

Dedicate To Be The Creator Of High-quality Solar Energy Utility In The World. 2010 PRODUCTS PROMOTION



ZHEJIANG SHENTAI SOLAR ENERGY CO., LTD



Shentai co., Itd,

10 years solar thermal specialist High quality, high performance!



SUNTASK SOLAR Hard-core

Vacuum tube	
Heat pipe Vacuum tube	
Superior	

Solar collectors

Heat pipe collector	3
U-pipe collector	3
non-pressure collector	3

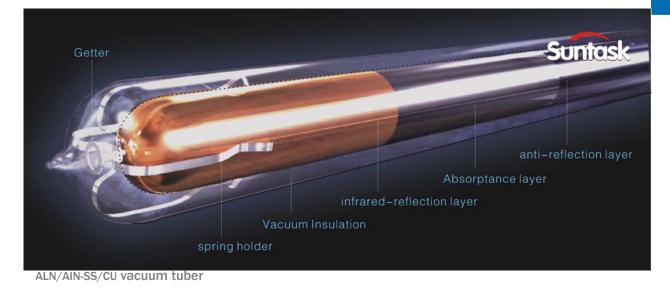
SUNTASK SOLAR Solar water heaters

Integrated pressure syste	m3
pre-heated pressure syste	m3
Compact non-pressure	
split pressurized system	3

SUNTASK SOLAR

Pressuried	tank	3
working sta	tion	3
Controller,	Accessories	3

SUNTASK SOLAR Hard-core



vacuum tube

Feature:

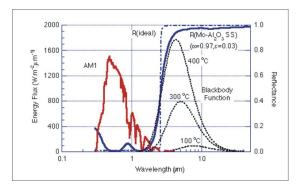
Suntask Vacuum tubes assimilate the advanced 12 layers of spattering deposition Of trivalent element technology, high borosilicate glass, gradual change of

ALN/AIN-SS/CU selective complex absorptive coating. And these make vacuum tubes have high performance of absorptance and low reflection ratio. Through the interlayer, vacuum has a unique effect of thermo, with its temperature up to 380 of idle sunning, performing a strong heating ability.

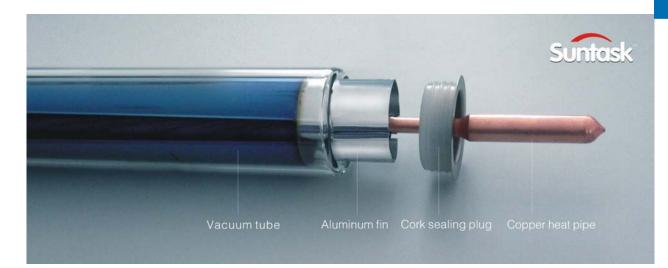
Models	material	Models	length	coat ing	vacuum	Transmi -ttane	bearing hail	
Ø 47x1500	borosilicato	Ø 47 mm 1500 mm		ALN/AIN-SS/CU	≤5x10 ⁻³	0.91	Ø 25 mm	
Ø 47x1800	borosilicato	Ø 47 mm	1800 mm	ALN/AIN-SS/CU	≤5x10 ⁻³	0.91	Ø 25 mm	
Ø 58x1800	borosilicato	Ø 58 mm	1800 mm	ALN/AIN-SS/CU	≤5x10 ⁻³	0.92	Ø 25 mm	
Ø 58x2100	borosilicato	orosilicato Ø 58 mm		ALN/AIN-SS/CU	≤5x10 ⁻³	0.91	Ø 25 mm	

Specification of all-glass Evacuated Solar Collector Tubes

1). Structure:	all glass concentric dual tube geometer
2). Glass material:	borosilicate glass
3). Absorptance:	>0.92
4). Emittance:	<0.08 (80)
5). vacuum:	<5*10-3 Pa
6). Stagnation	>230 m². /KW
7) average heat loss:	<0.8w/ m ² .
8). Lifetime	>15years



suntask solar Hard-core





Heat pipe vacuum tube

Feature:

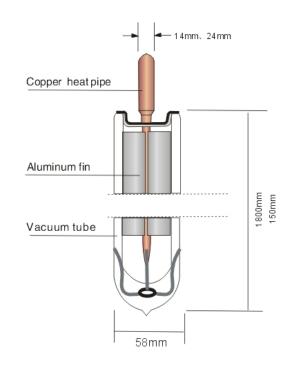
A perfect combination of the vacuum tube and the heat pipe.

1).higher heat efficiency: advanced heat transferring style of the heat pipe, excellent selective absorb coating and perfect combination with high vacuum heat preservation.

2).Wide applicable range: as the SUNTASK heat pipe has less heat can be started quickly even under cloudy fine day and collect heat effectively. It can work normally even -30 below degree. As no water in the vacuum tube, it can effectively prevent lowing of heat efficiency due to frost cracking or scaling.

3). Each individual tube can work independently, and the whole machine can still work if individual tube is damaged. The service life of the heat pipe can be longer than 15 years.

