

SOLAR

MAKE YOUR LIFE GREEN

SIDIT 



Founded in
2000

22 years'
experience

50% products
be exported to
overseas market

Sidite 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 most advanced production line in China, with 22 years' experience in product manufacturing, 50% of our products be exported to overseas market.

Our products have got certificates Solar Keymark, CE, CCC, ISO9001 and ISO14001 till now, and have been exported to

more than 100 countries such as Germany, Netherland, Poland, Russia, Denmark, 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.



History

2000

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

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".

2008

Sidite built the largest swimming pool solar hot water project in China-Nanchang University, which covers an area of 2200 square meters and produces 150 tons of hot water per day.



2010

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

2014

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

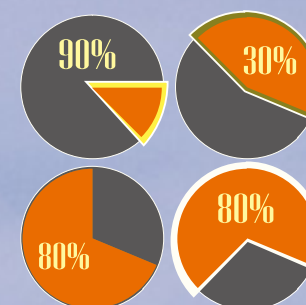


2018

Successful development of pressurized double inner tanks solar water heater.

2019

In August 2019, Sidite developed the group standard "Compact domestic solar water heating System" of Zhejiang Province, and it was officially implemented. In November 2019, Sidite obtained Zhejiang Manufacturing Certification, and entered Zhejiang Manufacturing word mark of "品" enterprises.



2022

In July 2022, Sidite won the energy management contract of the 4.43MWp rooftop photovoltaic power generation contract of Jiaxing Dongfang Steel Cord Co., LTD.

2023

In February 2023, Sidite's technical personnel have all medium-grade professional title, and 23 employees have been awarded the title of engineer.

2021

In 2021, Mr. Peizhong Qiu, general manager of Sidite, was hired by the Standardization Administration as a member of the National Household Appliances Standardization Technical Committee.





Green Management

Green products

Green environmental management

The company introduces the advanced 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

Certification of enterprises solar thermal lab

We have the international level of testing. The lab can test the tubes, solar collectors, tanks and the whole system to ensure our products with high quality.

The report issued by Sidite testing center has the qualifications that recognized by more than 100 countries and regions, reach the objective of producing high quality solar products.



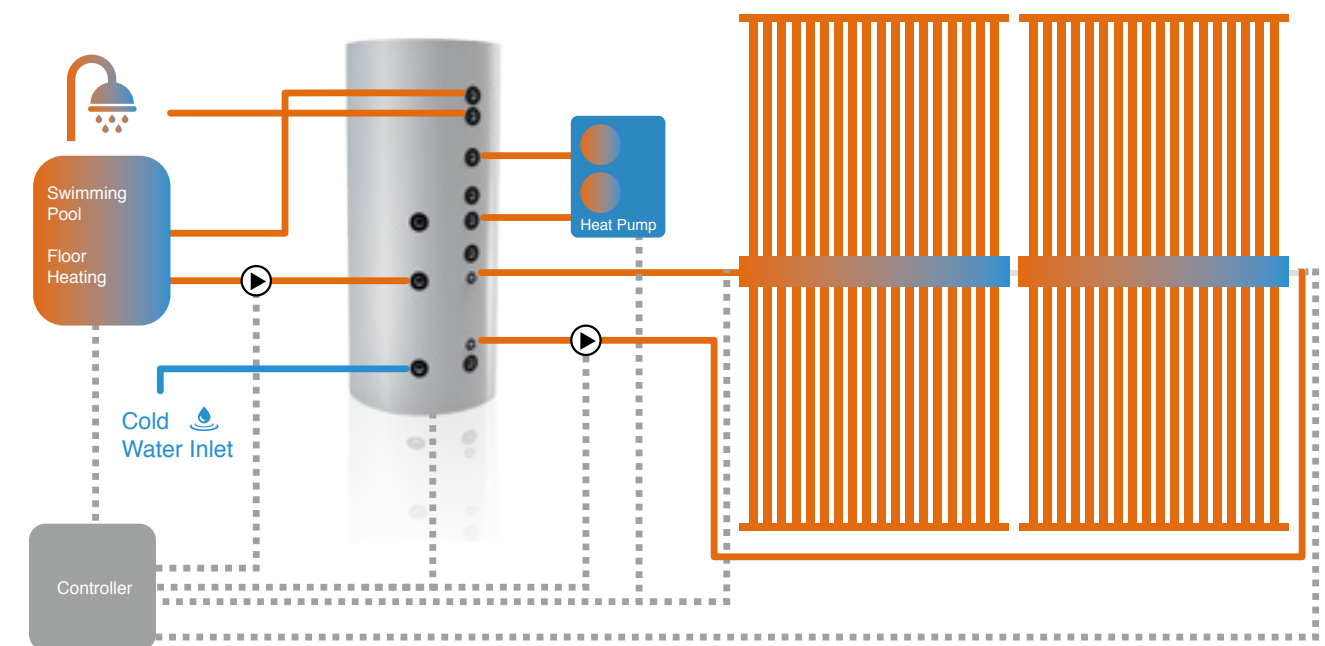
The characteristic:

This product is equivalent to a large-capacity/liter pressurized split water tank, making it more capable of collecting and using heat.

1. In terms of heat collection: solar collectors can be used for heating, and the same time air energy heat pumps can be used for supplementary heating. If conditions permit, the boiler can also be added to the pipeline for supplementary heating;

2. Heating use: this product can be used to heat the house and using ventilation), heat the house/Villa/Apartment-domestic swimming pool (swimming pool heating collector), and use as a conventional water heater (the house/Villa/Apartment-domestic water heater)

Structure Drawing:



Working principle:

The Pressurized storage hot water tank can be connected with solar collector for water heating ; The medium liquid heated by solar collector and then flow through the coils built in the water tank for heating exchange.

The part of the water tank with insufficient heat can be supplemented by air source heat pump to ensure providing hot water at all times.

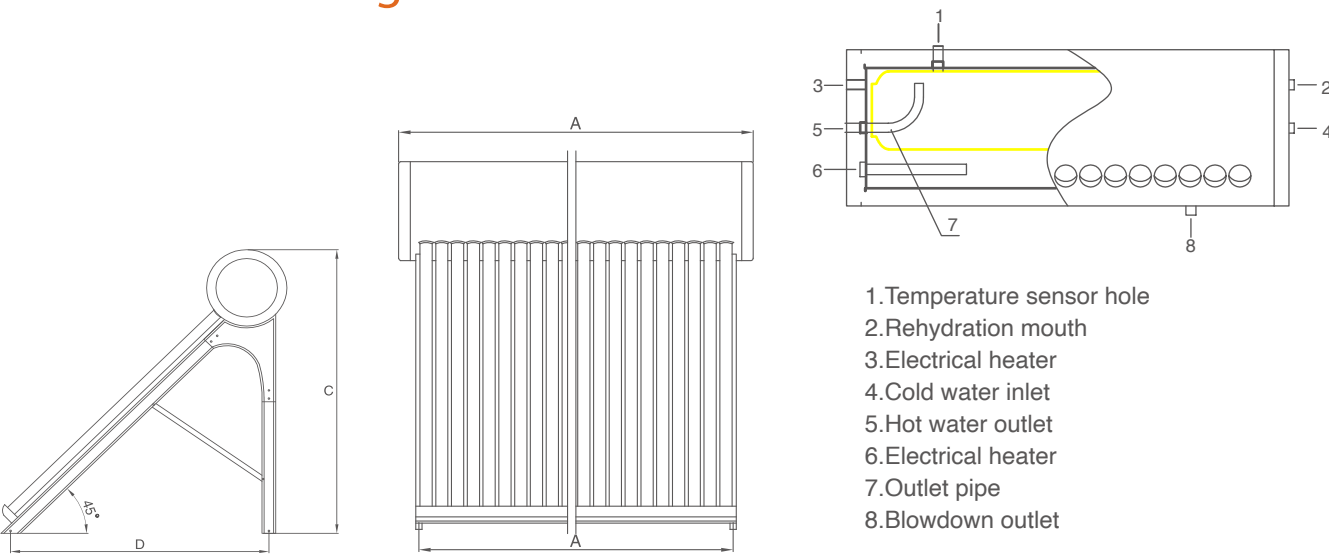
Depending on the capacity of the Pressure storage hot water tank, it can provide normal domestic bathing water, and can also heat the residence or heat the small swimming pool.

The characteristic:

- 1. There are double inner tanks.
- 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.
- 6. Directly connected with city water without a circulation pump.
- 7. Working pressure (0.6MPa)



Structure Drawing:

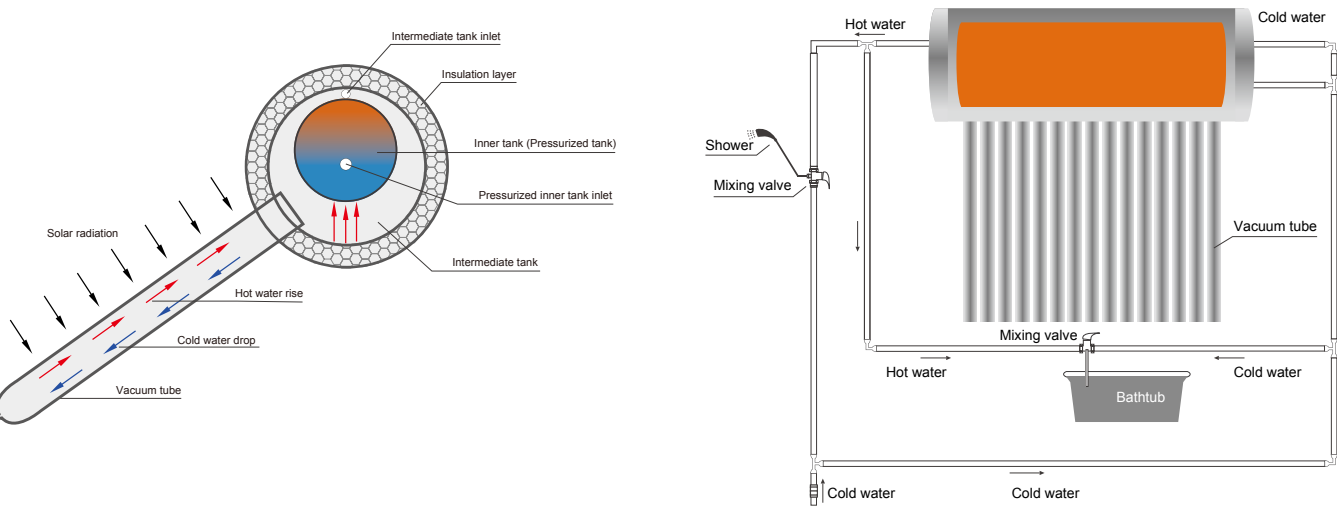


Working principle:

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.



