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We have only one Earth

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Company Introduction



Incorporating the functions of R&D, manufacturing and marketing, Jiaying Jinyi Solar Energy Technology Co., Ltd. is a company dedicated to the promotion of environmentally solar energy solution in China and globally.

The company has a fully fledged of ISO 9001:2000 manufacturing unit for solar water heaters, solar collectors, pressurized water tank, and large scale solar water heating systems, with quality standard conforming to global certificated as ISO, CE, Solar Keymark, EN12975, SRCC, etc.

Of the total annual output more than 80,000 sets, 70% of Jinyi solar products are exported to more than 30 countries or regions, such as North America, Germany, Spain, Bulgaria, Mexico, South Africa, and so on. By supplying not only high quality products with most competitive price, but also all-around and instant services, Jinyi Solar Ltd. enjoys a high reputation.

In the context of a growing global energy crisis, Jinyi has been established with a vision to identify and develop our efficient solar water heaters to satisfy our esteem customers. We are devoted to provide environmentally friendly solar energy to beautify our living space. We are looking forward to establish a close cooperation with clients from all over the world.



Equipments Display



Vacuum Tube

Vacuum tubes are the absorber of the solar water heater, consisting of double-layer coaxial glass tubes made from extremely strong borosilicate glass 3.3, the inner tube coated by solar selective coating, which absorbs solar energy and converts it into thermal energy for water heating. This type of tube is chosen for its reliability, efficient performance and low manufacturing cost, more and more people in the world make the vacuum tube as their first choice in energy saving planning.



Parameter table

Model	JVN	JVT	JVS
Structure	All-glass double-layer coaxial		
Tube material	High quality borosilicate glass 3.3		
Outer tube diameter and thickness	Φ=47 & =1.6mm. Φ=58 & =1.6mm & =2.0mm & =2.2mm		Φ=58 & =1.6mm
Inner tube diameter and thickness	Φ=37 & =1.6mm, Φ=47 & =1.6mm		Φ=47 & =1.6mm
Tube length	1500mm / 1800mm		1800mm
Absorptive coating	Structure	AL/N/AL	ALN/AIN-SS/CU
	Sediment method	Magnetron sputtering plating	
	Absorptance	a=0.88-0.92(AM1.5)	a=0.93-0.96(AM1.5)
	Emittance ratio	Σ=.004-0.08(80℃±5℃)	Σ=.004-0.06(80℃±5℃)
Vacuum quality	$p \leq 5.0 \times 10^{-2}$ Pa	$p \leq 5.0 \times 10^{-2}$ Pa	
Stagnation parameter	Y=250-260m ² . °C/kw	Y=270-300m ² . °C/kw	
Solar irradiation under stagnation	H=4.7MJ/m ²	H=3.7-4.2MJ/m ²	
Average heat loss coefficient	ULT=0.6-0.84W/(m ² . °C)	U _{LT} =0.4-0.6W/(m ² . °C)	
Hail resistance	Φ25mm / Φ40mm		



Heat Pipe Vacuum Tube

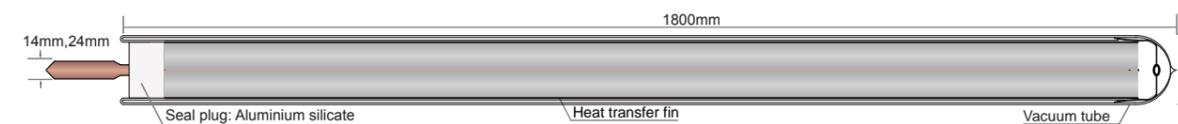
The heat pipe is hollow with the space inside evacuated, much the same as vacuum tube. In this case insulation is not the goal, but rather to alter the state of the liquid inside. Based on principle of water boiling at a lower temperature with decreased airpressure. The heat pipes used in our solar collectors have a boiling point of only 30 °C (86°F). So when the heat pipe is heated above 30 °C (86°F) the water vaporizes. This vapor rapidly rises to the top of the heat pipe and transfers the heat. As the heat is exchanged at the condenser top, the vapor condenses to form liquid (water) and returns to the bottom of the heat pipe at once and then repeats the process.



Model: JVH-14
 Vacuum tube: Borosilicate glass 3.3, Φ58×1800mm, Model: JVT
 Heat transfer fin: Length: 1.62m, thickness: 0.25mm
 Heat pipe: Red copper, length:1700mm, condensor: Φ14mm
 Seal plug: Aluminium silicate

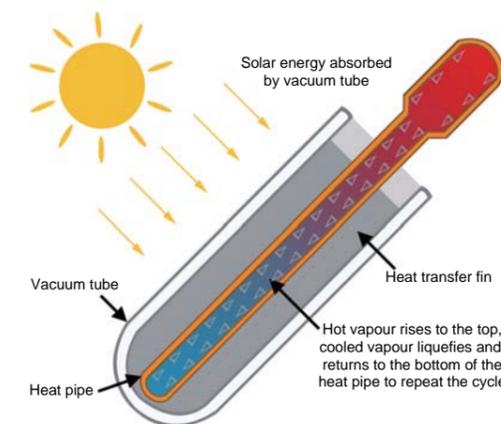


Model: JVH-24
 Vacuum tube: Borosilicate glass 3.3, Φ58×1800mm, Model: JVT
 Heat transfer fin: Length: 1.62m, thickness: 0.25mm
 Heat pipe: Red copper, length:1700mm, condensor: Φ24mm
 Seal plug: Aluminium silicate



Feature:

1. Higher heat efficiency: advanced heat transferring style of the heat pipe. excellent selective absorb coating and perfect combination with heat vacuum heat preservation.
2. Wide applicable range: as the heat pipe has less heat capacity, it can be started quickly even under cloudy fine day and collect heat effectively. it can work normally even -50 °C below degree. As no water in the vacuum tube, it can effectively prevent lowering of heat efficiency due to frost cracking or scaling.
3. Each individual tube can work independently, and the whole maching can still work if individual tube is damaged.
4. The unique connection between the heat pipe and the vacuum tube can ensure both sealing and replace of damaged glass vacuum tube.