4). The unique connection between the heat pipe and the vacuum tube can ensure both sealing and replace of damaged glass vacuum tube.



SUNTASK SOLAR Hard-core

Superior:

The Heat pipes products self R/D by Suntask with 36 unique procedures and testings to enusre its excellent quality



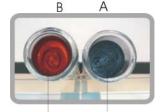
Updated technology of **Suntask** heat pipes warrant the high performance



Strict testing methods ensure 100% qualification rate



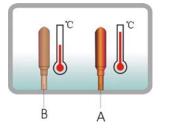
Suntask special anti-freezing design make the heat pipe be suitable for cold area and long lifetime service. A- Suntask B- The other companies'



Δ

New tri-elements technology, especially for the long time high stagnation temperature

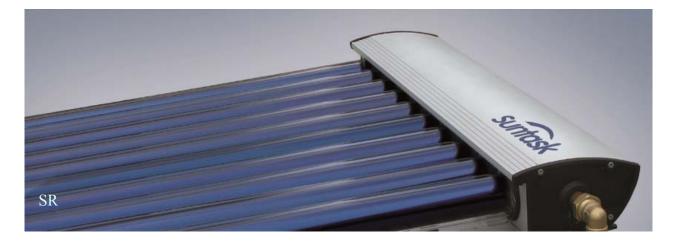
- A. SUNTASK vacuum tube
- B. The other vacuum tubes on the market



B

Faster start speed and high power is the most advantage of Suntask heat pipes. In the same condition of testing, Suntask heat pipe quicker 30-50% on start speed and higher 5-30% temperature

A, Suntask B. The other companies



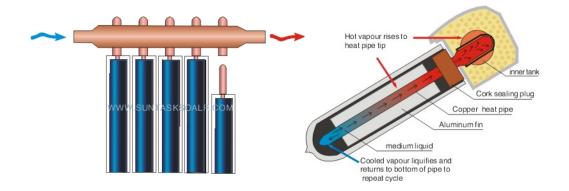
Heat pipe collector

SR、SCM-01、SCM-02

Feature:

◆ The pipeline is made of all the red copper and conducted By heat transfer medium liquid. Water can't flow in vacuum Tubes and operated when confined. The manifold uses Aluminum alloy mould material of high strength with Air flow design. It is furnished in good style.

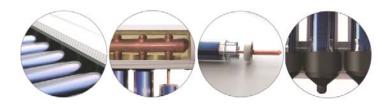
- ♦ Can withstand high pressure when it works.
- ♦ Module design, arbitrary combination, which can meet the demand of large water consumption.



Solar collectors

- ◆ Manifold (interior): red copper
- ◆ Manifold (exterior): aluminum alloy
- Glass tube dimensions: 58mm x 1.8m
- ◆ Daily efficiency: ≥55% (≥42% in winter)
- Hail resistance: 25mm
- max pressure: 12 bar
- Coating of vacuum tube: ALN/AIN-SS/CU
- ◆ Heat Pipe: anti-freezing > -35 °C
- Inlet/outlet: 2 2 mm (3/4'')
- ◆ Heat Pipe: anti-freezing > -35 °C
- manifold casing: silver (AL original), Black





Solar collectors

SR

- SR10-58/1800
- SR15-58/1800
- SR20-58/1800
- SR30-58/1800

SCM-01

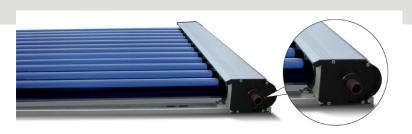
- SCM12-58/1800-01SCM15-58/1800-01
- SCM20-58/1800-01







SCM12-58/1800-02
SCM15-58/1800-02
SCM20-58/1800-02
SCM30-58/1800-02



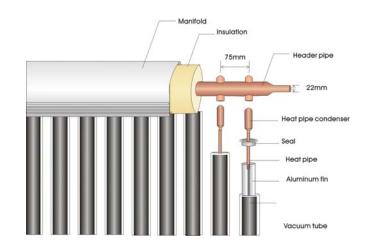


Aperturfläche

aperture area $A_a = 2.806 m^2$ $\eta_{0a} = 0.735$ $a_{1a} = 1.349 W/m^2 K$ $a_{2a} = 0.0151 W/m^2 K^2$

Absorberfläche

absorber area $A_A = 2.448 m^2$ $\eta_{OA} = 0.842$ $a_{1A} = 1.546 W/m^2 K$ $a_{2A} = 0.0173 W/m^2 K^2$