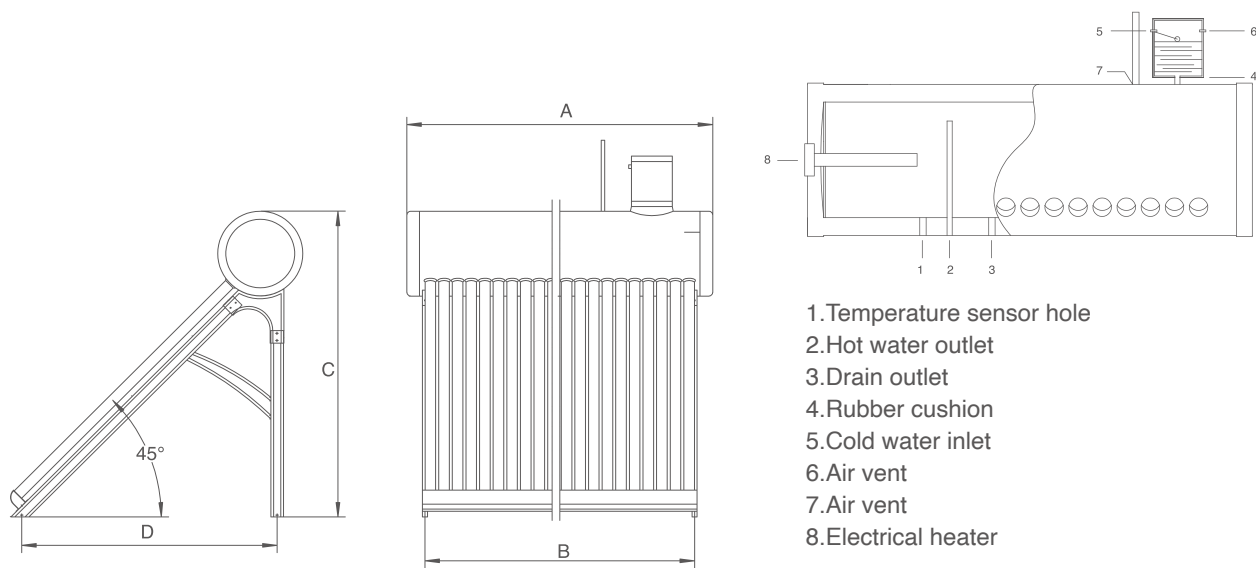
Model	SD-P-15	SD-P-20	SD-P-25	SD-P-30
Tube Quantity (pcs)	15	20	25	30
Water Tank				
Net Capacity (L)	130	165	205	240
Gross Capacity (L)	165	215	265	315
Diamater Of Inner/Outer Tank(mm)	Φ360 / Φ470			
Length Of Outer Tank L(mm)	1380	1755	2130	2505
Length Of Middle Tank L(mm)	1290	1665	2040	2415
Length 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	Polyurethane			
Vacuum Tube				
Diameter/Length(mm)	Φ58 / 1800			
Material	High Borosilicate Glass3.3			
Frame	2 Feet (Left-To-Right)		3 Feet (Left-Middle-Right)	
Material	Stainless Steel / Galvanized Steel			
Angle	45°			
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

The characteristic:

1. With high quality assistant tank and automatic water supply.
2. 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.



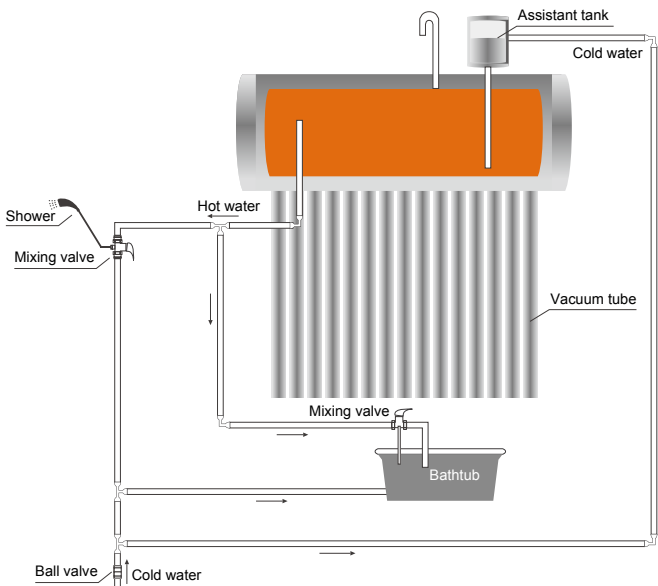
Structure Drawing:



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.



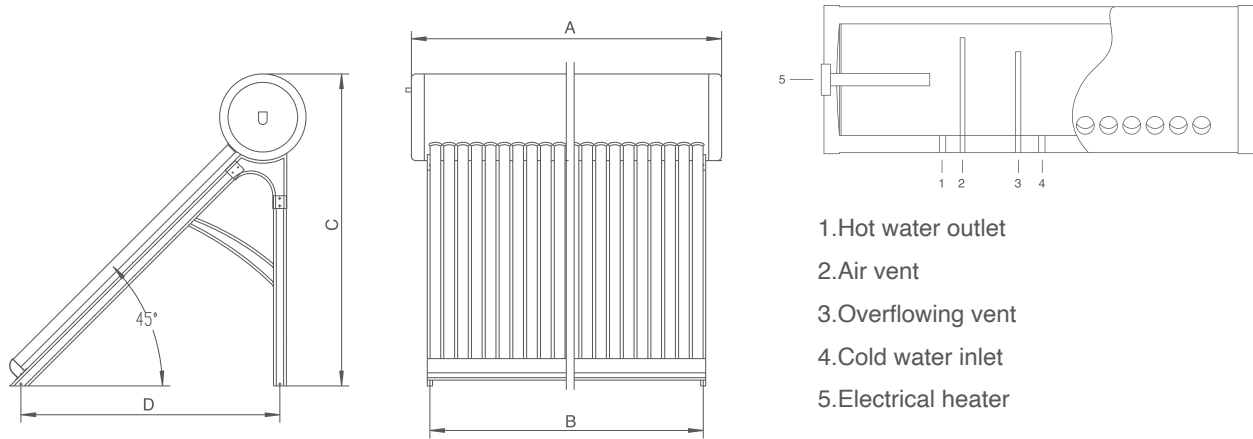
Model	SD-T-10	SD-T-15	SD-T-18	SD-T-20	SD-T-24	SD-T-25	SD-T-30
Tube Quantity (pcs)	10	15	18	20	24	25	30
Water Tank							
Net Capacity (L)	80	120	140	155	185	195	230
Gross Capacity (L)	105	155	185	205	245	255	305
Material Of Inner Tank (mm)	SUS304-2B / SUS316L						
Material Of Outer Tank	SUS304 / Color Steel Plate						
Material Of Insulation	Polyurethane						
Vacuum Tube							
Diameter/Length(mm)	Φ58 / 1800						
Material	High Borosilicate Glass3.3						
Frame	2 Feet (Left-To-Right)				3 Feet (Left-Middle-Right)		
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

The characteristic:

- 1. With intelligent controller.
- 2. 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. SUS304-2B/BA outer tank, against rust and corrosion.
- 7. Eco and economical, improves the environment and save your fuel cost.

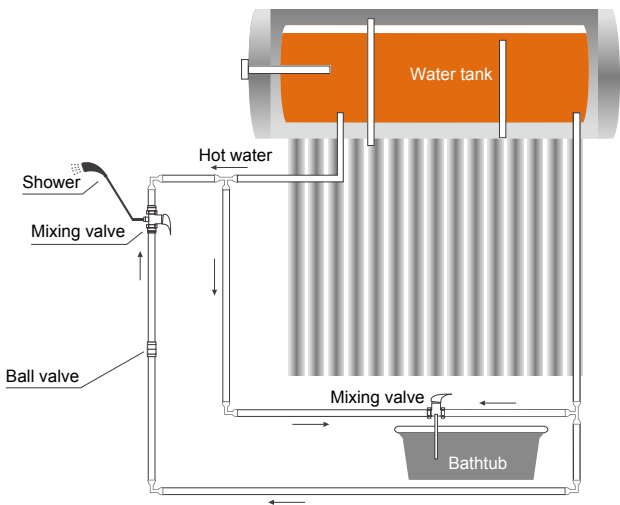


Structure Drawing:



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 nautal circulation.



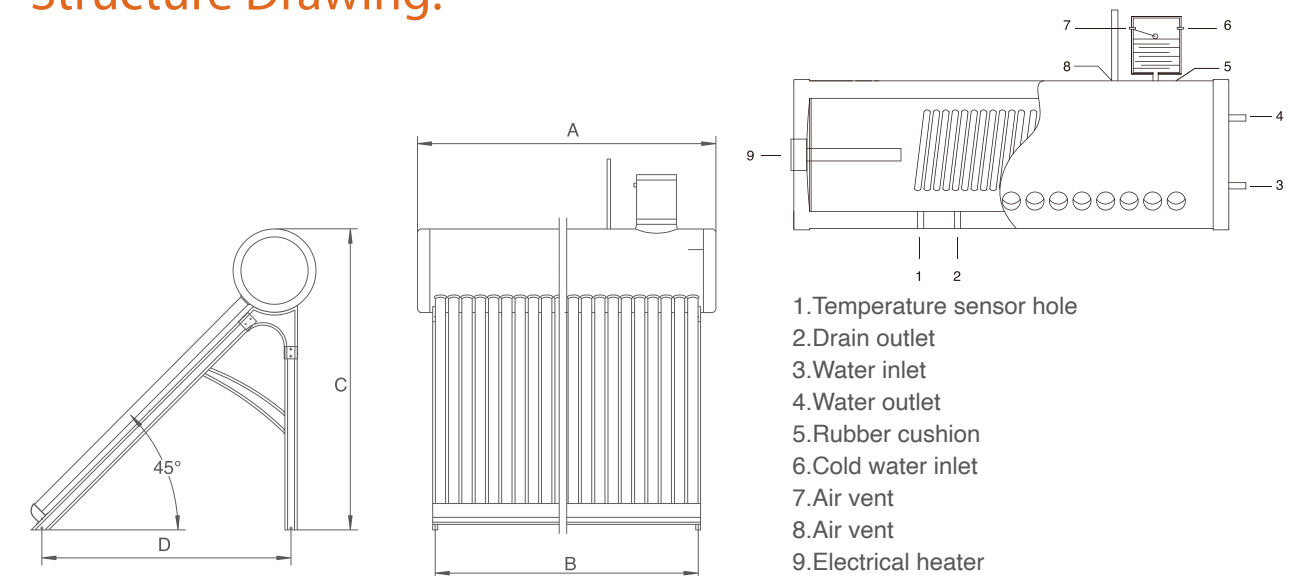
Model	SD-S-10 (SD-G-10)	SD-S-15 (SD-G-15)	SD-S-18 (SD-G-18)	SD-S-20 (SD-G-20)	SD-S-24 (SD-G-24)	SD-S-25 (SD-G-25)	SD-S-30 (SD-G-30)
Tube Quantity (pcs)	10	15	18	20	24	25	30
Water Tank							
Net Capacity (L)	80	120	140	155	185	195	230
Gross Capacity (L)	105	155	185	205	245	255	305
Diamater Of Inner/Outer 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 Glass3.3						
Frame	2 Feets (Left-To-Right)				3 Feets (Left-Middle-Right)		
Material	Stainless Steel / Galvanized 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

The characteristic:

1. It takes the advantage of the tap water's pressure.
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, best option 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.



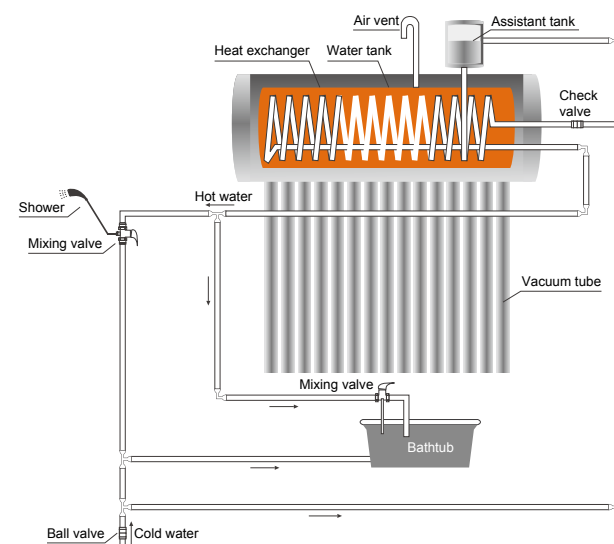
Structure Drawing:



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.