Heat Pipe Solar Collector

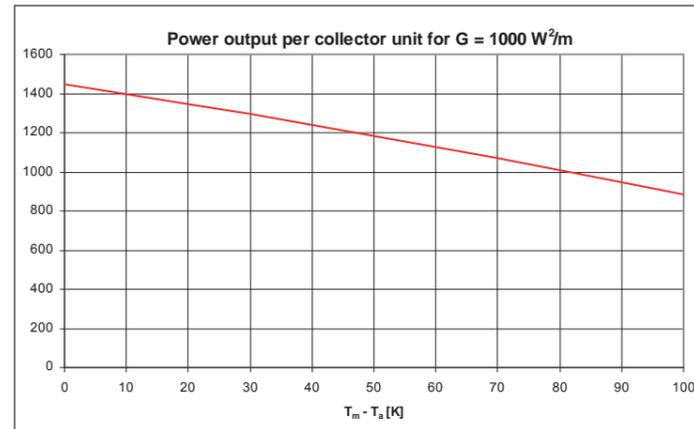


Figure: Leistungskurve des Moduls JinYi JHC-5818-24 bei 1000W/m² power output per collector unit at irradiance G=1000 W/m²

T _m - T _a	Global irradiance G		
	G=400 W/m²	G=700 W/m²	G=1000 W/m²
10 K	529 W	964 W	1398 W
30 K	424 W	859 W	1294 W
50 K	314 W	749 W	1183 W

Peak power W_{peak} per collector unit for normal incident irradiation of 1000 W/m²

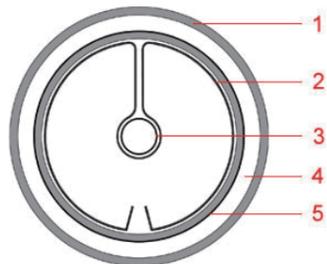
W_{peak} = 1449 [W]

Parameters for efficiency equation

Reference area	Absorber area	Aperture area	Gross area
η ₀ (-)	0.751	0.644	0.409
a ₁ (W/m²K)	2.57	2.20	1.40
a ₂ (W/m²K²)	0.0036	0.0031	0.0020



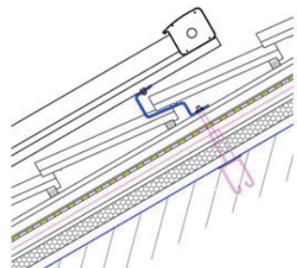
Sketch of Collector



Specifications on Elements

- 1 Glazing**
Material: Borosilicate glass
Thickness [mm]: 1.6
- 2 Heat-conducting metal sheet**
Description: Aluminum
- 3 Heat pipe**
Description: Copper
- 4 Vacuum**
- 5 Absorber coating**
Description: ALN/AIN-SS/CU

Sketch of slope roof mounting

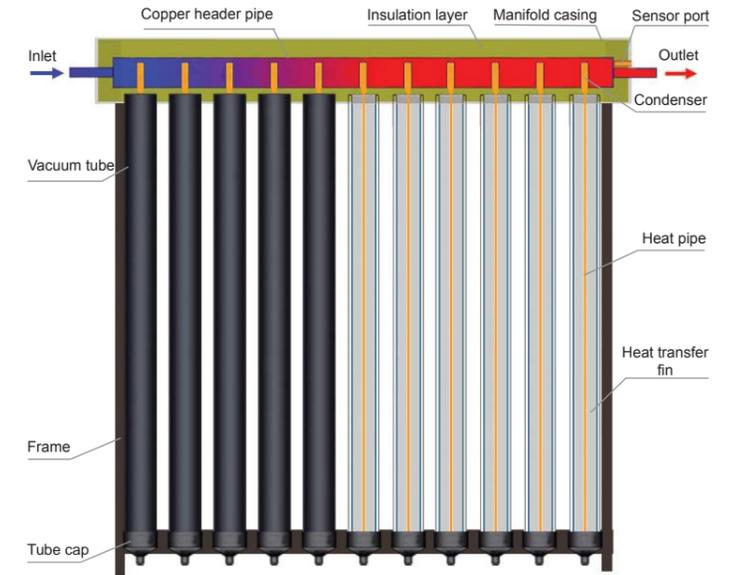


Heat Pipe Solar Collector



The heat pipe solar collector is always connected with existing heating supply device. The selective coating on the inner cover of the vacuum tubes converts solar energy into thermal energy and transfers heat to the heat pipes by aluminum fins. The liquid in the heat pipe changes into vapor which rises to the condenser. The heat then passes through the heat exchanger and the vapor becomes liquid, returning to the base of the heat pipe. The heat conducts to the heat transfer liquid via a copper pipe. This transference of heat into the liquid creates a continuous circulation as long as the collector is heated by the sun.

Model: JHC
 Vacuum tube: Φ58×1800mm
 Condenser: Red copper Φ14mm, Φ24mm
 Heat pipe: Red copper Φ8mm
 Manifold casing: Aluminium alloy
 Casing color: Silver, black
 Header pipe: Red copper
 Insulation layer: Rock wool
 Frame: Aluminium alloy
 Heat transfer fin: Integrated aluminium fin
 Working pressure: 0.6MPa
 Max. working pressure: 1.2MPa
 Hail resistance: Φ25mm, Φ40mm
 Ambient temperature: ≥-50 C
 Inlet/outlet: Φ22mm(3/4")



Characteristic:

- 1) Light-weight, easy delivery.
- 2) Attractive design, standard frame suitable for pitched roof or flat roof.
- 3) Easy plug-in installation.
- 4) Can be connected with the existing heating device.
- 5) Humanized design, no water directly flowing in the tubes, enabling the system still workable in case of occasional tube breakage.

Parameter table

Model	Heat pipe vacuum tube			Condenser Φ (mm)	Absorber area(m²)	L/W/H(mm)	Loading Qty (set)		
	Dia. / Len.(mm)	Qty(pcs)					20'	40'	40'HQ
JHC-5818-10	58	1800	10	Ø 14	0.805	1960x1025x130	139	288	324
JHC-5818-15	58	1800	15	Ø 14	1.208	1960x1250x130	135	274	310
JHC-5818-18	58	1800	18	Ø 14	1.449	1960x1475x130	110	225	251
JHC-5818-20	58	1800	20	Ø 14	1.610	1960x1625x130	92	193	214
JHC-5818-24	58	1800	24	Ø 14	1.929	1960x1925x130	80	164	186
JHC-5818-30	58	1800	30	Ø 14	2.415	1960x2375x130	67	148	175
JHC-5818-10-E	58	1800	10	Ø 24	0.805	1980x1025x185	150	310	350
JHC-5818-15-E	58	1800	15	Ø 24	1.208	1980x1250x185	112	230	261
JHC-5818-18-E	58	1800	18	Ø 24	1.449	1980x1475x185	87	185	212
JHC-5818-20-E	58	1800	20	Ø 24	1.610	1980x1625x185	83	172	195
JHC-5818-24-E	58	1800	24	Ø 24	1.929	1980x1925x185	73	150	168
JHC-5818-30-E	58	1800	30	Ø 24	2.415	1980x2375x185	62	129	145