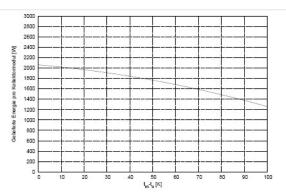


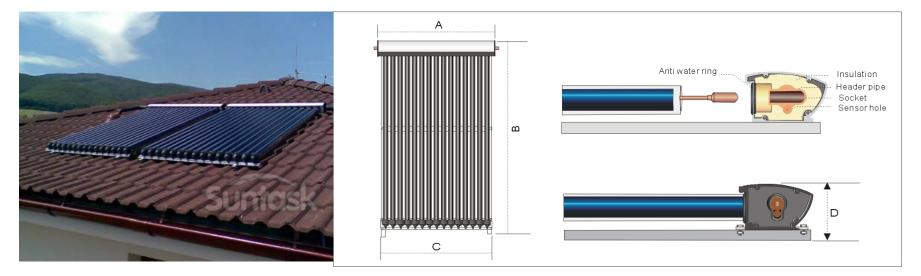
Figure 2: Leistungskurve des Moduls Suntask SR30-58/1800 bei 1000 W/m² - power output curve of the module Suntask SR30-58/1800 at 1000 W/m²

400 [W/m ²]	700 [W/m ²]	1000 [W/m ²]					
825	1444	2062					
783	1402	2020					
673	1292	1911					
530	1148	1767					
352	971	1590					
	825 783 673 530	825 1444 783 1402 673 1292 530 1148					

Spitzenleistung (G = 1000 W/m²) je Kollektormodul 2062 W Maximum power output per collector module

Above for the installation on the slope roof, we accept the custom-made as your specifications

*Tips: • standard O optional - no



Models	vacuum tuber				Adjusta	Capacity	apacity Effective		size((mm)		Qty (set)			
		Condenser	Heat	Whole	Thick	ble	(Liter/Day	collector							
		Φr	pipe	pipe	er	frame	/60)	area M	Α	В	С	D	20'ft	40'ft	
		(mm)	pipe	AL- fin	heat										
					pipe										
SR10-58/1800	Ø 58x1800*10Pc	Ø 24		•			90-100	1.28	1070	2020	1005	123			
SR15-58/1800	Ø 58x1800*15Pc	Ø 24			•		140-150	1.95	1295	2020	1230	123			
SR20-58/1800	Ø 58x1800*20Pc	Ø 24		•		•	180-210	2.60	1670	2020	1605	123			
SR30-58/1800	Ø 58x1800*30Pc	Ø 24		•	•	•	280-300	3.91	2420	2020	2355	123			
SCM12-58/1800-01	Ø 58x1800*12Pc	Ø 14		•			100-120	1.55	1070	1990	1005	130			
SCM15-58/1800-01	Ø 58x1800*15Pc	Ø 14	•				130-150	1.95	1295	1990	1230	130			
SCM20-58/1800-01	Ø 58x1800*20Pc	Ø 14		•	•		170-200	2.60	1670	1990	1605	130			
SCM12-58/1800-02	Ø 58x1800*12Pc	Ø 14		0	_	•	100-120	1.55	1070	2010	1005	125			
SCM15-58/1800-02	Ø 58x1800*15Pc	Ø 14		0	_		120-150	1.95	1295	2010	1230	125			
SCM20-58/1800-02	Ø 58x1800*20Pc	Ø 14		0	_		170-200	2.60	1670	2010	1605	125			
SCM30-58/1800-02	Ø 58x1800*30Pc	Ø 14		0	-		260-300	3.91	2420	2010	2355	125			

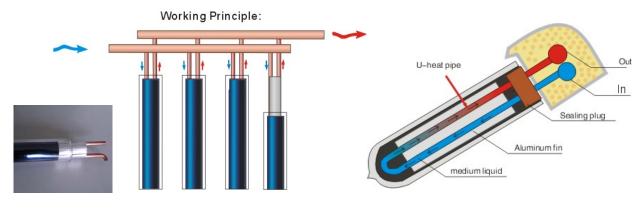
CPC SUPSCIENT

U-pipe collectors

SU、SU-C

Working Principle:

The U type series solar collector are always connected with existing heating supply device, The selective coating on the inner cover of the evacuated tube converts solar energy into heat energy and transfers heat to metal U tube by an aluminum fin. The liquid (usually glycol water antifreeze mixture) in the metal U tube is heated, and conducts the heat energy to the water inside the storage tank through plate exchanger or internal spiral coils.



sunnask solar Solar collectors

Feature:

360° absorber (CPC reflector)
 high energy yield
 high price/performance ratio
 easier and faster modular installation
 long lifetime and stable service.