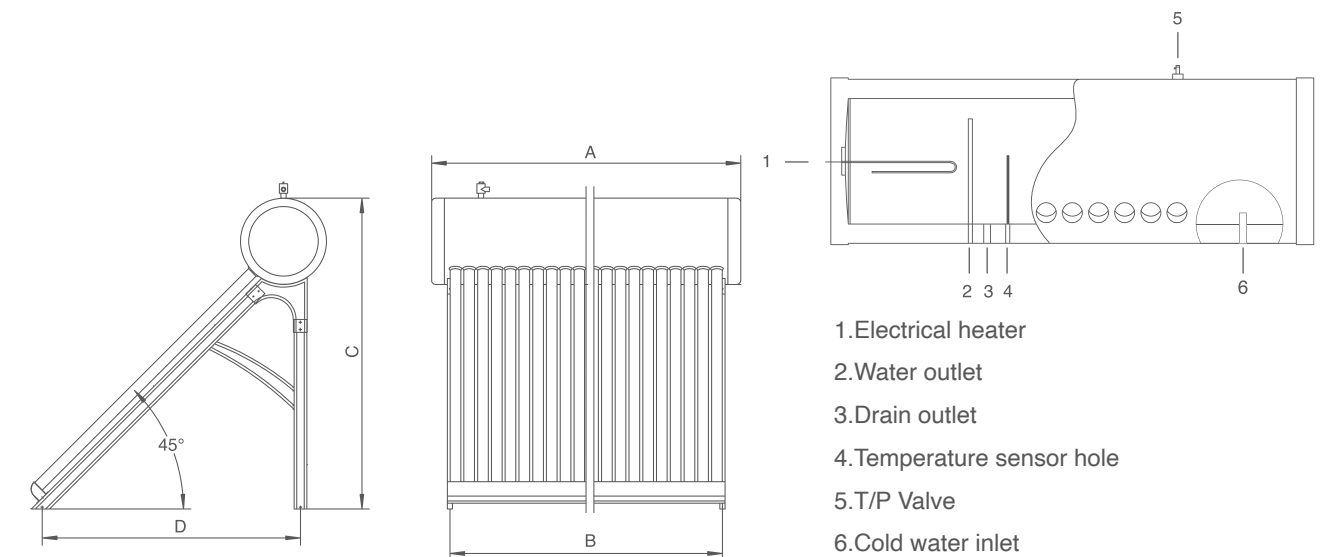
Model	SP-C-15	SP-C-18	SP-C-20	SP-C-24	SP-C-25	SP-C-30
Tube Quantity (pcs)	15	18	20	24	25	30
Water Tank						
Net Capacity (L)	120	140	155	185	195	230
Gross Capacity (L)	155	185	205	245	255	305
Material Of Inner Tank (mm)	SUS304-2B / SUS316L					
Material Of Outer Tank	SUS304 / Color Steel Plate					
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/Φ1800					
Material	High Borosilicate Glass3.3					
Frame	2 Feets (Left-To-Right)			3 Feets (Left-Middle-Right)		
Material	Galvanized Steel					
Angle	45°					
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

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 best conduction performance metal-copper (heat pipe).
5. Directly connected with city water without a circulation pump.
6. Working pressure (0.6MPa).



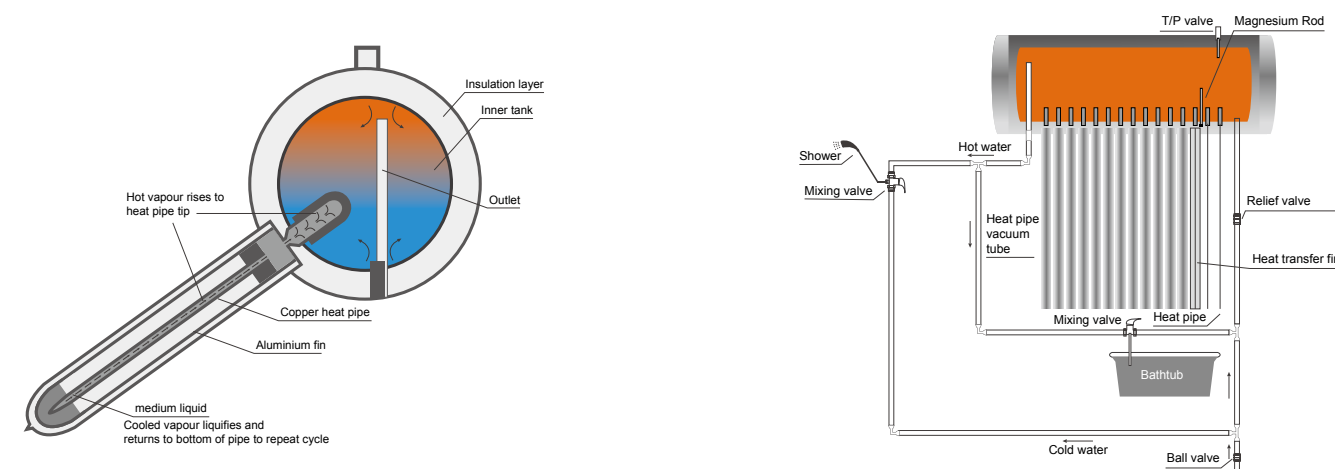
Structure Drawing:



Working principle:

Integrative pressurized type is a renovation model for the solar hot water, which adopts advanced 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.

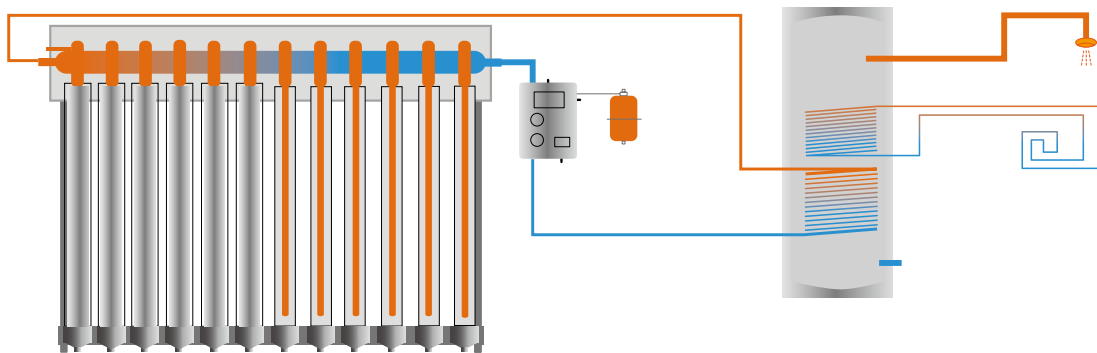


Model	SP-H-10	SP-H-15	SP-H-18	SP-H-20	SP-H-24	SP-H-25	SP-H-30
Tube Quantity (pcs)	10	15	18	20	24	25	30
Water Tank							
Net Capacity (L)	83	123	144	160	190	200	235
Material Of Inner Tank (mm)	SUS304-2B / SUS316L						
Material Of Outer Tank	SUS304 / Color Steel Plate						
Material Of Insulation	Polyurethane						
Vacuum Tube							
Diameter/Length(mm)	Φ58 / 1800						
Material	High Borosilicate Glass3.3						
Frame	2 Feets (Left-To-Right)				3 Feets (Left-Middle-Right)		
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



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.

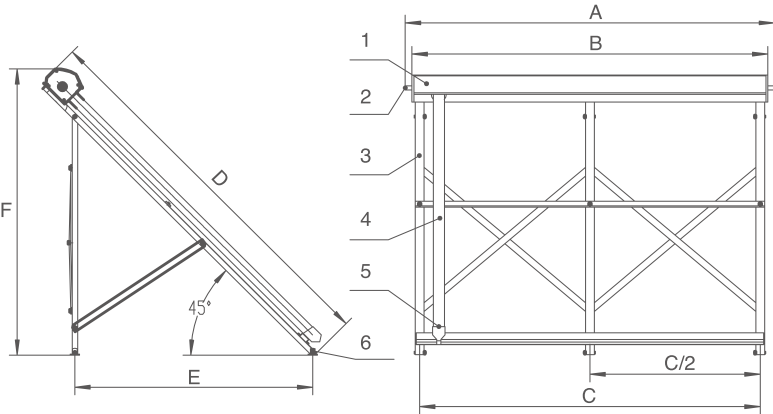
Model	SS-M-15	SS-M-20	SS-M-25	SS-M-30	SS-M-40	SS-M-50
Tank Capacity (L)	150	200	250	300	400	500
Copper Coil Qty	0 / 1 / 2					
Solar Collector Model	SC-H-15	SC-H-20	SC-H-25	SC-H-30	SC-H-20	SC-H-25
Solar Collector Qty	1				2	
Work Station Model	SR961S					
Expansion Tank	12L		18L		24L	
Rated Pressure	0.6Mpa					

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 still 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°C .
- 4. 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.



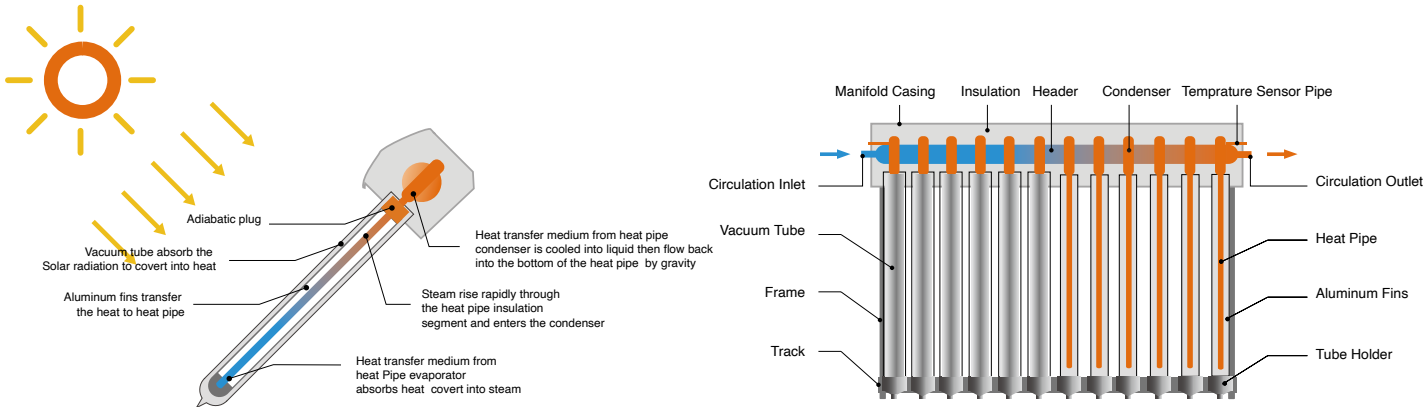
Structure Drawing:



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

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.



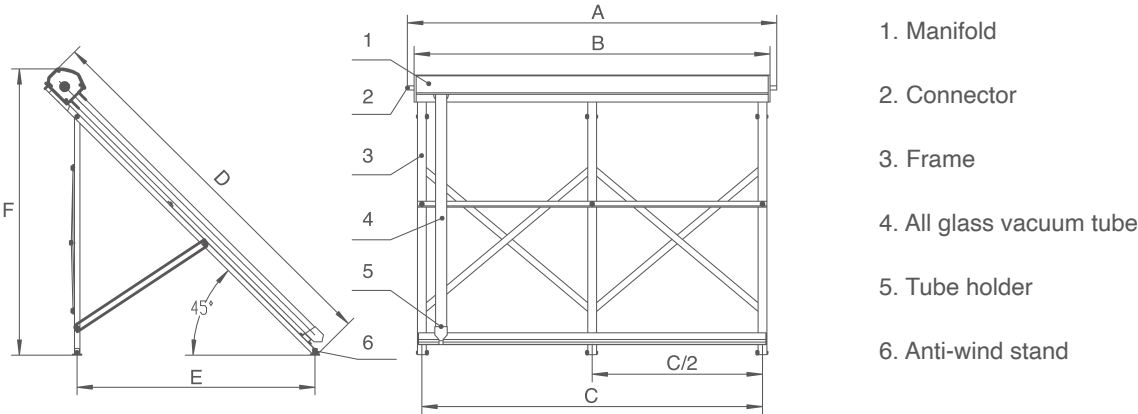
Model	SC-HP-10 (SC-H-10)	SC-HP-15 (SC-H-15)	SC-HP-18 (SC-H-18)	SC-HP-20 (SC-H-20)	SC-HP-24 (SC-H-24)	SC-HP-25 (SC-H-25)	SC-HP-30 (SC-H-30)
Tube Quantity (pcs)	10	15	18	20	24	25	30
Vacuum Tube Diameter/Length (mm)	Φ58 / 1800						
Vacuum Tube Material	High Borosilicate Glass 3.3						
Heat Pipe (mm)	Φ14/1700						
Insulation Material/Thickness (mm)	Polyurethane Foaming / 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/m²	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

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 still 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°C .
- 4. 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.