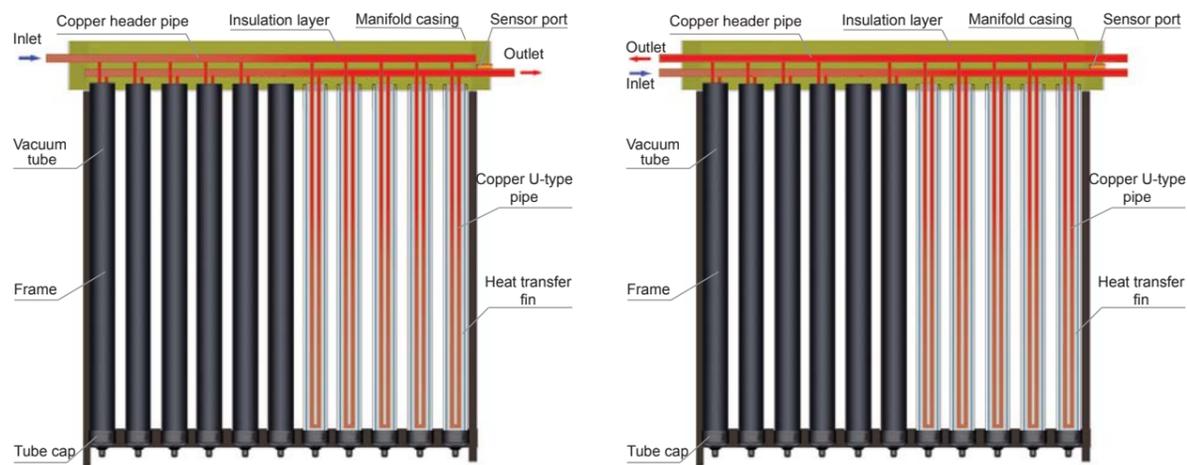


U-Type Solar Collector



Model: JUC
 Vacuum tube: Borosilicate glass 3.3, $\Phi 58 \times 1800$ mm
 Header pipe: Red copper
 U-type pipe: Red copper
 Manifold casing: Aluminium alloy
 Insulation layer: Rock wool
 Frame: Aluminium alloy
 Heat transfer fin: Integrated aluminium fin
 Working pressure: 0.6MPa

In each vacuum tube there is a U pipe with direct flow-through that is connected to the header pipe inside manifold. This U pipe is sealed in an aluminum heat transfer fin in the interior of vacuum tube that transmits the heat from the interior tube to the U pipe. The liquid (usually a glycol-water antifreeze mixture) in the metal U pipe is heated, and conducts the heat energy to the water inside the storage tank through plate exchanger or internal spiral copper coils.



Characteristic:

- 1) Especially used for the balcony solar water heating system.
- 2) Can be connected with the existing heating device.
- 3) Can be integrated with the architecture perfectly.
- 4) Humanized design, no water directly flowing in the tubes, enabling the system still workable in case of occasional tube breakage.

Parameter table

Model	Vacuum tube		Absorber area(m ²)	L/W/H(mm)	Loading Qty (set)			
	Dia. / Len.(mm)	Qty(pcs)			20'	40'	40'HQ	
JUC-5818-15	58	1800	15	1.208	2000×1325×180	50	95	114
JUC-5818-18	58	1800	18	1.449	2000×1550×180	39	78	86
JUC-5818-20	58	1800	20	1.610	2000×1700×180	37	75	80

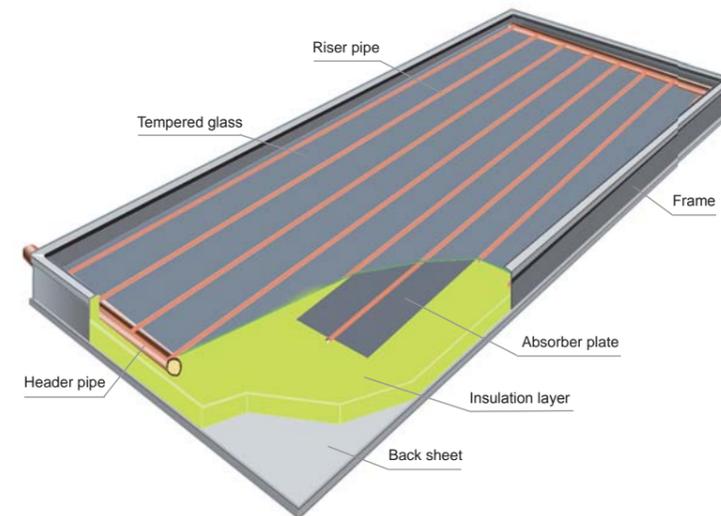
Flat Plate Solar Collector



Model: JFC-3
 Coating: Black chrome
 Absorptance: $\geq 92\% \pm 2\%$
 Emittance: $\leq 8\% \pm 2\%$
 Material & thickness of glass: Tempered glass, 3.2mm
 Material of frame: Aluminum alloy
 Insulation layer: Glass wool
 Fluid content: 2.22L
 Working pressure: 0.6MPa
 Riser pipe: 8pcs



Model: JFC-4
 Coating: Blue titanium
 Absorptance: $\geq 95\% \pm 2\%$
 Emittance: $\leq 5\% \pm 2\%$
 Material & thickness of glass: Low iron tempered glass, 3.2mm
 Material of frame: Aluminum alloy
 Insulation layer: Glass wool
 Fluid content: 2.22L
 Working pressure: 0.6MPa
 Riser pipe: 8pcs



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

Characteristic:

- 1) Affordable solar heating solution.
- 2) Easily integrated with existing heating systems.
- 3) Suitable for domestic and commercial hot water.

Parameter table

Model	Dimensions (W×L×H)(mm)	Cross area (m ²)	Packing dimension	Loading Qty (set)		
				20'	40'	40'HQ
JFC-3	2000*1060*90	2	2025*1125*105	129	264	296
JFC-4	2000*1060*90	2	2025*1125*105	129	264	296

Non-pressurized Solar Collector

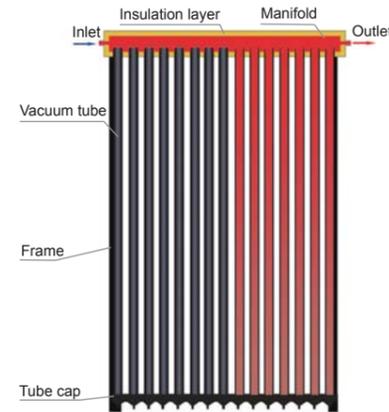
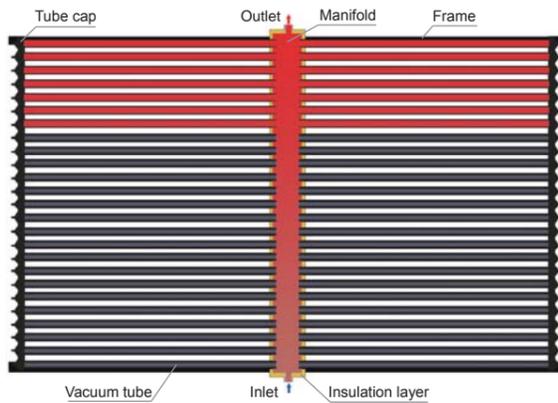


Model: JNCH



Model: JNCV

- Material:
1. Vacuum tube: Borosilicate glass 3.3, $\Phi 47 \times 1500\text{mm}$, $\Phi 58 \times 1800\text{mm}$
 2. Inner shell: SUS304-2B stainless steel
 3. Outer shell: Colored steel
 4. Insulation layer: High density, one-off molding polyurethane foam
 5. Bracket: Galvanized steel, aluminium alloy



- Characteristic:
- 1) Suit for such large scale solar water heating solution like hotel, school, and public bath, etc.
 - 2) Flexible installation.
 - 3) Beat rising energy cost and help the environment.