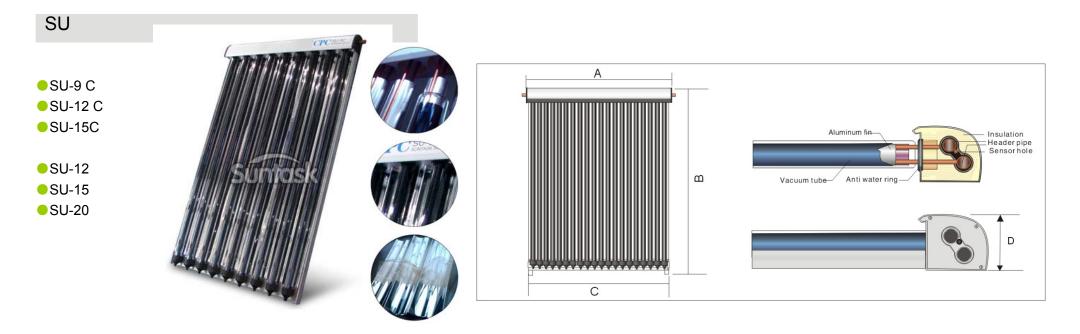
CPC reflector

Maximum performance at minimum dimensions. Absorber is bigger than gross surface area. Three dimensionally 360° shaped absorbers for the greatest possible energy collecting surface, utilized up to most of the diffuse and direct radiation from morning to evening.

360° absorber tube utilizes solar energy the year round in the most efficient way and provide the users with free energy even in the bad weather. Compared with the other collectors, the absorbers, thanks to 360° technology, absorbs direct and diffuse radiation in a much greater mass. In concert with vacuum tube insulation, heretofore unknown rates of efficiency have been achieved with our 360° absorber tubes. Even at sub-zero temperatures this construction prevents heat loss.



SUNTASK SOLAR Solar collectors



Models	vacuum tuber						Capacity	Effective		size((mm)		Qty	(set)	
		U-pipe (mm)	CPC	preass embly	Thick er U pipe	Adju stabl e fram e	(Liter/Day/ 60)	collector area M	A	В	С	D	20'ft	40'ft	
						-	-		-						
SU-9 C	Ø 47x1500*9Pc	Ø 8	•				80-100	1.43	1020	1650	995	96			
SU-12 C	Ø 47x1500*12Pc	Ø 8	•		•	•	110-130	1.91	1350	1650	1325	96			
SU-15 C	Ø 47x1500*15Pc	Ø 8	•	•	•		140-160	3.15	1680	1650	1655	96			
SU-10	Ø 58x1800*12Pc	Ø 8	_				80-100	1.55	1070	1970	1005	120			
SU-15	Ø 58x1800*15Pc	Ø 8	_				130-150	1.95	1295	1970	1230	120			
SU-20	Ø 58x1800*20Pc	Ø8	_				180-200	2.60	1670	1970	1605	120			

non-pressure collector

FCM

Advantages:

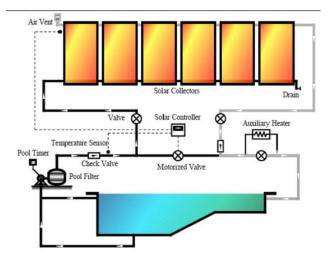
- ♦ Central solar water heating system is designed based on customers water consumption.
- ♦By collecting the solar heat, it can heat a great amount of water that can accomm odate tens of and hundreds of people.
- SUNTASK solar thermal collector, SCM, SFM ,SR a lot of these collectors can be linked together to make the solar central heating project. It is widely used in hotel, swimming pool, school etc.
- Investment only once, benefit forever.
- ♦ No harm , no pollution, saving and clean.



Specifications:

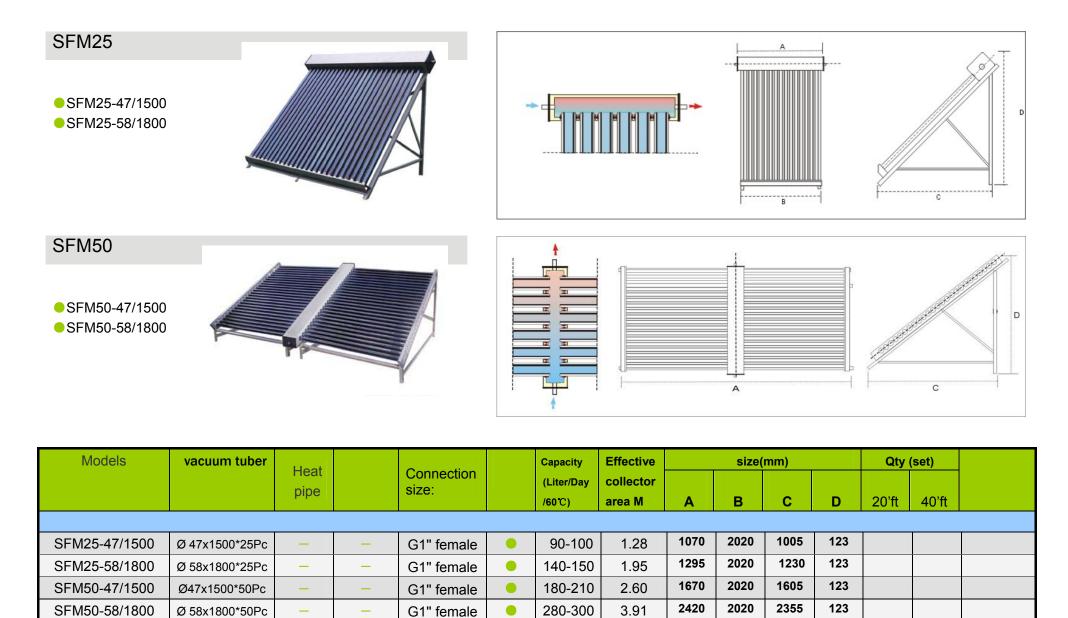
- ◆ Water tank (interior): stainless steel
- Water tank (exterior): PVDF
- Glass tube dimensions: 58mm x 1.8m / 47mm x 1.5m
- Heat preservation: 72h
- Hail resistance: 25mm
- ♦ Lifetime: 15 years