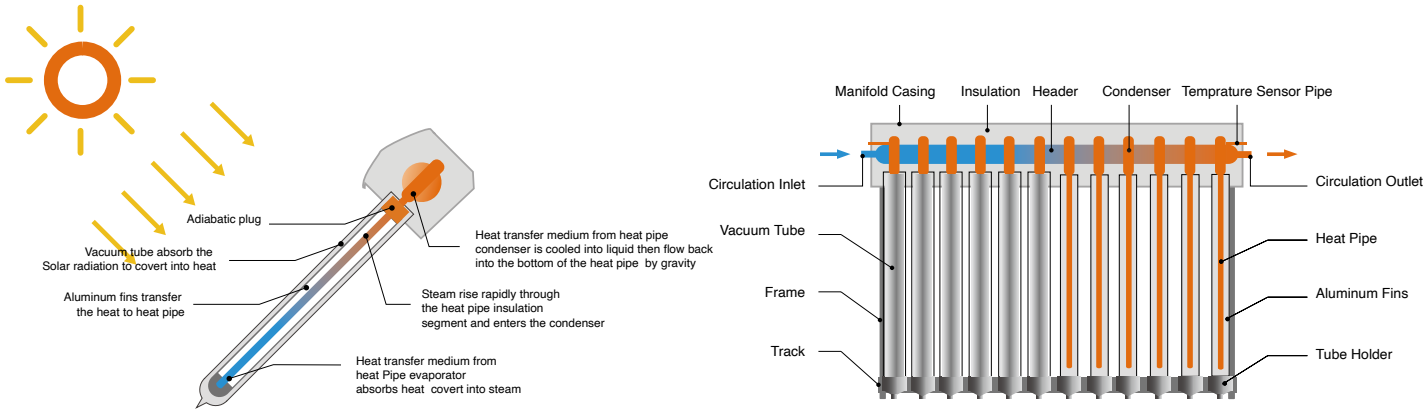
Structure Drawing:



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 Glass 3.3						
Heat Pipe (mm)	Φ24 / 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/m²	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.

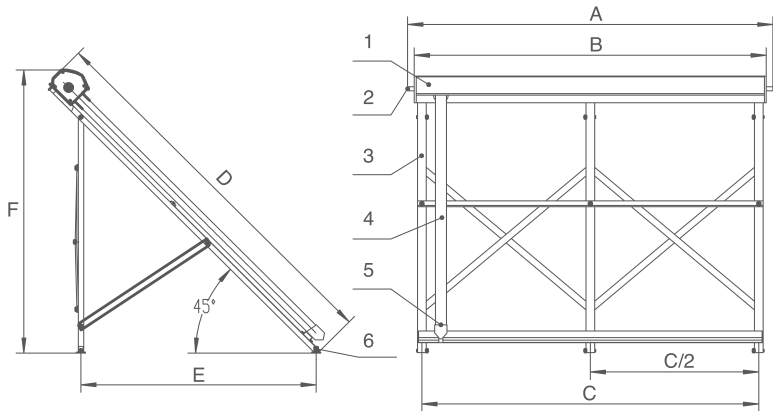


The characteristic:

- 1. Twin-glass vacuum tubes: reliable, efficient, high temperature resistant, anti-freezing.
- 2. There is no water in the vacuum tube, the system will still 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°C .
- 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 most advantage is that It can empty the medium(water or deicing fluid) in the manifold.



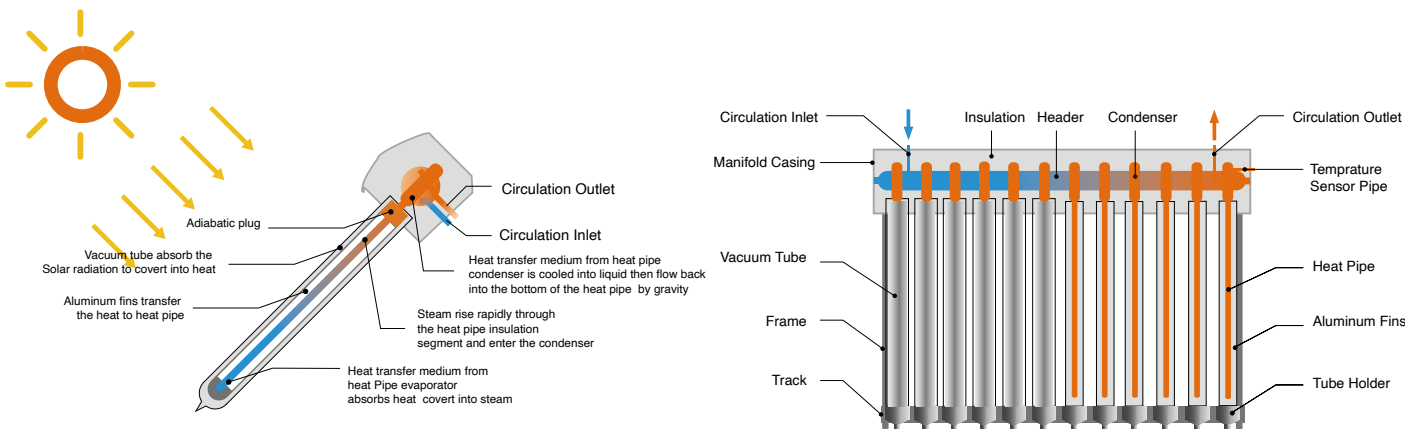
Structure Drawing:



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

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.



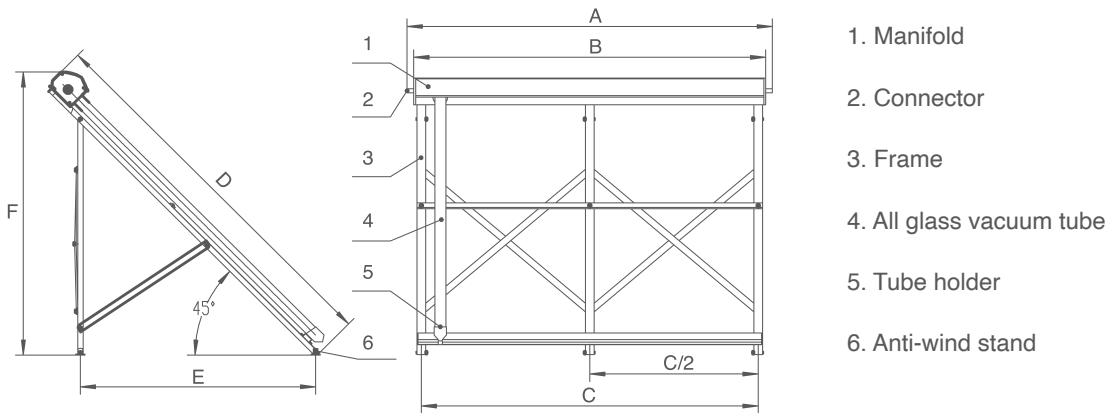
Model	SC-HD-10	SC-HD-15	SC-HD-18	SC-HD-20	SC-HD-24	SC-HD-25	SC-HD-30
Tube Quantity (pcs)	10	15	18	20	24	25	30
Vacuum Tube Diameter/Length (mm)	Φ58 / 1800						
Vacuum Tube Material	High Borosilicate Glass 3.3						
Insulation Material/Thickness (mm)	Rock Wool / 40						
Rated Pressure (mpa)	0.6						
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/m²	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

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 still work even the tube broken.
3. U pipe, most efficient.
4. Aluminum alloy manifold and bracket, corrosion resistance, easy to install. It's suitable for flat and sloping roof.
5. 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.
7. High quality copper manifold, its testing pressure is 1MPa.
8. Eco and economical, improves the environment and save your fuel cost.



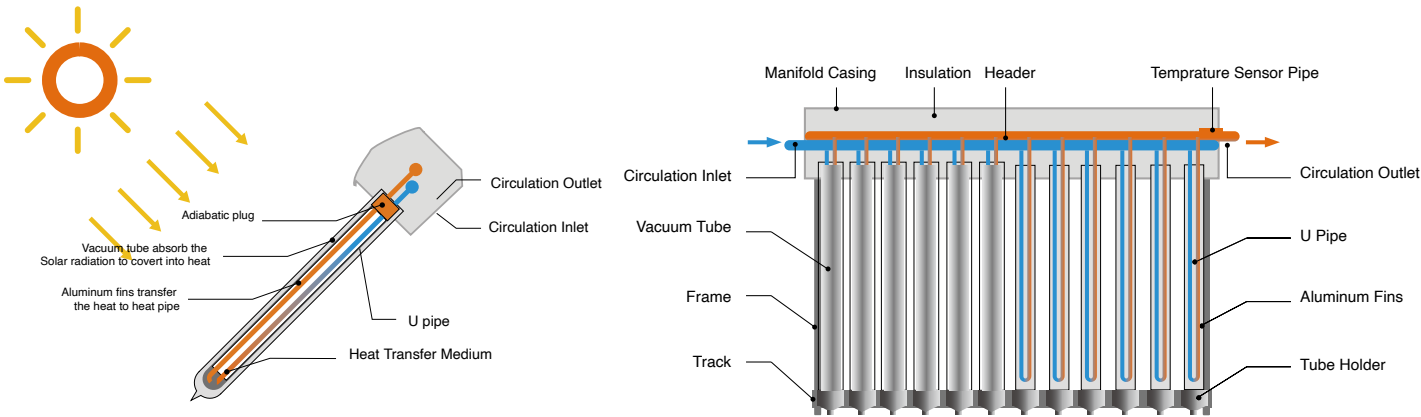
Structure Drawing:



Model	SC-U-15	SC-U-18	SC-U-20
Tube Quantity (pcs)	15	18	20
Diameter/Length Of Vacuum Tube (mm)	Φ58 / 1800		
Material Of Vacuum Tube	High Borosilicate Glass3.3		
Insulation Material/Thickness (mm)	Rock Wool / 40		
Rated Pressure (mpa)	0.6		
Aperture Area (m²)	1.5	1.8	2
Gross Area (m²)	2.3	2.74	3.04
Power (w)1000w/m²	870	1047	1165
Net Weight (kg)	50.75	59.75	64.75
A (mm)	1270	1495	1645
B (mm)	1175	1400	1550
C (mm)	1100	1325	1475
C/2 (mm)	—	—	—
D (mm)	1980	1980	1980
E (mm)	1240	1240	1240
F (mm)	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 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.

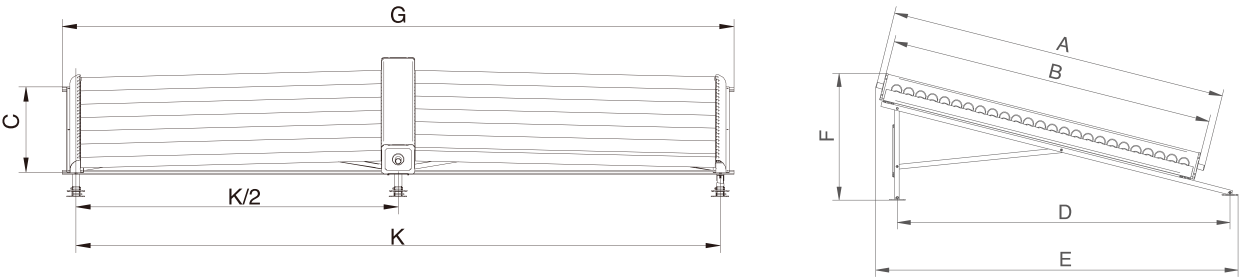


The characteristic:

1. Unpressurized,can be used for natural circulation system,large collector area,easy to assemble and install.
2. Polyurethane insulation,high pressure foaming process,small heat conductivity coefficient,not easy to loss heat.
3. 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.