Parameter table

Model	Vacuum tube		Tube orientation	L/W/H(mm)	Loading Qty (set)			
	Dia / Len(mm)	Qty(pcs)			20'	40'	40'HQ	
JNCH-4715-50	47	1500	50	horizontal	3200×1863×210	72	146	158
JNCH-5818-50	58	1800	50	horizontal	3700×2100×210	42	85	93
JNCV-5818-25	58	1800	25	vertical	1960×2035×210	60	123	170



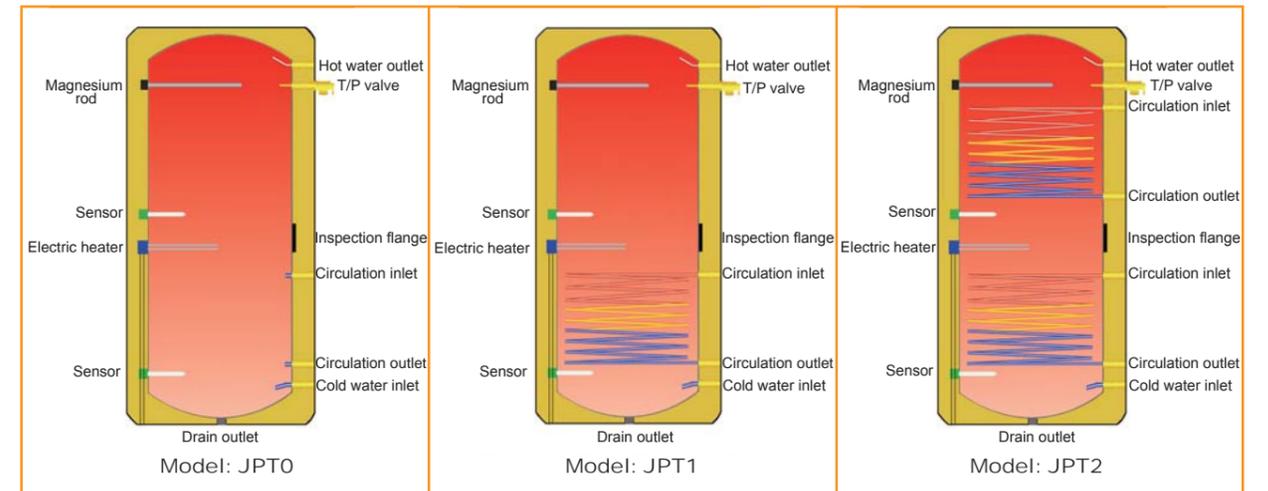
Pressurized Water Tank



- Model: JPT
- Outer tank: Colored steel
 - Inner tank: SUS304-2B or SUS316 stainless steel
 - Insulation layer: High density, one-off molding polyurethane foam
 - Tank capacity: 100L-1000L
 - Heat exchanger (inside tank): Copper coil
 - Auxiliary energy: Electric heater
 - Working pressure: 0.6Mpa

Characteristic:

- 1) Used for split solar water heater.
- 2) 80mm diameter inspection hole, much more convenient to clean the tank.
- 3) Insulation density reaches 42kg/m^3 , better heat preservation assured.
- 4) Big size magnesium rod, longlife for pressurized tank.
- 5) Adopt specialized Incoloy 800 electric heater, super anti-corrosion, dry-heat resistant, super heat-resistant and super heat conduction.



Parameter table

Model	Capacity (L)	Outer tank (mm)	Inner tank (mm)	Packing size(mm)			G.W./ KG	N.W./ KG	Loading Qty (sets)		
				L	W	H			20'	40'	40'H
JPT2-100	100	$\Phi 470$	$\Phi 370$	560	560	1140	36	39.5	80	168	168
JPT2-150	150	$\Phi 470$	$\Phi 370$	560	560	1520	44	49	58	117	142
JPT2-200	200	$\Phi 550$	$\Phi 450$	630	630	1440	55	60	45	84	108
JPT2-250	250	$\Phi 580$	$\Phi 480$	680	680	1540	62	67	36	76	76
JPT2-300	300	$\Phi 580$	$\Phi 480$	680	680	1770	68	74	27	60	72
JPT2-400	400	$\Phi 700$	$\Phi 580$	770	770	1660	90	94	30	63	66
JPT2-500	500	$\Phi 700$	$\Phi 580$	770	770	1970	99	106	24	54	54
JPT2-600	600	$\Phi 700$	$\Phi 580$	770	770	2280	120	129	21	45	45
JPT2-700	700	$\Phi 700$	$\Phi 580$	770	770	2280	135	147	18	36	45
JPT2-800	800	$\Phi 1000$	$\Phi 800$	1200	1200	2000	182	207	4	10	20
JPT2-1000	1000	$\Phi 1000$	$\Phi 800$	1200	1200	2300	201	231	4	10	10

Note: Above parameter also suit for JPT0 and JPT1 series except weight.



Integrative Pressurized Solar Water Heater



Model: JPH
 Heat-pipe vacuum tube: Model:JVH
 Inner tank: SUS304-2B or SUS316 stainless steel, thickness 1.2 mm
 Outer tank: Colored / Enamel / Fluorine carbon steel
 Insulation layer: High density, one-off molding polyurethane foam
 Bracket: Galvanized steel, 38° 45° angle
 Capacity : 60L- 300L



Model: JPS
 Heat-pipe vacuum tube: Model:JVH
 Inner tank: SUS304-2B or SUS316 stainless steel, thickness 1.2 mm
 Outer tank: Stainless steel
 Insulation layer: High density, one-off molding polyurethane foam
 Bracket: Stainless steel, 23° 30° 38° 45° angle
 Capacity : 60L- 300L



Model: JPE
 Heat-pipe vacuum tube: Model:JVH
 Inner tank: SUS304-2B or SUS316 stainless steel, thickness 1.2 mm
 Outer tank: Stainless steel
 Insulation layer: High density, one-off molding polyurethane foam
 Bracket: Aluminium alloy, 30° 38° 45° angle
 Capacity : 60L- 300L

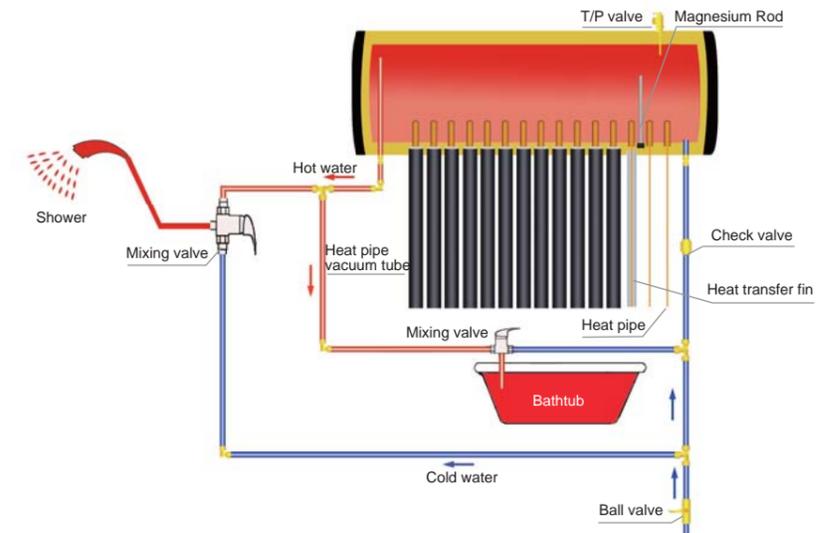


Model: JPL
 Heat-pipe vacuum tube: Model:JVH
 Inner tank: SUS304-2B or SUS316 stainless steel, thickness 1.2 mm
 Outer tank: Colored steel
 Insulation layer: High density, one-off molding polyurethane foam
 Bracket: Galvanized steel, 23° 30° 38° 45° angle
 Capacity : 60L- 300L

Integrative Pressurized Solar Water Heater



Jinyi integrative pressurized series 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 water 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.