Solar collectors

*图标: ●是 ○选配 -无



*以上为斜坡房安装支架,特殊规格可以定做

Solar water heaters

Specifications:

- ◆ Material of storage tank
- ♦ Outer tank: colorful steel, 0.4mm thick
- Inner Tank: crystal liner 4mm, steel 1.5 mm
- thick Insulation Polyurethane foam, 50 mm
- ♦working pressure: 6Bar
- ◆Daily efficiency: ≥55% (≥42% in winter)
- ♦working temperature :60°C ~ -35°C
- vacuum tube specifications: 58mm*1800mm
- ♦lifetime:15 years
- ◆出水口: 3/4"



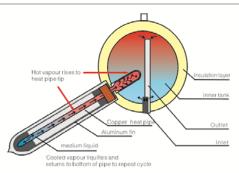
DAC-H

Feature:

- ◆ Highly efficient absorber of high performance with daily average efficiency over 50%;
- ◆ Start up quickly, heat pipe transfer the heat energy into the storage tank in one direction.
- ♦ Withstand pressure of 6 Bar, can be connected directly with city water.
- ♦No water inside the evacuated tubes; the solar water heater can still in service even with several tubes breakage:
- ♦ Highly efficient insulation with polyurethane foam;
- Simple structure, easy to assembly and install, diffuse flat plate reflector can be assembled easily with its module structure;
- Can be used all year round in the cold climate;
- Can be used together with Auxiliary electric boost:
- ◆Long service life, can be used as long as 15 years.













installed on the slope roof

SUNTASK SOLAR Solar water heaters

pre-heated pressure system

A8C-E WAC-E

Feature:

♦ Use in any time : It adopts advanced design idea and integrates with high efficiency preheated patent technique, so it can warm the cold water rapidly when it flows through special pipe. It can overcome the short of traditional SWH, such as slow heating, long waiting time.

◆ More Capacity: We adopt special exchanging heat mode, it avoids mixed effect, so cold water can be heated at any moment.

♦ Strong hydraulic pressure : The hydraulic pressure is same as tap water, it is very suitable for tired person.

◆ Economical and Environmental protecting: There is no pollution when it is working since it depends on sunshine. Green and economical.

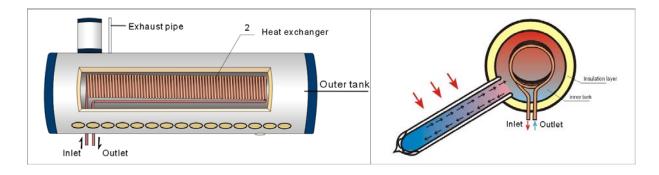
Easy operation : It can supply water automatically, you can take it easy and enjoy good time.

◆Fashionable : The appearance is fashionable and it can great integrate with your fitment.

Specifications:

- ◆ Tank material: interior SUS 304-2B
- ♦ Outer: PVDF / Color steel
- Frame: A8C-Aluminum alloy
- ♦WAC- Galvanized steel
- Heat exchanger: Red copper
- ♦Pressure: 6 Bar
- Heat preservation: 72-80h
- ♦ Hail resistance: 25mm