Structure Drawing:

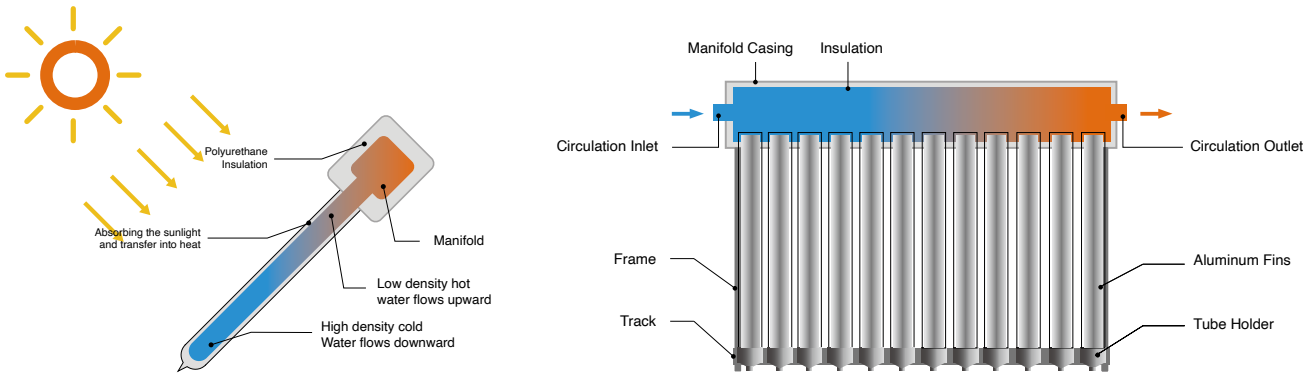


Model	SC-V-15	SC-V-20	SC-V-25	SC-V-30	SC-V-50	SC-V-60
Tube Quantity (pcs)	15	20	25	30	50	60
Tube Diameter/ Length (mm)	Φ58 / 1800					
Vacuum Tube Material	High Borosilicate Glass3.3					
Inner Tank Material	SUS304					
Insulation Material/ Thickness (mm)	Polyurethane / 40					
Collecting Area (m²)	1.4	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

Working principle:

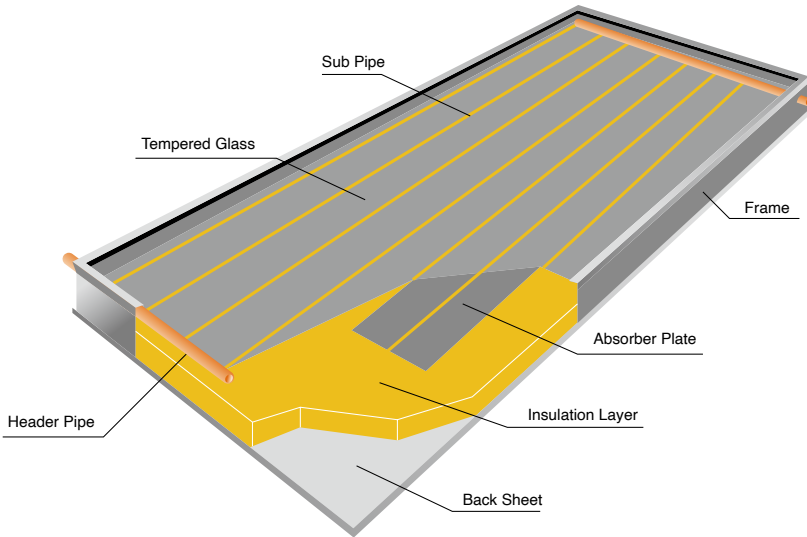
This model operates to feed water automatically.

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 nautal circulation.



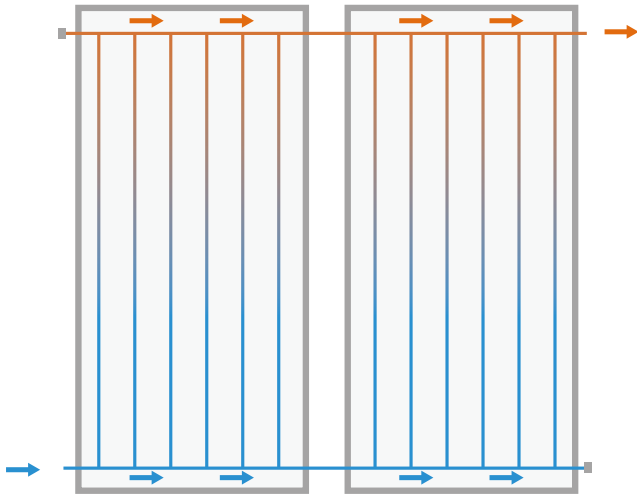
The characteristic:

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.



Working principle:

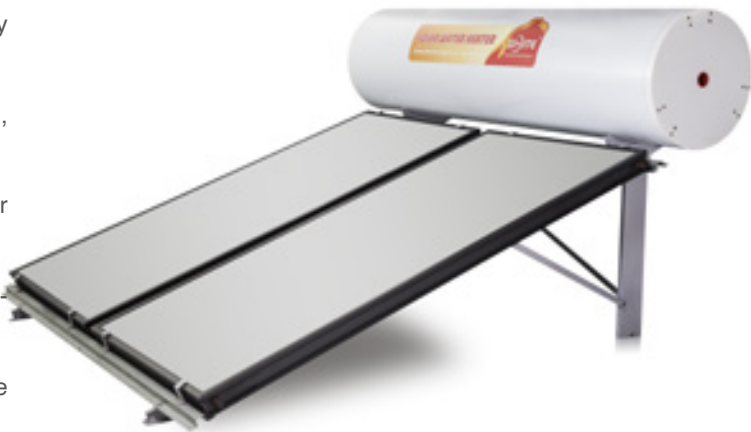
Flat plate solar collector is a device for absorbing solar radiation and transferring heat to the medium, which is a kind of special heat ex-changer, the medium in the collector heat exchanges with the sun. Flat plate solar collector is composed of absorbing plate core, shell, transparent cover plate,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



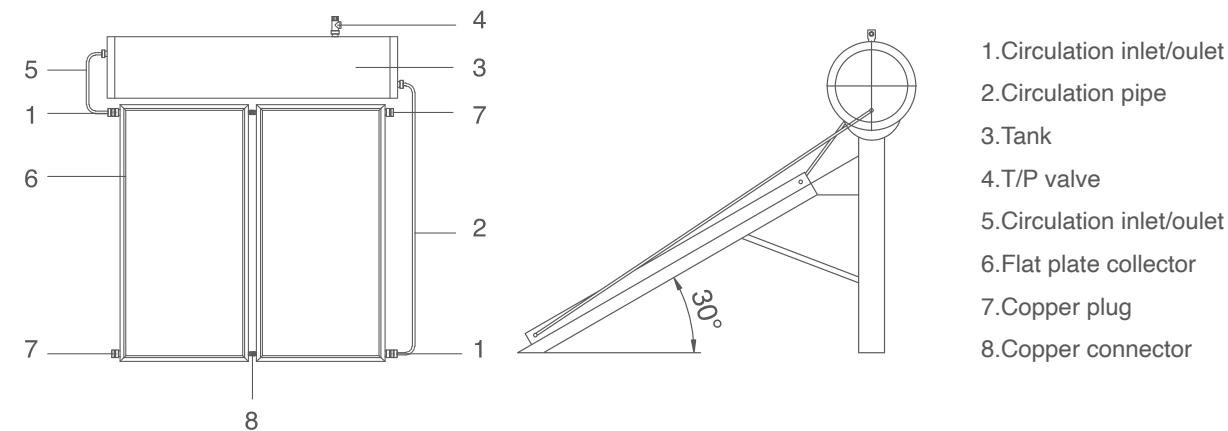
Model	SC-F-C/A	SC-F-C/A1	SC-F-C/BC	SC-F-C/BC1	SC-F-C/VC	SC-F-C/VC1
Dimension:L*W*T	2000 X 1000 X 80mm					
Material Of Cover	Tempered Glass					
Thickness Of Cover	4mm					
Area (m²)	2.00m²					
Weight	36kg	37kg	37kg	38kg	38kg	38kg
Dimension Of End Pipe	22 x0.6mm	22 x0.6mm	22 x0.6mm	22 x0.6mm	22 x0.6mm	22 x0.6mm
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					
Material Of Frame	6063 Aluminum Alloy					
Material Of Back Cover	Embossed Aluminum					
Seal Material	Epdm					

The characteristic:

1. Thermosiphon direct system, easy piping work, higher efficiency.
2. Intelligent control, automatic water filling.
3. 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.
6. Polyurethane layer foaming insulation for keeping temperature of water.
7. Totally copper flow channels achieve low defect rate and easy maintenance, long service life.

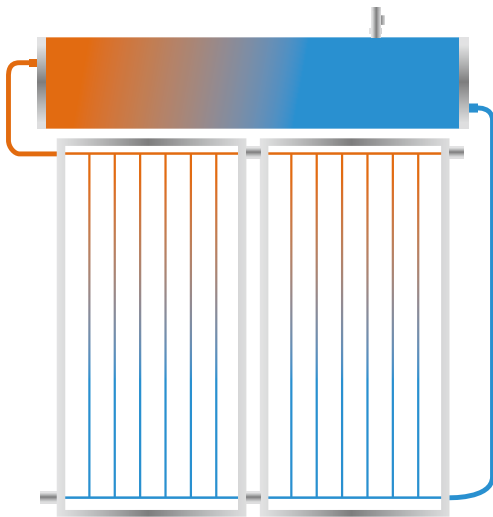


Structure Drawing:

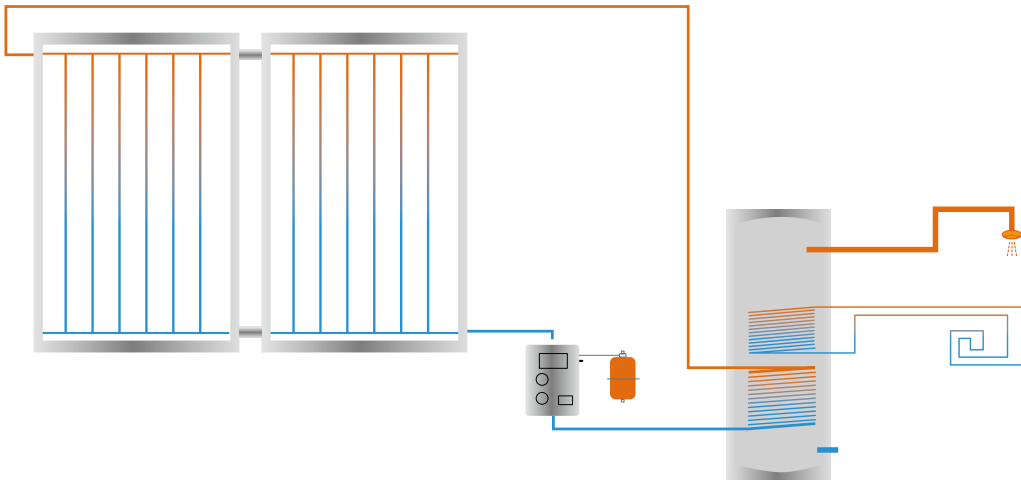


Working principle:

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.