- Characteristic:
- 1) Humanized design, no water directly flowing in the tubes, enabling the system still workable in case of occasional tube breakage.
 - 2) Completely automatic operation with intelligent controller.
 - 3) Antifreezing, all-year-round service even in extremely cold area.
 - 4) Adopting the best conduction performance metal- copper TU1(heat pipe).
 - 5) Withstanding high pressure (0.6MPa), comfortable shower.
 - 6) No Glycol, No Chemicals!

Parameter table

Model	Vacuum tube		Tank capacity(L)	Person NO.	Loading Qty (set)			
	Dia. / Len.(mm)	Qty(pcs)			20'	40'	40'HQ	
JPH-10A	58	1800	10	84	1,2	72	144	172
JPH-10B	58	1800	10	102	2	66	132	150
JPH-12A	58	1800	12	99	2	62	128	145
JPH-12B	58	1800	12	121	2,3	52	115	128
JPH-15A	58	1800	15	122	2,3	48	100	116
JPH-15B	58	1800	15	150	3	48	99	110
JPH-18A	58	1800	18	145	3	44	90	106
JPH-18B	58	1800	18	179	3,4	38	80	90
JPH-20A	58	1800	20	160	3,4	36	76	90
JPH-20B	58	1800	20	199	4	34	72	81
JPH-24A	58	1800	24	191	4	34	70	82
JPH-24B	58	1800	24	237	4,5	28	60	69
JPH-30A	58	1800	30	236	4,5	24	64	66
JPH-30B	58	1800	30	295	5	16	48	58

Note: Above parameter also suit for JPS, JPE and JPL series.

Non-pressurized Solar Water Heater



Model: JNG
 Vacuum tube: Borosilicate glass 3.3, $\Phi 47 \times 1500\text{mm}$, $\Phi 58 \times 1800\text{mm}$
 Inner tank: SUS304-2B stainless steel
 Outer tank: Colored / Enamel / Fluorine carbon steel
 Insulation layer: High density, one-off molding polyurethane foam
 Bracket: Galvanized steel, 30° 38° 45° angle
 Capacity : 30L- 360L



Model: JNS
 Vacuum tube: Borosilicate glass 3.3, $\Phi 47 \times 1500\text{mm}$, $\Phi 58 \times 1800\text{mm}$
 Inner tank: SUS304-2B stainless steel
 Outer tank: Stainless steel
 Insulation layer: High density, one-off molding polyurethane foam
 Bracket: Stainless steel, 23° 30° 38° 45° angle
 Capacity: 30L- 360L



Model: JNA
 Vacuum tube: Borosilicate glass 3.3, $\Phi 47 \times 1500\text{mm}$, $\Phi 58 \times 1800\text{mm}$
 Inner tank: SUS304-2B stainless steel
 Outer tank: Stainless steel
 Insulation layer: High density, one-off molding polyurethane foam
 Bracket: Aluminium alloy, 23° 30° 38° 45° angle
 Capacity: 30L- 360L

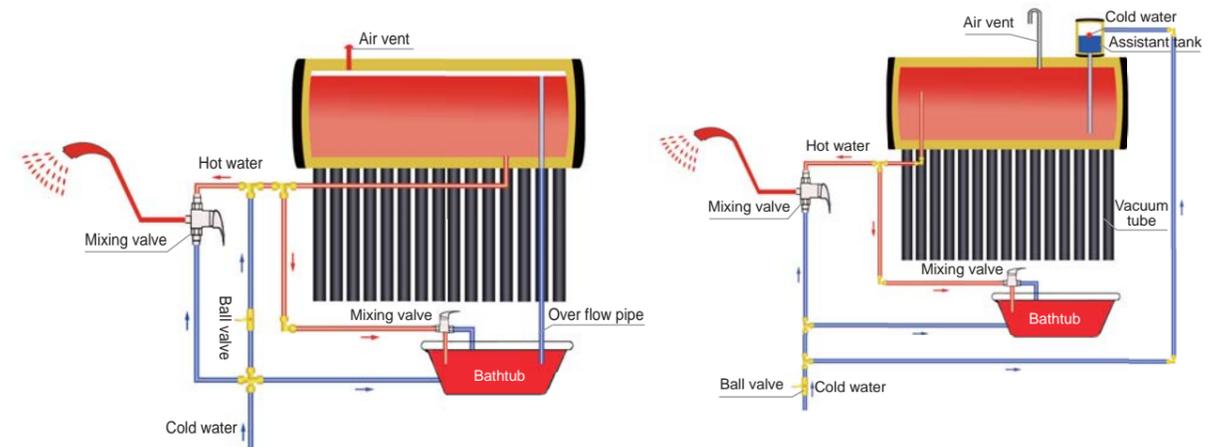


Model: JNT
 Vacuum tube: Borosilicate glass 3.3, $\Phi 47 \times 1500\text{mm}$, $\Phi 58 \times 1800\text{mm}$
 Inner tank: SUS304-2B stainless steel
 Outer tank: Colored / Enamel / Stainless / Fluorine carbon steel
 Insulation layer: High density, one-off molding polyurethane foam
 Bracket: Galvanized steel, 23° 30° 38° 45° angle
 Capacity: 30L- 360L
 Assistant tank: 3L- 50L option

Non-pressurized Solar Water Heater



The non-pressurized system is based on the natural circulation-thermosiphon phenomenon. It's the most cost-effectiveness and environmentally friendly way to harness solar energy for hot water applications, which is unsurpassed by any other solar thermal products, for its most high efficiency, low cost, and easy installation.



Characteristic:

- 1) The most reliable, cost saving, efficient hot water heating solution.
- 2) Superior heat preservation ensured by one-off molding polyurethane foam, with 50-65mm in thickness, 42Kg/m³ in density.
- 3) Anticorrosion inner tank, low maintenance cost.
- 4) Simple structure, easy installation, labour cost saving.
- 5) Completely automatic operation with intelligent controller.