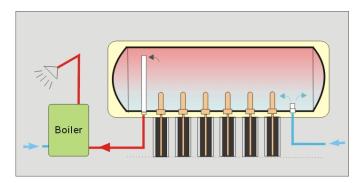


SUNTASK SOLAR Solar water heaters

DAC-H

Integrated pressure system DAC-150H DAC-200H DAC-300H



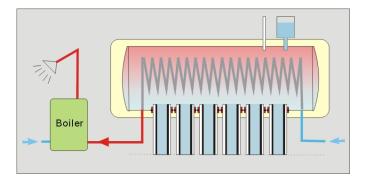


A8C-E

pre-heated pressure system

A8C-210EA8C-240EA8C-300E





A8C-E

pre-heated pressure system

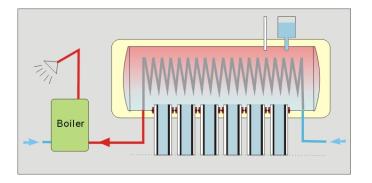
•WAC-210E

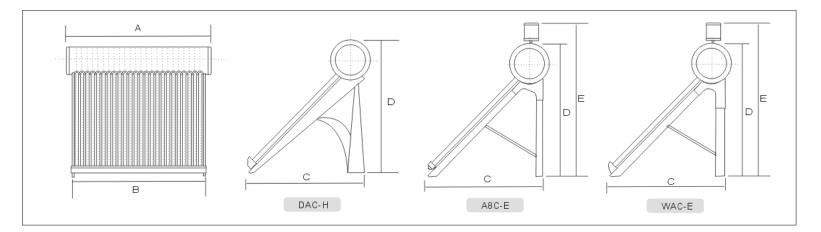
•WAC-240E

•WAC-300E

•WAC-360E







Models	vacuum	Heat		铝合						Effectivec			size(mm)		Qty	(set)	
	tuber	pipe	运行方式	金支 架	水箱 承压	支架角度	(Liter/Da y/60)	ollector area M	А	В	С	D	- E	20'ft	40'ft			
						T			1			1						
DAC-150H	Ø 58x1800*15Pc	•	直接承压	0		50°	150	1.92	1385	1185	1550	1720	—					
DAC-200H	Ø 58x1800*20Pc	•	直接承压	0		50°	200	2.57	1760	1560	1550	1720	—					
DAC-300H	Ø 58x1800*30Pc	•	直接承压	0		50°	300	3.87	2510	2310	1550	1720	_					
A8C-210E	Ø 58x1800*21Pc	0	换热承压	•		45°/38°/25°	210	2.60	1835	1635	1550	1650	2060					
A8C-240E	Ø 58x1800*24Pc	0	换热承压	•		45°/38°/25°	240	2.98	2060	1860	1550	1650	2060					
A8C-300E	Ø 58x1800*30Pc	0	换热承压	•		45°/38°/25°	300	3.73	2510	2310	1550	1650	2060					
WAC-210E	Ø 58x1800*21Pc	0	换热承压		-	45°/38°/25°	210	2.60	1835	1635	1550	1650	2060					
WAC-240E	Ø 58x1800*24Pc	0	换热承压	_	_	45°/38°/25°	240	2.98	2060	1860	1550	1650	2060					
WAC-300E	Ø 58x1800*30Pc	0	换热承压	_	_	45°/38°/25°	300	3.73	2510	2310	1550	1650	2060					
WAC-360E	Ø 58x1800*36Pc	0	换热承压	_	_	45°/38°/25°	360	4.48	2960	2760	1550	1650	2060					

*特殊规格可以定做

Compact non-pressure

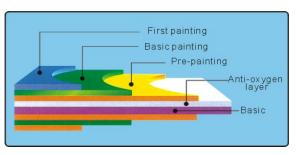
ST

Feature:

◆Super Anti-erode outer tank: Outer tank is made by PVDF. Best anti-erode material. Especially for the seaside area, such as East South Asia etc.

• Feeding water automatic: With special design, feeding water automatic,

and ensure the outlet water as stable temperature.



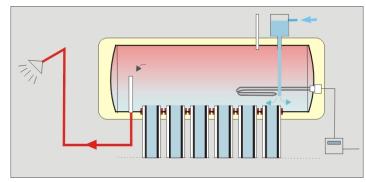
PVDF structure



SUNTASK SOLAR Solar water heaters

Specifications:

- Tank material: interior SUS 304-2B
- ◆ Outer: PVDF / Color steel /不锈钢
- Frame: Aluminum alloy / Galvanized steel
- Heat preservation: 60-72h
- ♦ Hail resistance: 25mm