Model	SP-F-150A	SP-F -200A	SP-F -300A	SP-F -150	SP-F -200	SP-F -300
Flat Plate Quantity (pcs)	1	1	2	1	1	2
Installing Type	Flat Roof / 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:

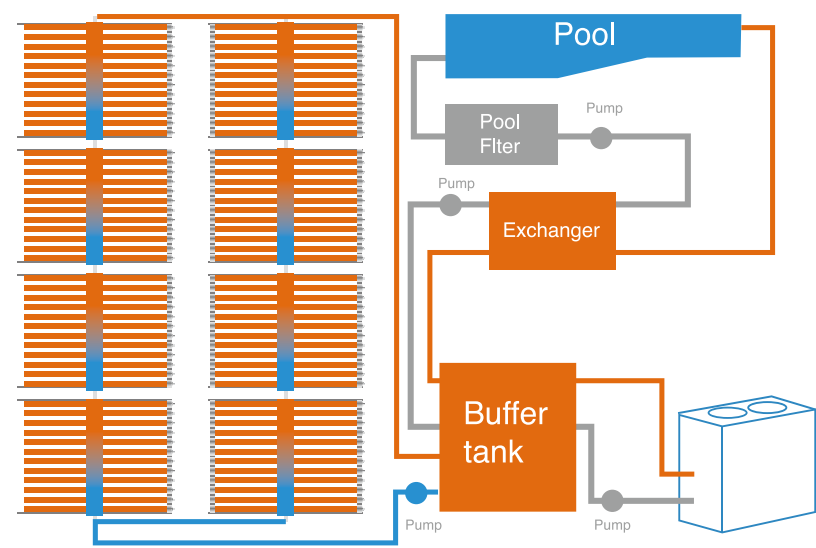
The SS-F series, in streamline closed circuit systems which are recommended for frost prone and poor water quality situations. Antifreeze fluid is used to circulation through the collectors. The heat collected from the panels is transferred from the fluid pipes to the water tank by a heat exchanger. 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.

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.

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	12L		18L		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					

Solar Hot Water System For Swimming Pool



Working Principle:

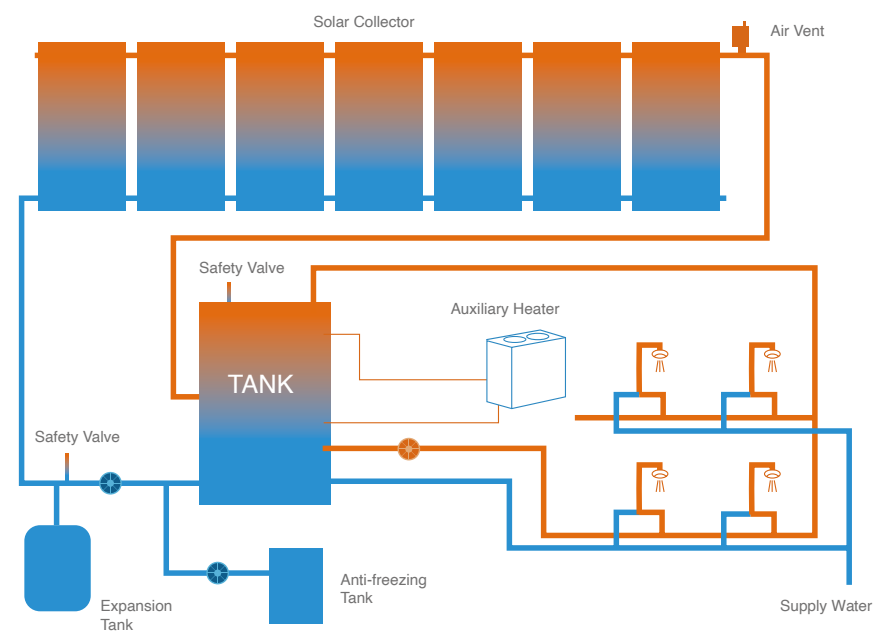
This system adopt centralized heating, centralized heat accumulation; solar collector be installed centralized and also install big thermal storage tank, swimming pool heat exchanger, solar controller system, circulation equipments and other auxiliary equipments on the equipment room or top roof. solar 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:

1. Flat plate Collector be combined with a variety of architectural forms, to achieve the integration design of the building.
2. 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

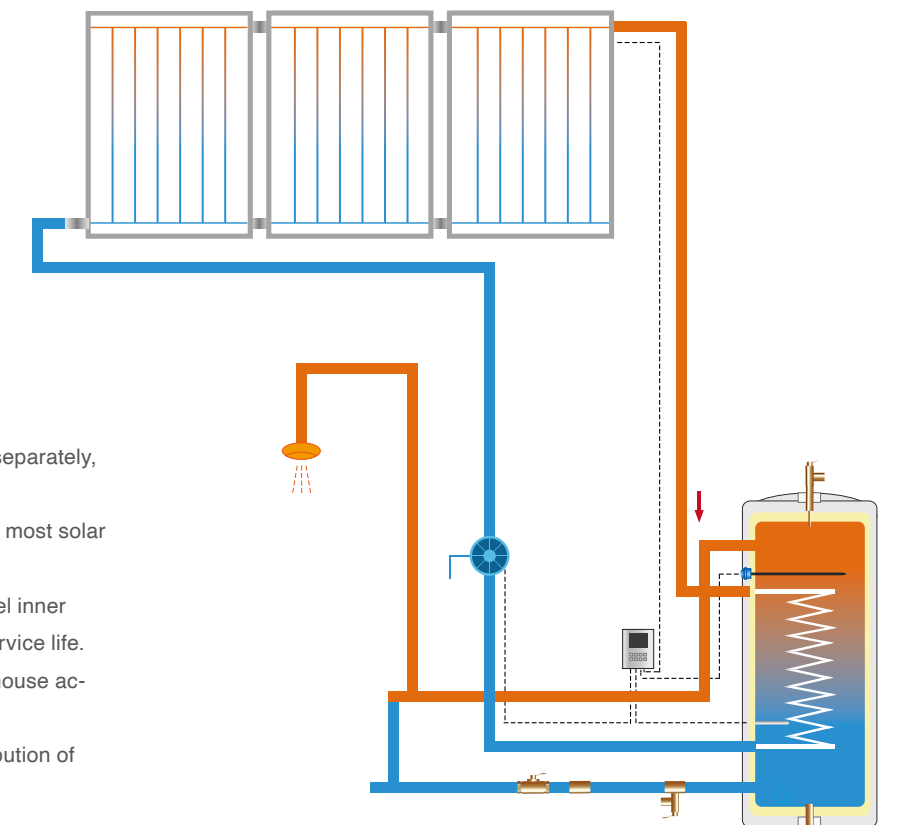
Working principle:

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.

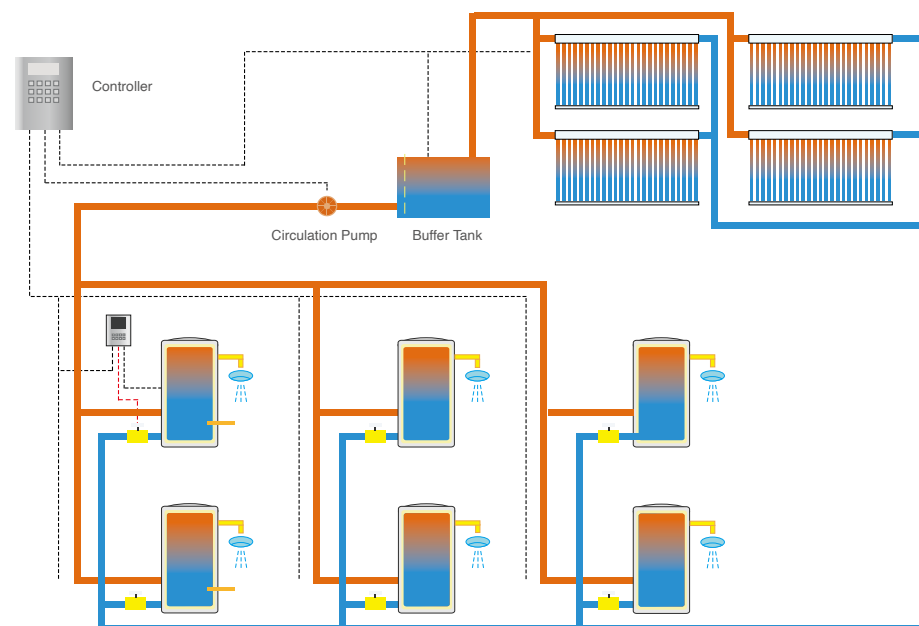
System Characteristic:

- 1.The solar collector and water tank can be placed separately, easy to install, easy for building integration.
- 2.The proper installation angle of solar collector, 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.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



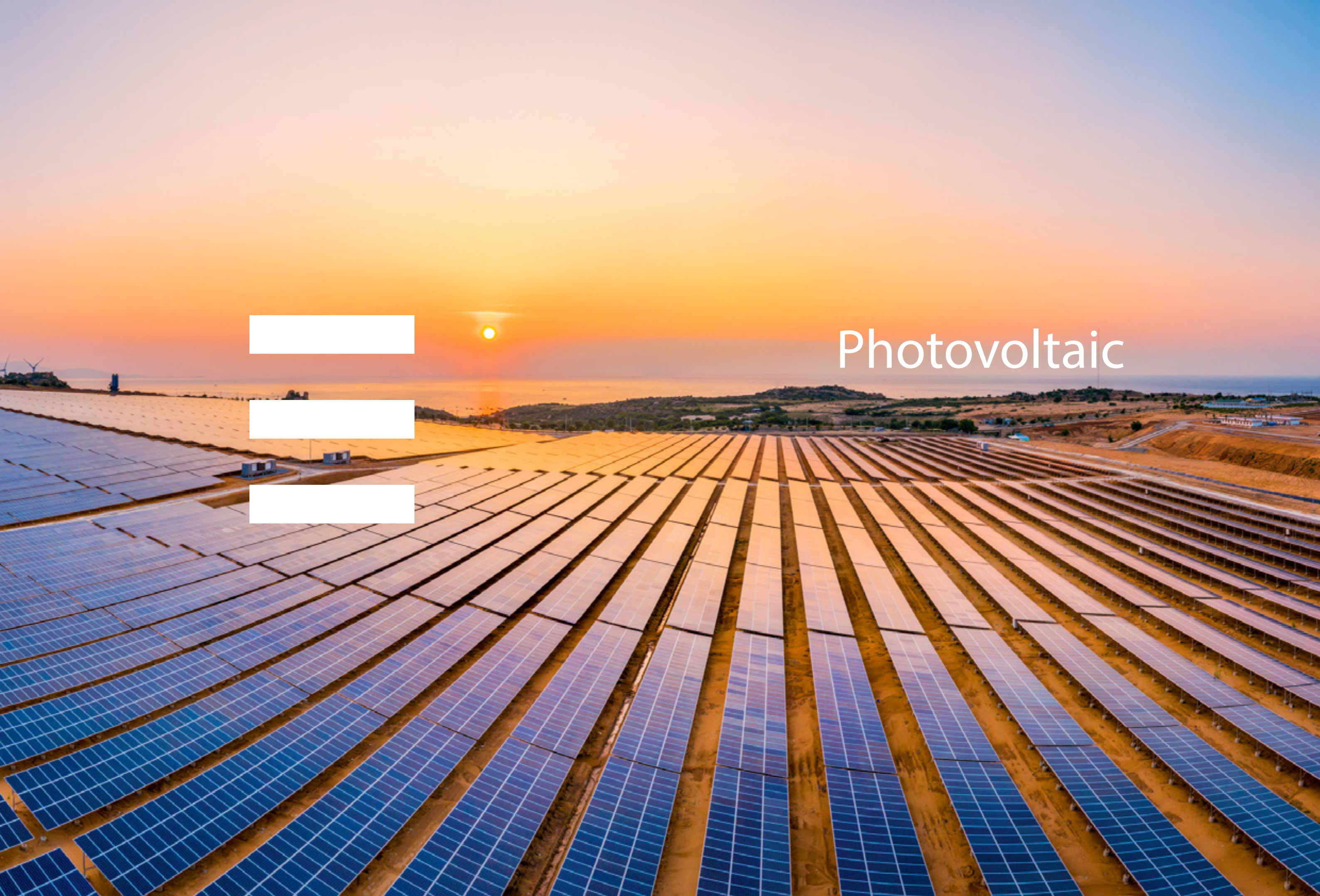
Working Principle:

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 stair-case 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 colector, 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.