Parameter table

Model	Vacuum tube		Tank capacity(L)	Tank and tube capacity(L)	Person NO.	Loading Qty (set)		
	Dia. / Len.(mm)	Qty(pcs)				20'	40'	40'HQ
JNG581800-10A	58	1800	10	81	1,2	70	145	175
JNG581800-10B	58	1800	10	99	2	64	140	160
JNG581800-12A	58	1800	12	96	2	66	142	160
JNG581800-12B	58	1800	12	119	2,3	56	122	136
JNG581800-15A	58	1800	15	120	2,3	52	108	126
JNG581800-15B	58	1800	15	148	3	48	100	116
JNG581800-18A	58	1800	18	142	3	48	96	110
JNG581800-18B	58	1800	18	177	3,4	40	83	94
JNG581800-20A	58	1800	20	158	3,4	36	86	92
JNG581800-20B	58	1800	20	196	4	35	75	85
JNG581800-24A	58	1800	24	188	4	35	73	84
JNG581800-24B	58	1800	24	235	4,5	32	64	72
JNG581800-30A	58	1800	30	234	4,5	28	62	68
JNG581800-30B	58	1800	30	293	6	16	48	60
JNG581800-36A	58	1800	36	280	6	24	48	60

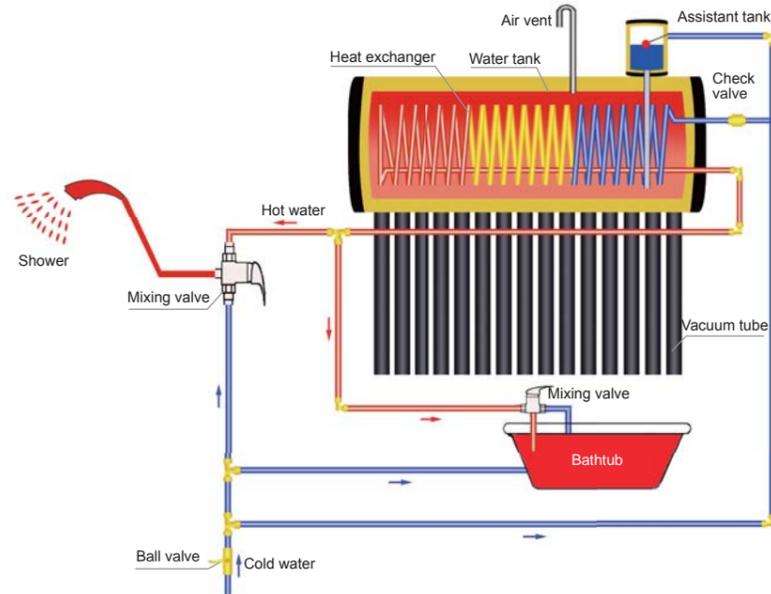
Note: Above parameter also suit for JNS, JNA and JNT series

Pre-heated Solar Water Heater



Model: JPC
 Vacuum tube: Borosilicate glass 3.3, $\Phi 58 \times 1800$ mm
 Inner tank: SUS304-2B stainless steel
 Outer tank: Colored / Enamel / Stainless / Fluorine carbon steel
 Insulation layer: High density, one-off molding polyurethane foam
 Bracket: Galvanized steel, aluminium alloy, stainless steel
 Capacity : 200L- 360L
 Assistant tank: Color and material same as water tank
 Heat exchanger: Stainless steel pipe / Copper pipe

There is a heat exchanger stainless steel coil, inside the non-pressurized tank. Through the unique heat exchanger, cold water in, hot water out immediately, which enables you to enjoy instant hot water. The hot water inside tank is only used for heat storage and exchange.



Characteristic:

- 1) Solve the problem of thermosiphon system's low pressure hot water output.
- 2) Best solution to the water quality inferiority area.
- 3) No corrosion or scale deposit.
- 4) Integrating with the pre-heated technique, so the system can supply instant hot water, overcome the disadvantage of traditional solar water heater, such as slow heating, long time waiting.

Parameter table

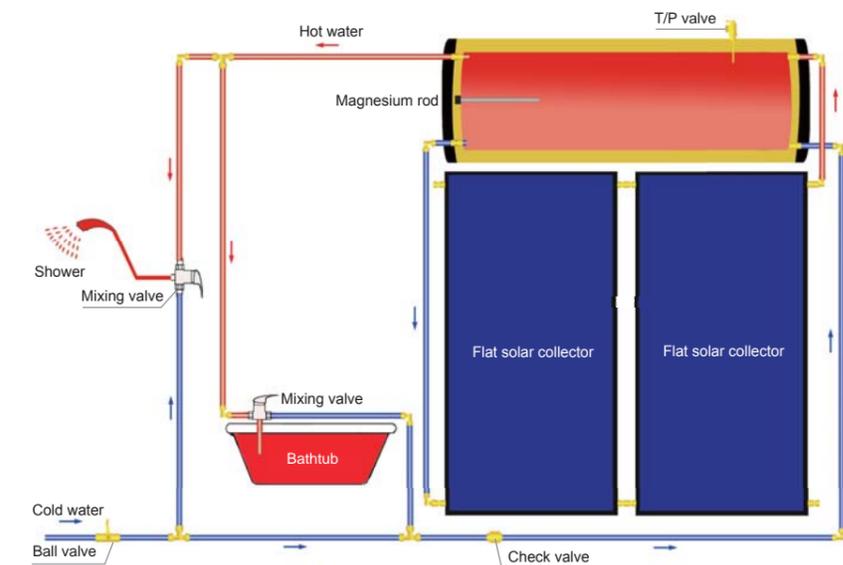
Model	Vacuum tube		Tank capacity(L)	Tank and tube capacity(L)	Person NO.	Loading Qty (set)		
	Dia. / Len.(mm)	Qty(pcs)				20'	40'	40'HQ
JPC-20	58	1800	20	158	3,4	36	86	90
JPC-24	58	1800	24	188	4	33	73	80
JPC-30	58	1800	30	234	4,5	28	60	60
JPC-36	58	1800	36	280	5,6	24	48	60

Flat Plate Pressurized Solar Water Heater



Model: JFP
 Inner tank: SUS304-2B or SUS316 stainless steel
 Outer tank: Colored steel
 Insulation layer: High density, one-off molding polyurethane foam
 Collector: Flat plate solar collector
 Absorber coating: Blue titanium, black chrome
 Bracket: Galvanized steel

Jinyi Flat plate pressurized solar water heater is a tank of roof-mounted system, using the thermosiphon principle to transfer heat from collector to water inside tank. The thermosiphon principle is based on two naturally occurring phenomena: Selective absorb coating and hot water rises. The collectors are coated with a heat-absorbent surface which absorbs the sun rays and heats the fluid in the collector. As the fluid heated, it rises to the top of the collector panel and into the tank where it displaces cooler fluid which flows in to the bottom of the collector panel where the process is repeated. The more temperature difference between the fluid in the collector panel and water in the tank, the faster flowing and heat exchanging.



Characteristic:

- 1) Withstanding high pressure (0.6MPa).
- 2) Integrated with the architecture perfectly.