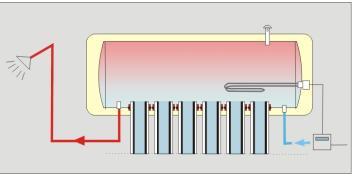
带自动补水箱的结构



S T15-180
S T18-180
ST21-180
ST24-180
ST30-180
S T36-180

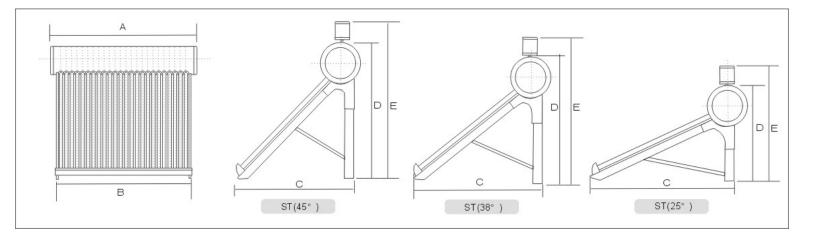
ST16-150
ST20-150
ST24-150
ST30-150





不带自动补水箱的结构

SUNTASK SOLAR Solar water heaters



Models	vacuum		铝合			Capacity	Effectived			size(cm)		Qty	(set)	
	tuber	补水箱	金支 架	水箱 承压	支架角度	(Liter/Da y/60)	Liter/Da ollector /60) area M		В	C 45°/38°/25°	D 45°/38°/25°	- E 45°/38°/25°	20'ft	40'ft	
ST15-150	Ø 47x1500*15Pc	0	0	—	45°/38°/25°	96	1.34	107	99	138 /147/165	140 /125/95	180 /165/135			
ST20-150	Ø 47x1500*20Pc	0	0	I	45°/38°/25°	120	1.80	140	132	138 /147/165	140 /125/95	180 /165/135			
ST24-150	Ø 47x1500*24Pc	0	0	—	45°/38°/25°	150	2.16	165	151	138 /147/165	140 /125/95	180 /165/135			
ST30-150	Ø 47x1500*30Pc	0	0	—	45°/38°/25°	180	2.70	205	197	138 /147/165	140 /125/95	180 /165/135			
ST15-180	Ø 58x1800*15Pc	0	0	_	45°/38°/25°	150	1.92	138	118	155 /165/187	160 /145/116	201 /185/156			
ST18-180	Ø 58x1800*18Pc	0	0	_	45°/38°/25°	180	2.23	160	141	155 /165/187	160 /145/116	201 /185/156			
ST21-180	Ø 58x1800*21Pc	0	0	_	45°/38°/25°	210	2.60	183	163	155 /165/187	160 /145/116	201 /185/156			
ST24-180	Ø 58x1800*24Pc	0	0	_	45°/38°/25°	240	2.98	206	186	155 /165/187	160 /145/116	201 /185/156			
ST30-180	Ø 58x1800*30Pc	0	0	_	45°/38°/25°	300	3.73	251	231	155 /165/187	160 /145/116	201 /185/156			
ST36-180	Ø 58x1800*36Pc	0	0	-	45°/38°/25°	360	4.48	296	276	155 /165/187	160 /145/116	201 /185/156			

*特殊规格可以定做

*图标; O选配 - 无

split pressurized system

SFCY-01/02

Suntask split pressurized solar water heater is specially designed for the villa. The split means that the collector separates from water storage tank. Collector maybe installed either on the roof or wall while water tank may be installed at any place in a villa flexible. Collector harmonizes with villa's outlook and maintains villa's outlook beauty.

Working Principle:

The collector absorbs solar energy and transmits it to the water tank through circulation. When the temperature of the collector reaches the set value, the controller starts the circulation pump automatically

Feature:

- ♦ Module design, arbitrary combination, harmony with the building perfectly ;
- ◆Intelligent control and automatic operation
- Anti-freeze: Using the anti-freezing liquid as the medium and the controller has the anti-freezingfunction
- multifunction: bathing, washing, domestic heating etc ;
- Work at anytime and enjoyable

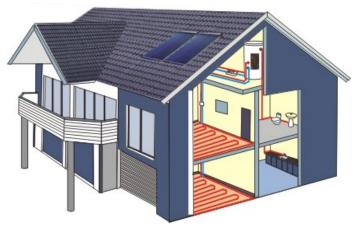


SUNTASK SOLAR Solar water heaters

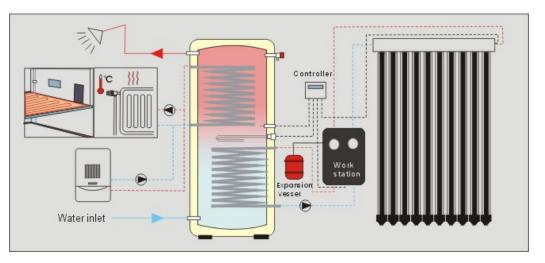
Specifications:

 The whole system is mainly combined by pressurized collector, pressurized storage tank, solar working stations controller.

- Pressure: 6 Bar
- ◆ Daily efficiency: ≥55% (≥42% in winter)
- Heat preservation: 72h 80h
- ◆ Electric heater: 1.5Kw-3Kw
- ♦ Heat Pipe: anti-freezing > -35 ° C





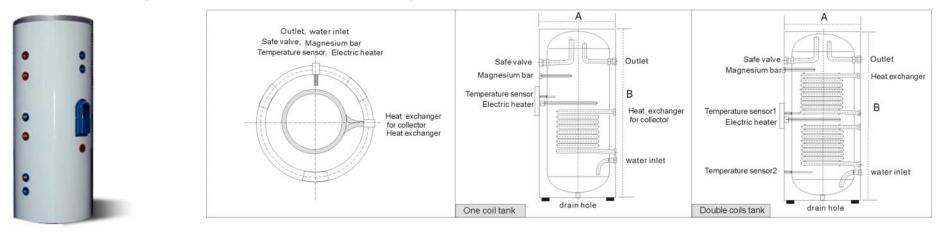


Models	controller							采光面积 (m2)	- 容水量	Qty (set)	
	Models	集热器数量	水箱型号		working station	Controller	膨胀管			20'ft	40'ft
SFCY-150-15	SCM15-58/1800-01		TK-150L	0	WS- I	868-C8	8L	1.95	150L		
SFCY-200-20	SCM20-58/1800-01		TK-200L	0	WS- I	868-C8	8L	2.60	200L		
SFCY-200-24	SCM12-58/1800-01		TK-200LS	00	WS- I	868-C8	8L	3.10	200L		
SFCY-300-30	SCM15-58/1800-01		TK-300LS	00	WS- I	868-C8	8L	3.90	300L		
SFCY-300-36	SCM15-58/1800-01		TK-300LS	00	WS-	868-C8	8L	4.65	300L		
SFCY-500-60	SCM20-58/1800-01		TK-500LS	00	WS-	868-C8	16L	7.80	500L		
SFCY-700-80	SCM20-58/1800-01		TK-700LS	00	WS-	868-C8	16L	10.4	700L		