[Redacted]

[Redacted]

[Redacted]

Photovoltaic

Key Features

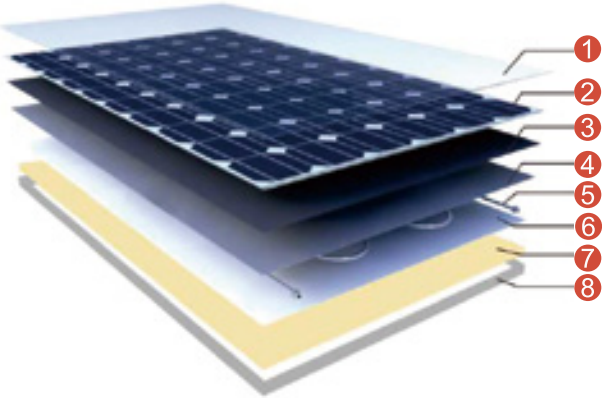
- Saving the roof area by combination of electric and thermal.
- Raising up 10%-15%efficiency of electricity output.
- Internal cooling circulation extend the lifespan.
- Hot water output 40-85 celsius degrees.
- A simple low cost, low maintenance energy solution able to facilitate the world's zero-carbon strategy.
- High wind&snow load strength.
- Application widely. Payback fast for energy investment.

Idea Solution for these application areas



Certificates

- * CE Marking
- * IEC61215&61730n°16429 Rev.2
- * SOLARKEYMARK
- * CEC listed/UL1703n°702139/ICC-RCCn °10002099



- 1

Tempered Glass
- 2

Solar Cells
- 3

EVA
- 4

Seal Board
- 5

Heat Conduct Pipe
- 6

Heat Exchange Plate
- 7

Insulation
- 8

Alloy Frame

Electrical Characteristics

Model	NES72-6-330P	NES144-6-450M	NES144-7-540M
Maximum Power(Pmax)	330W	450W	540W
Optimum Operating Voltage(Vmp)	37.26V	41.50V	41.76V
Optimum Operating Current(Imp)	8.86A	10.85A	12.93A
Open Circuit Voltage(Voc)	45.64V±3%	49.30V±3%	49.70V±3%
Short Circuit Current(Isc)	9.33A±3%	11.60A±3%	13.72A±3%
Module Efficiency	16.97%	20.70%	21.12%
Voltage Temperature coefficient(α Voc)	-0.300%/°C	-0.270%/°C	-0.285%/°C
Current Temperature coefficient(α Isc)	+0.060%/°C	+0.048%/°C	+0.045%/°C
Power Temperature coefficient(α Pmpp)	-0.400%/°C	-0.350%/°C	-0.350%/°C
Maximum System Voltage	1500/1000V	1500V	1500V
Maximum Reverse Current	20A	20A	20A
NMOT	45+/- 2°C	45+/- 2°C	45+/- 2°C
Application Class	Class II	Class II	Class II
Size(H*W*T)	1960±1*992±1*43±1mm	2094±1*1038±1*43±1mm	2256±1*1133±1*43±1mm
Empty / full weight	35/35.9kg	37.5/38.5kg	44/45.1kg
Heat exchange area	0.8m²	1.07m²	1.25m²
Net volume	2.8liter	3liter	3.2liter
Number of cells	72	144	144
Cell Type	Poly-5BB	Mono-9BB	Mono-10BB
Connectors	MC4/MC4 compatible		
Cables Lenght	1000mm/Customized		
Maximum Load	5400 Pa(Snow)/2400 Pa(Wind)		
Frame	Anodised aluminum		
Power Tolerance	0~+5W		



Electricity Generation

Front Side
Premium photovoltaic system.
Three type of solar cells, polysilicon, and half cut mono-crystalline.



Hot water production

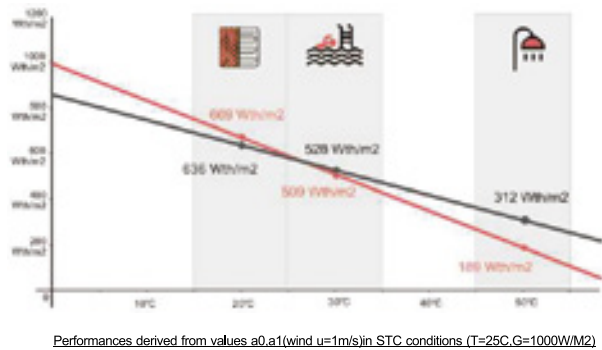
Rear Side
Cooling of the panel and reuse of waste heat in the form of hot water generated by a patented heat exchanger.

Thermal Characteristics

Model	330W	450W	540W
Thermal Power	1085W	1210W	1397W
Heat Exchanger Area	1.90m²	2.17m²	2.54m²
Heat Exchanger Volume	2.5L	3L	3.5L
Max Operating Pressure	0.8mps		
Flow Rate	0.4L/s		
Hydraulic Inlet / Outlet	DN 15		
Stagnation Temperature	70°C	75.6°C	75.6°C
Optical Efficiency a ₀	58.9%	58.2%	58.2%
Coefficient a ₁	10.8W/K/m²	16.0W/K/m²	16.0W/K/m²
Coefficient a ₂	0 W/(m2.K2)		
Operating Temperature	-40°C to +85°C		

STC Conditions: Irradiance 1000 W/m², temperature 25°C, AM=1.5;
Measurement tolerance: +/-3% .

Thermal Power Output



Thermal power output as a function of the temperature of the water in the panel and by application.

Thermal power calculated with wind u=0 m/s, DT=0, G=1000W/m². The coefficients a₀,a₁, and a₂result from EN 9806:2017 certification tests for solar collectors without glazing carried out by KIWA for a wind speed u=1m/s: a₀=n_s-c_s*u'; a₁=c₁+c₂*u'; u'=u-3.


Note: Specifications subject to technical changes and tests, We reserves the right of final interpretation.


NES-144


440-460w F35mm Mono Solar Panel





Key Features


- 

Half Cell
The power of Half-cell solar panel increases, and the hot spot temperature reduces because of lower working current
- 

Positive Tolerance
Positive tolerance of up to 0~+5W delivers higher outputs reliability
- 

High PID Resistant
Advanced cell technology and qualified materials lead to high PID resistant
- 

Current Sorting Process
System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage
- 

Extended Wind and Snow load tests
Module certified to withstand extreme wind (2400 Pascal) and snow loads(5400 Pascal)
- 

1500V
Backsheet and junction box supporting 1500V system

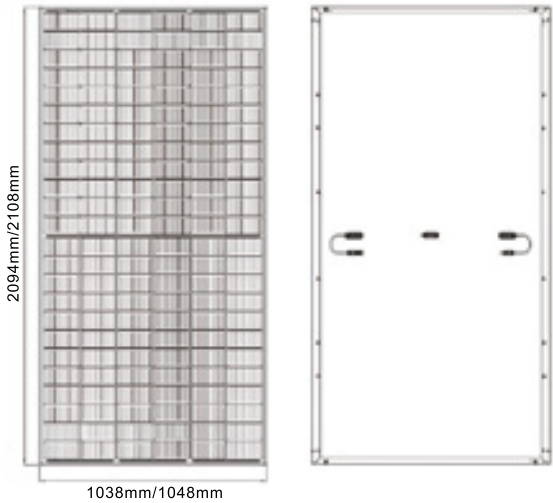


Electrical Characteristics

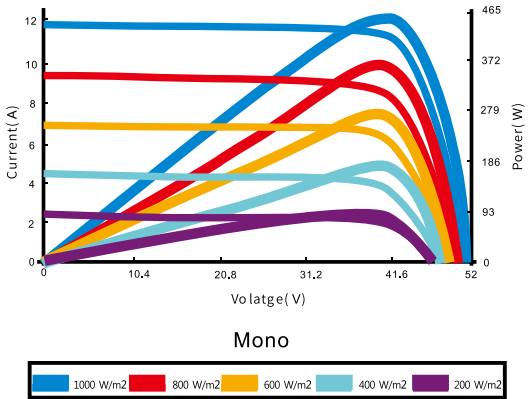
STC	NES144-6-440M	NES144-6-445M	NES144-6-450M	NES144-6-460M
Maximum Power(Pmax)	440W	445W	450W	460W
Optimum Operating Voltage(Vmp)	40.50V	40.80V	41.00V	42.13V
Optimum Operating Current(Imp)	10.86A	10.92A	10.98A	10.92A
Open Circuit Voltage(Voc)	49.00V	49.20V	49.50V	50.01V
Short Circuit Current(Isc)	11.30A	11.36A	11.42A	11.45A
Module Efficiency	20.24%	20.47%	20.70%	21.16%
Operating Module Temperature	-40°C to +85°C			
Maximum System Voltage	1500V DC (IEC)			
Power Tolerance	0~+5W			

STC Irradiance 1000 W/m², module temperature 25°C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used

Engineering Drawing



I-V Curve



Excellent performance under weak light conditions: at an irradiance intensity of 800W/m² (AM 1.5, 25°C), 95.5% or higher of the STC efficiency(1000W/m²) is achieved.

Mechanical Characteristics

Solar Cell	166mm 9BB Monocrystalline silicon cells
No. of Cells	144(6x12x2)
Dimensions	2094x1038x35mm; 2108x1048x35mm
Weight	24.5kg
Front Glass	3.2mm(0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip67 rated
Output Cables	TÜV (2Pfg1169:2007) 4.0 mm ² (0.006 inches ²), 300mm/Customized
Connectors	MC4 connectors

Temperature Characteristics

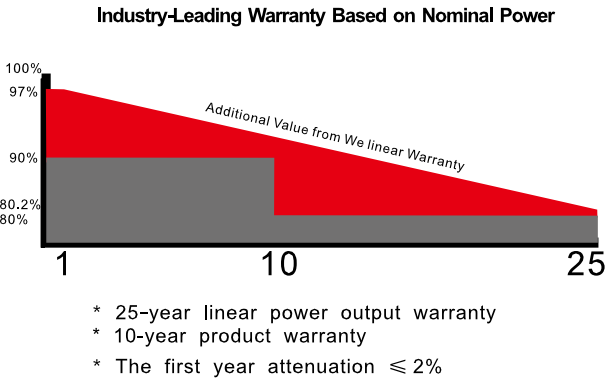
NOCT	45±2°C
Temperature Coefficient of Pmax	-0.380%/°C
Temperature Coefficient of Voc	-0.300%/°C
Temperature Coefficient of Isc	0.060%/°C

Packing Configuration(35mm)

Per Pallet	30Pieces
Per Container (20' GP)	282Pieces
Per Container (40' HQ)	704Pieces

Note: Specifications subject to technical changes and tests, We reserves the right of final interpretation.