Parameter table

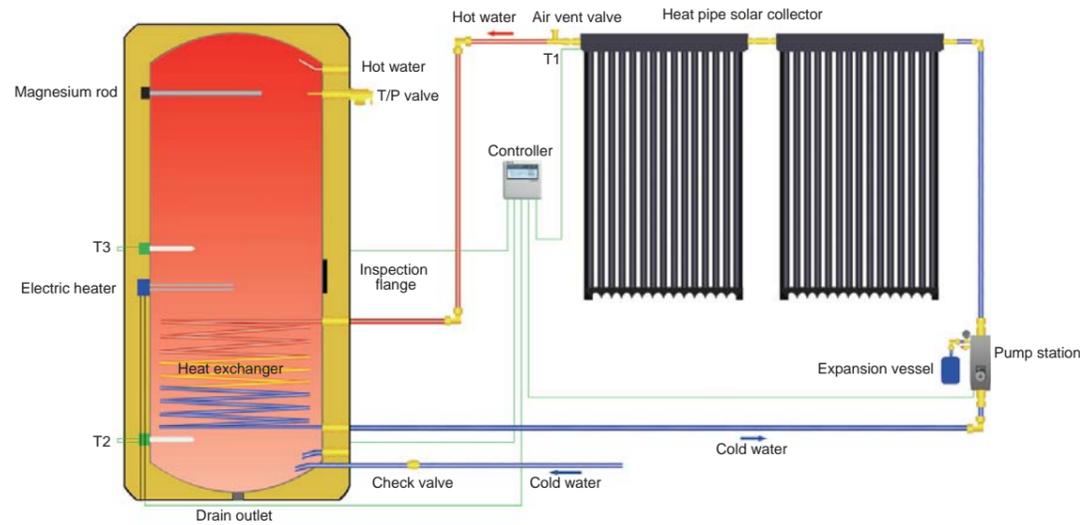
Model	Tank		Absorber area(m ²)	Collector NO.	Capacity(L)	Person NO.	Loading Qty (set)		
	Dia. / Len.(mm)						20'	40'	40'HQ
JFP-150	$\Phi 540$	1085	2	1	150	3	40	84	90
JFP-250	$\Phi 540$	1715	4	2	250	5	23	50	57
JFP-300	$\Phi 540$	2035	4	2	300	6	21	45	50

Single Exchanger Split Solar Water Heater



Model: JSH1
 Collector: Heat pipe solar collector
 Tank capacity: 100L-1000L
 Heat exchanger(inside tank): Copper coil
 Auxiliary energy: Electric heater
 Expansion vessel: 5L,8L,12L,18L,24L

The split solar water heating is an active system, using a circulation pump with a controller to circulate the fluid in the closed loop system. Storage tank and solar collector are separated, the collector is integrated with the building perfectly, while the tank and the pump station can be installed anywhere in the building.



Characteristic:

- 1) No disorder water tank on your roof.
- 2) Anti-freezing, perfect for cold area.
- 3) Can be combined with existing energy source, such as gas water heater, electric water heater, boiler, etc.
- 4) Auxiliary electric heating booster inside tank, providing hot water in case of cloudy or rainy days.
- 5) Completely automatic operation.

Parameter table

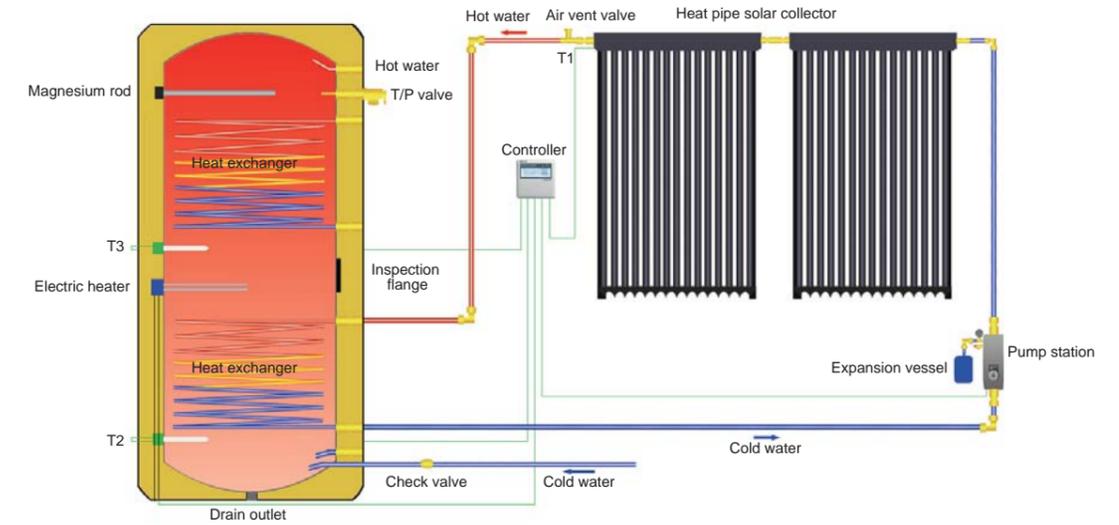
Model	Solar collector		Absorber area(m ²)	Capacity(L)	Person NO.	Loading Qty (set)		
	Model	NO.				20'	40'	40'HQ
JSH1-150-18	JHC-5818-18	1	1.449	150	3	38	76	88
JSH1-200-24	JHC-5818-24	1	1.929	200	4	28	58	74
JSH1-250-30	JHC-5818-15	2	2.416	250	5	24	52	54
JSH1-300-36	JHC-5818-18	2	2.898	300	6	21	42	50
JSH1-400-48	JHC-5818-24	2	3.858	400	8	18	36	42
JSH1-500-60	JHC-5818-20	3	4.830	500	10	15	29	33

Double Exchanger Split Solar Water Heater



Model: JSH2
 Collector: Heat pipe solar collector
 Tank capacity: 150L-1000L
 Heat exchanger(inside tank): Copper coil
 Auxiliary energy: Electric heater
 Expansion vessel: 5L,8L,12L,18L,24L

The split solar water heating is an active system, using a circulation pump with a controller to circulate the fluid in the closed loop system. Storage tank and solar collector are separated, the collector is integrated with the building perfectly, while the tank and the pump station can be installed anywhere in the building. In which, top coil usually used to connect auxiliary energy or housing heating system.



Characteristic:

- 1) No disorder water tank on your roof.
- 2) Anti-freezing, perfect for cold area.
- 3) Can be combined with existing energy source, such as gas water heater, electric water heater, boiler, etc.
- 4) Auxiliary electric heating booster inside tank, providing hot water in case of cloudy or rainy days.
- 5) Completely automatic operation.