Pressurized tank

Pressurized tank is used for the connection of SFB pressurized solar collectors. Our tank includes electric

immersion heater for backup, magnesium strick, P/T valve, one-direction safety valve.



Models	内胆材料	1材料 内胆厚 进出水 双盘管 辅助加 重量 保温 包装尺寸	包装尺寸	size(mm)		Qty (set)		FOB					
	及直径	内起序 度 (mm)	口径		热	 (kg)	原度 (mm)	(mm)	A	В	20'ft	40'ft	SHANGHAI
								• •					
TK100L	SUS304-Ф370	1.2	3/4 ″	0	1500W	30	50	550*550*1120	470	1040			
TK-150L	SUS304-Ф370	1.2	3/4 ″	0	1500W	44	50	550*550*1500	470	1440			
TK-200L	SUS304-Ф470	1.5	1 ″	0	1500W	55	50	640*640*1330	560	1260			
TK-300LS	SUS304-Ф470	2.0	1 ″	•	1500W	72	50	640*640*1870	560	1870			
TK-500LS	SUS304-Ф600	2.0	1 ″	•	3000W	96	50	780*780*1950	700	1850			
TK-700LS	SUS304-Ф650	2.5	1 ″	•	3000W	113	50	820*820*2280	760	2200			
TK-1000LS	SUS304-Ф900	3.0	1″/1.5″		3000W	136	50	1100*1100*2150	1000	2000			

*特殊规格可以定做

*图标: ●是 O选配

SUNTASK SOLAR Installation parts

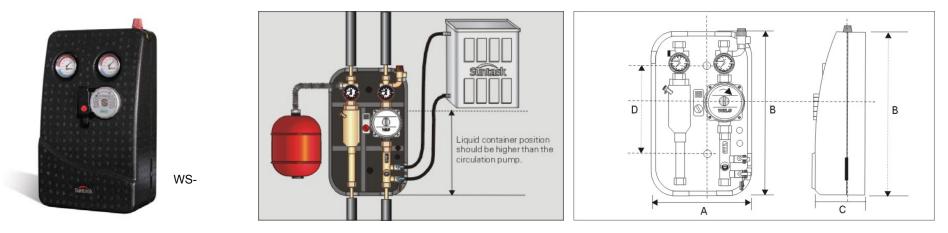
working station (WS-I, WS-II)

Dear customer:

Congratulations on your purchase of Suntask solar working station WS- Installing for superior performance in order to operate reliably at optimal efficiency, it must be correctly installed. Please ensure that you employ the services of a certified installer who will ensure the installation follows the manufacturer's guidelines and meets all government and health regulations.

The Suntask solar working station WS- has been designed with ease of installation as one of the key design features. This manual includes a clear step by step installation guide. If you come across any issues not covered by this manual during the installation, please contact with your Suntask accredited installer or representative agent.





		Max working temperature	Flow rate control range:	self filling pump	power supply	Conne ction size:	双管 路	Thermome ter/pressur e gauge	带排气 罚	size(mm)				Qty	(set)	
	Max pressure									A	В	С	· D	20'ft	40'ft	FOB SHANGHA I
WS-I	10 Bar	120 ℃	4 to 16 l/ min		220V/60Hz	G3/4"	_	1 PC	_							
					110V/ 50Hz	female										
WS-II	10 Bar	120 ℃	4 to 16 l/ min		220V/60Hz	G3/4"		2 PC	•	285	476	158	173			
					110V/ 50Hz	female										

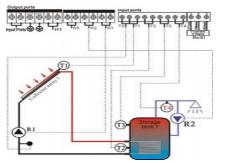
SUNTASK SOLAR Installation parts

Controller

868C8

适合于一般分体太阳能热水器

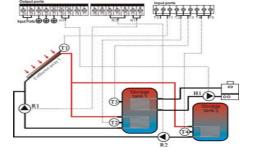






适合于多路分体太阳能热水器

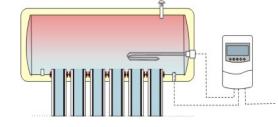




609C

适合于一体太阳能电加热的控制

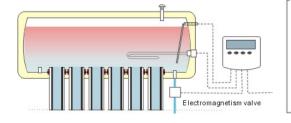




609C

适合于一体太阳能电磁阀上 水的控制





配件



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