The water tank have heat exchanger and electrical heater. The control system, circulation equipment and other accessory equipments installed on the staircase and roof.

The sun heating the solar collector, temperature rise, the intelligent control system start or stop the circulation pump. The heating medium circulating between the solar collector and water tank, making heat exchange through the heat exchanger to water tank, and then heating the water inside water tank. The solar heating system can working with electrical heater, gas heater and air source heat pump, it will provide hot water for 24 hours.

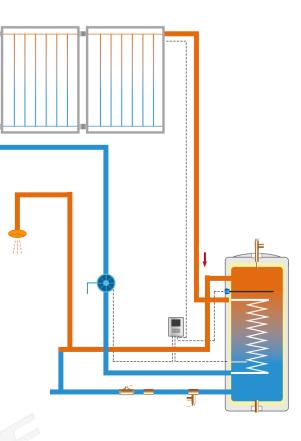
#### System Characteristic:

The solar collector and water tank can be placed separately, easy to install, easy for building integration.
The proper installation angle of solar collector, the most solar radiation absorbing, the highest heating efficiency.
The pressurized water tank uses the stainless steel inner tank. High pressure bearing, anti-corrosion, long service life.

4.Install the water tank in the suitable space of the house according the house structure, saving space.5.Intelligent controller, guarantee the average distribution of heat.

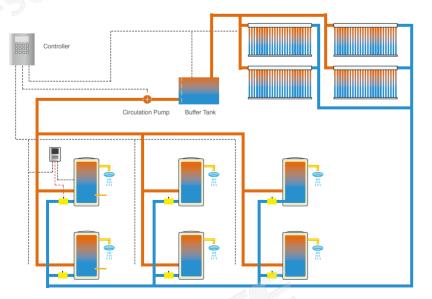








### **SOLAR HOT WATER** SYSTEM FOR APARTMENT



#### Working Principle:

The solar energy system solution is concentrated heating, separated heat storage. All the solar collectors installed on the roof together, the water tank have heat exchanger and electrical heater. The control system, circulation equipment and other accessory equipments installed on the staircase and roof.

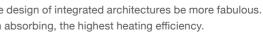
The sun heating the solar collector, temperature rise, the intelligent control system start or stop the circulation pump. The heating medium circulating between the solar collector and water tank, making heat exchange through the heat exchanger to water tank, and then heating the water inside water tank. The solar heating system can work with electrical heater, gas heater and air source heat pump, it will provide hot water for 24 hours.

#### System Characteristic:

1. The perfect combination of solar collector & various architecture let the design of integrated architectures be more fabulous. 2.The proper installation angle of solar colelctor, the most solar radiation absorbing, the highest heating efficiency. 3.The pressurized water tank uses the stainless steel inner tank. High pressure bearing, anti-corrosion, long service life. 4. Individual water tank for each apartment, separately controlling, satisfy the different requirement of hot water for users. 5.Install the water tank in the suitable space of the house according the house structure, saving space. 6.Intelligent controller, guarantee the average distribution of heat.









### ON/OFF GRID SOLAR POWER SYSTEM

#### Working Principle:

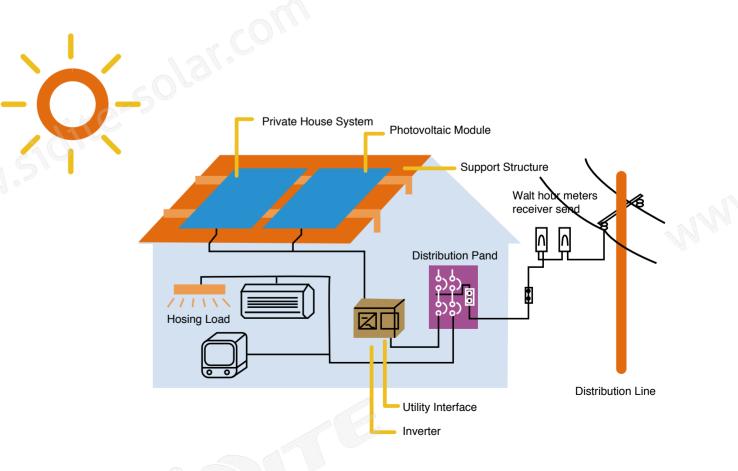
The array of a photovoltaic power system, or PV system, produces direct current (DC) power which fluctuates with the sunlight's intensity.

For practical use this usually requires conversion to certain desired voltages or alternating current (AC), through the use of inverters. Multiple solar cells are connected inside modules. Modules are wired together to form arrays, then tied to an inverter, which produces power at the desired voltage, and for AC, the desired frequency/phase.

Many residential PV systems are connected to the grid wherever available, especially in developed countries with large markets.

### System Characteristic:

- 1. High efficiency and clean renewable energy.
- 2. Energy saving: no consumption of conventional energy.
- 3. Environmental protection: no pollution to the environment.
- 4. Easy to install.
- 5. Disposable investment.
- 6. Relief the situation of power shortage in a certain.



### CORPORATE VISION

The trend of global warming is increasing, which brings a series of environmental problems, glaciers melting, sea level rising, biological diversity destruction, more extreme weather, threat to human survival environment. The human beings have reached a consensus that we must protect the Earth and create a green environment with low carbon.

Sidite has been specialized in the field of solar water heater since 2000, Sidite not only accumulated technology and rich experience in manufacturing, but also supply more than 20 million sets solar water heater to the worldwide. One set of solar water heater can save 1500kWh electric energy, 408kg reducing carbon emissions and 1177kg carbon dioxide per year. Sidite solar water heater has reduced 81.6 million tons carbon emissions and 235.4 million tons carbon dioxide during recent 10 years.

Sidite will ever on the way of energy conservation and environment protection, constant innovation, creating the green life by our solar thermal technology!