Quality Guarantee




- *9BB solar cells , Low resistance loss and higher conversion efficiency
- *Double EL test before and after lamination, highly control product defects
- *Solar panel classified by current, to improve system performance


NES-144


525-550w F35mm
Mono Solar Panel





Key Features


- 

Half Cell
The power of Half-cell solar panel increases, and the hot spot temperature reduces because of lower working current
- 

Positive Tolerance
Positive tolerance of up to 0~+5W delivers higher outputs reliability
- 

High PID Resistant
Advanced cell technology and qualified materials lead to high PID resistant
- 

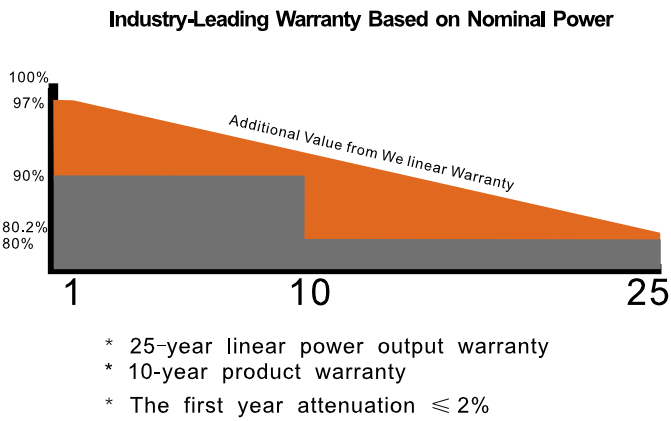
Current Sorting Process
System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage
- 

Extended Wind and Snow load tests
Module certified to withstand extreme wind (2400 Pascal) and snow loads(5400 Pascal)
- 

1500V
Backsheet and junction box supporting 1500V system



Quality Guarantee

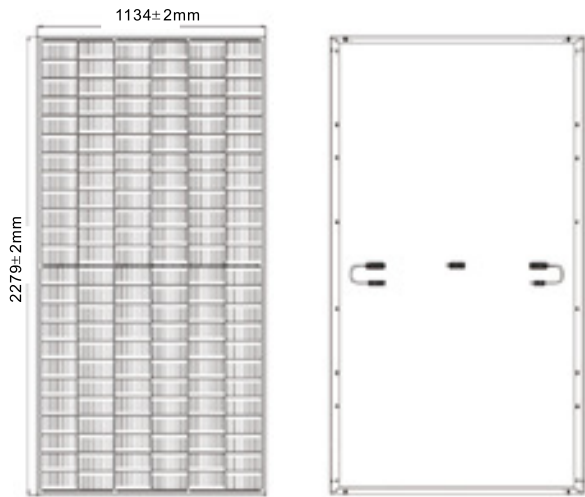


*MBB solar cells , Low resistance loss and higher conversion efficiency
*Double EL test before and after lamination, highly control product defects
*Solar panel classified by current, to improve system performance

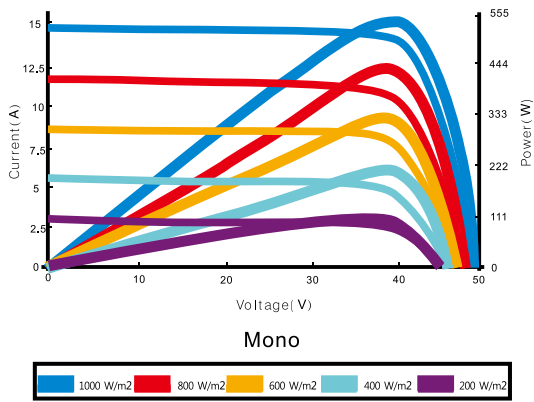
Electrical Characteristics

STC	NES144-7-525M	NES144-7-530M	NES144-7-535M	NES144-7-540M	NES144-7-545M	NES144-7-550M
Maximum Power(Pmax)	525W	530W	535W	540W	545W	550W
Optimum Operating Voltage(Vmp)	41.15V	41.31V	41.47V ₃	41.64V	41.80V	41.96V
Optimum Operating Current(Imp)	12.76A	12.83A	12.90A	12.97A	13.04A	13.11A
Open Circuit Voltage(Voc)	49.15V	49.30V	49.45V	49.60V	49.75V	49.90V
Short Circuit Current(Isc)	13.65A	13.72A	13.79A	13.86A	13.93A	14.00A
Module Efficiency	20.31%	20.51%	20.70%	20.90%	21.09%	21.28%
Operating Module Temperature	-40°C to +85°C					
Maximum System Voltage	1500V DC (IEC)					
Power Tolerance	0~+5W					
STC	Irradiance 1000 W/m ² , module temperature 25°C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used					

Engineering Drawing



I-V Curve



Mechanical Characteristics

Solar Cell	182mm MBB Monocrystalline silicon cells
No. of Cells	144(6x12x2)
Dimensions	2279± 2mmx1134± 2mmx35± 1mm
Weight	28.6kg± 3%
Front Glass	3.2mm(0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated
Output Cables	TÜV (2Pfg1169:2007) 4.0 mm ² (0.006 inches ²), 300mm/Customized
Connectors	MC4 connectors

Temperature Characteristics

NOCT	45±2°C
Temperature Coefficient of Pmax	-0.350%/°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C

Packing Configuration(35mm)


Per Pallet	30Pieces
Per Container (20' GP)	250Pieces
Per Container (40' HQ)	624Pieces

Note: Specifications subject to technical changes and tests, We reserves the right of final interpretation.


NES-132

480-505w F35mm
Mono Solar Panel


Key Features

- 


Half Cell

The power of Half-cell solar panel increases, and the hot spot temperature reduces because of lower working current
- 


Positive Tolerance

Positive tolerance of up to 0~+5W delivers higher outputs reliability
- 


High PID Resistant

Advanced cell technology and qualified materials lead to high PID resistant
- 

Current Sorting Process

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage
- 

Extended Wind and Snow load tests

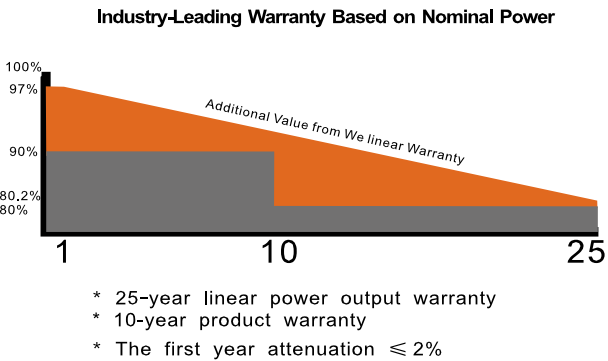
Module certified to withstand extreme wind (2400 Pascal) and snow loads(5400 Pascal)
- 

1500V

Backsheet and junction box supporting 1500V system



Quality Guarantee

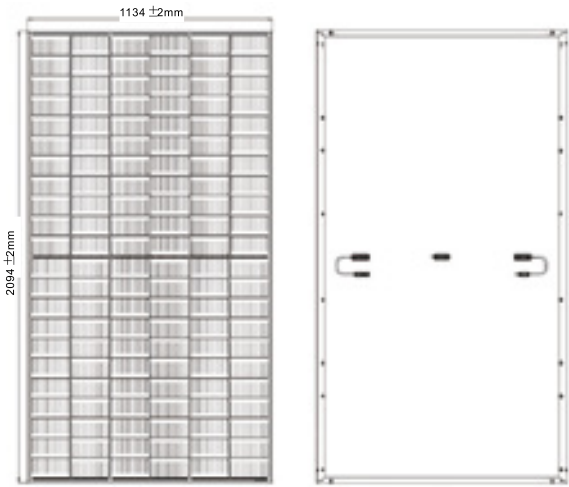


MBB solar cells , Low resistance loss and higher conversion efficiency
Double EL test before and after lamination, highly control product defects
*Solar panel classified by current, to improve system performance

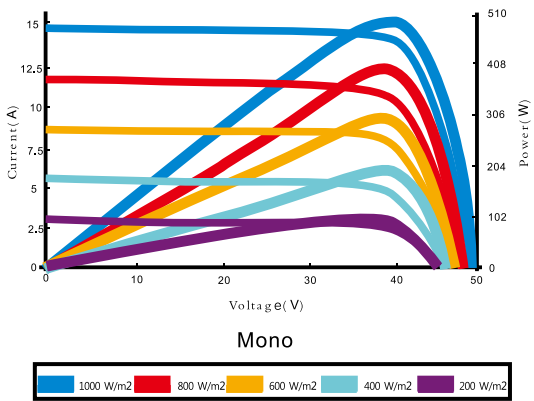
Electrical Characteristics

STC	NES132-7-480M	NES132-7-485M	NES132-7-490M	NES132-7-495M	NES132-7-500M	NES132-7-505M
Maximum Power(Pmax)	480W	485W	490W	495W	500W	505W
Optimum Operating Voltage(Vmp)	37.62V	37.81V	37.99V ₃	38.17V	38.35V	38.53V
Optimum Operating Current(Imp)	12.76A	12.83A	12.90A	12.97A	13.04A	13.11A
Open Circuit Voltage(Voc)	45.07V	45.20V	45.33V	45.46V	45.59V	45.72V
Short Circuit Current(Isc)	13.65A	13.72A	13.79A	13.86A	13.93A	14.00A
Module Efficiency	20.21%	20.42%	20.64%	21.06%	20.37%	21.27%
Operating Module Temperature	-40°C to +85°C					
Maximum System Voltage	1500V DC (IEC)					
Power Tolerance	0~+5W					
STC	Irradiance 1000 W/m ² , module temperature 25°C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used					

Engineering Drawing



I-V Curve



Excellent performance under weak light conditions: at an irradiance intensity of 800W/m² (AM 1.5, 25°C), 95.5% or higher of the STC efficiency(1000W/m²) is achieved.

Mechanical Characteristics

Solar Cell	182mm MBB Monocrystalline silicon cells
No. of Cells	132(6x11x2)
Dimensions	2094 ±2mmx1134 ±2mmx35 ±1mm
Weight	26.3kg ±3%
Front Glass	3.2mm(0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated
Output Cables	TÜV (2Pfg1169:2007) 4.0 mm ² (0.006 inches ²), 300mm/Customized
Connectors	MC4 connectors

Temperature Characteristics

NOCT	45±2°C
Temperature Coefficient of Pmax	-0.350%/°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C

Packing Configuration(35mm)

Per Pallet	30Pieces
Per Container (20' GP)	250Pieces
Per Container (40' HQ)	690Pieces

Note: Specifications subject to technical changes and tests, We reserves the right of final interpretation.



On/Off Grid Solar Power System

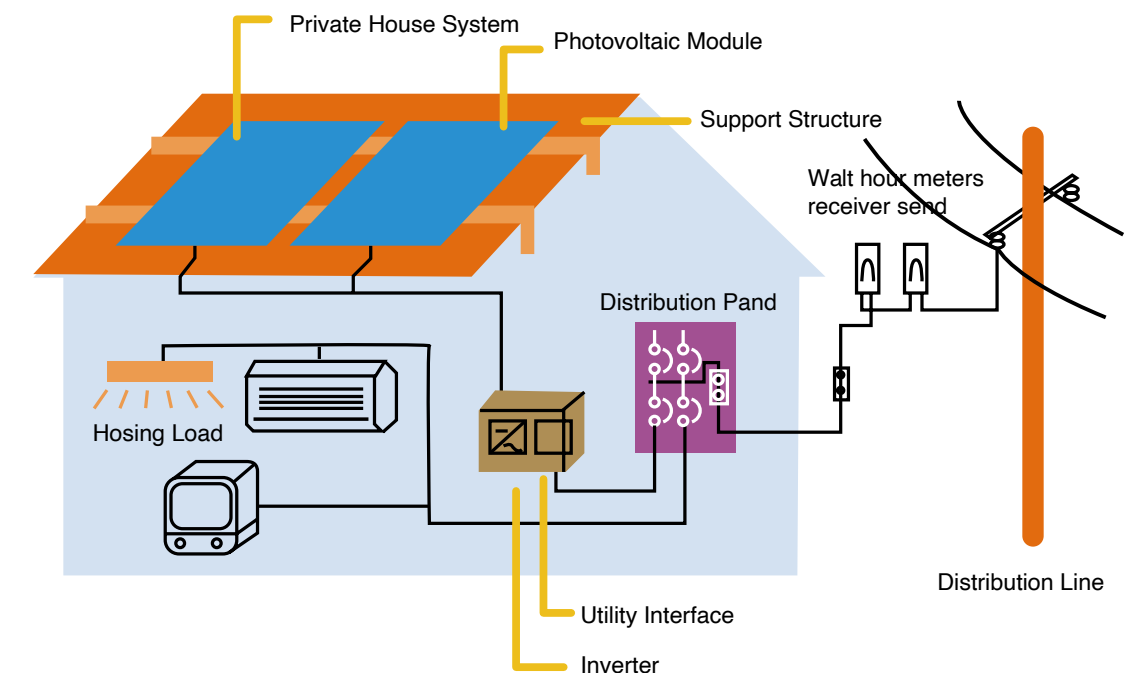
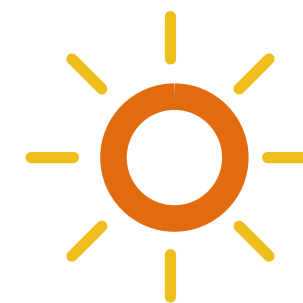
Working Principle:

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 market.

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 leading 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 advanced solar thermal technology!



ISO 9001

ISO 14001

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