Parameter table

Model	Solar collector		Absorber area(m ²)	Capacity(L)	Person NO.	Loading Qty (set)		
	Model	NO.				20'	40'	40'HQ
JSH2-150-18	JHC-5818-18	1	1.449	150	3	38	76	88
JSH2-200-24	JHC-5818-24	1	1.929	200	4	28	58	74
JSH2-250-30	JHC-5818-15	2	2.416	250	5	24	52	54
JSH2-300-36	JHC-5818-18	2	2.898	300	6	21	42	50
JSH2-400-48	JHC-5818-24	2	3.858	400	8	18	36	42
JSH2-500-60	JHC-5818-20	3	4.830	500	10	15	29	33

Solar Water Heating System



With the development of the society and the continuous progress of human civilization, people pay more and more close attention to save energy and protect the environment. Developing and utilizing renewable energy has become key project to research to every country. As green, renewable and popular energy, solar energy has become the first important to develop, and we get great progress in this field, Particularly in solar water heater line. Because of simple structure and cheap price, full glass vacuum tube solar water system has become the leading products in the market. Jinyi solar heating project suits to any place where hot water is needed, such as industry, dormitory, hotel, bathing pool, house and so on. We can out environmental protection and save energy without auxiliary energy or with little energy, solar energy come from nature, it is clear and free so you can collect it at any place. We have opened up and developed lots of different kinds centre heating system to suit for different demands. With many years practice, we have accumulated much experience, and cultivated technology personnel in designing, manufacturing and installation.

- The main components:
- Solar collectors
 - Control system
 - Circulating pump
 - Insulated tank
 - Valves
 - Pipeline and pipe fittings
 - Auxiliary energy



Solar Pool Heating System



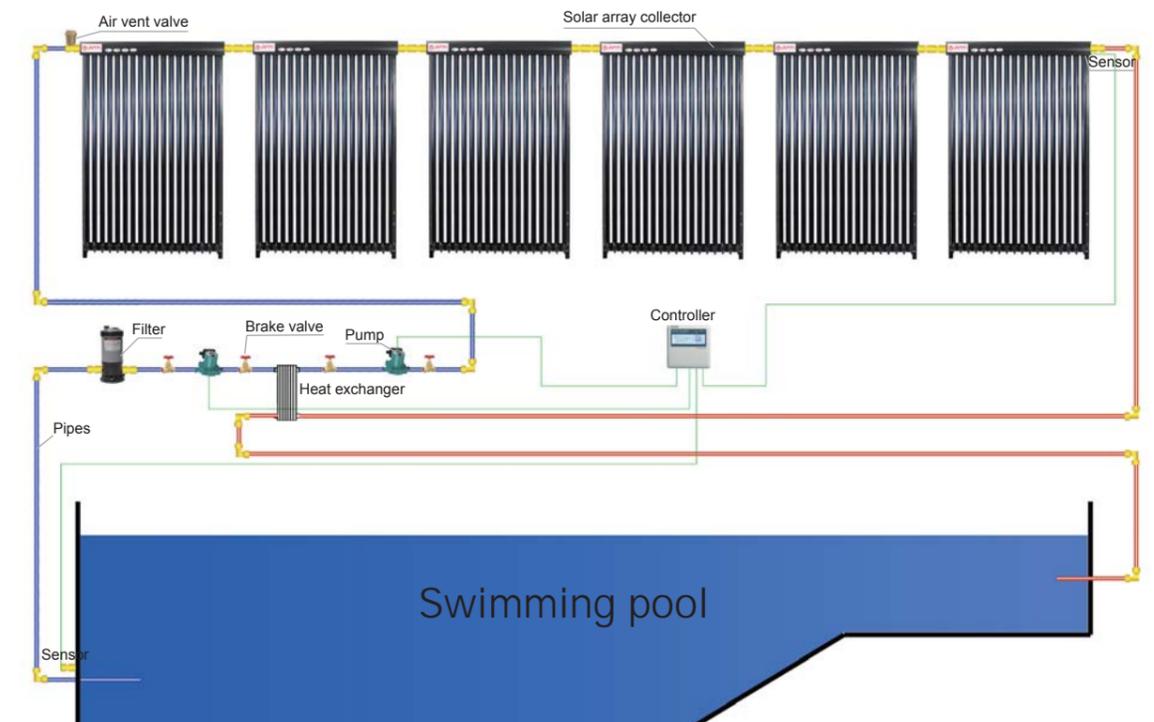
Solar swimming pool heating is the most cost-effective application of solar energy. solar collectors, which are the simplest and least expensive of all collectors, are used almost universally for heating outdoor pools and spas. The heating system itself is normally already required for pools, regardless of whether a solar heating system is added.

The main components:

1. Solar collectors
2. Solar loop circulator pump
3. Heat exchanger
4. Automatic controller
5. Actuator and 3-way valve
6. Your existing pool system: timer, pump, filter, etc
7. Other basic plumbing hardware: pipes, joints, valves, gauges, etc



Solar Swimming pool heating operates on the same principles as solar water heating. The system comprises heat solar collector usually mounted on roof top and water from the swimming pool is routed through the collector where it gets heated up before returning to the swimming pool. Unlike solar water heating, swimming pool heating relies on existing pressure from swimming water treatment equipment to circulate the water. Ordinarily, the swimming pool is fitted with a pool blanket to prevent heat loss to the atmosphere when the pool is not in use.



Solar Accessories



Model: SR881
Single pipeline pump station

Exterior size: 400x200x145mm
Power supply: 110V/220V
Collector temp. measuring range: -10~200°C
Tank temp. measuring range: 0~110°C
Max. pressure: 1MPa
Max. flow rate: 2.5t/h
Components:
1.safety valve 2.wilo pump 3.manometer
4.flow meter 5.controller
Application: Split solar water heater



Model: SR882
Double pipeline pump station

Exterior size: 410mmx350mmx165mm
Power supply: 110V/220V
Collector temp. measuring range: -10~200°C
Tank temp. measuring range: 0~110°C
Max. pressure: 1MPa
Max. flow rate: 2.5t/h
Components:
1.safety valve 2.wilo pump 3.manometer
4.flow meter 5.controller
Application: Split solar water heater



Model: JEV
Expansion vessel

Capacity: 5L -24L
Max. working pressure: 0.8 MPa
Max. Temperature: -10°C~99°C
Factory precharge: 0.2 MPa
Connector: 3/4 inch / 1 inch



Model: RS-15/6
Circulating pump

Power supply: 110V / 220V 50HZ.
Maximum output power: 37W
Pump lift: 6m
Connection size: 1inch
Weight: 2.1kg
Max. pressure: 1MPa



Model: SR868C9
Solar controller

Dimension: 120mmx120mmx23mm
Power consumption: <3W
Power supply: 110V / 220V
Collector temp. measuring range: -10~200°C
Main functions
1. Temperature difference function
2. THET timing heating
3. TEMP Temperature main menu
4. FUN Auxiliary function
5. HND Manual mode
Application: Split solar water heater



Model: SR609C
Solar controller

Dimension: 170mmX128mmX40mm
Self power consumption: <2W
Power supply: 110V / 220V
Temperature range of measurement: 0~99°C
Main functions:
1. Time display 2. Manual heating
3. Temperature display
4. Timing heating at three time sections
5. Memory protection when power is failure
6. Trouble indication of sensor
Application: Pressurized solar water heater



Model: SR500
Solar controller

Dimension: 210x145x40mm
Self power consumption: <3W
Power supply: AC100-240V
Temperature range of measurement: 0~99°C
Main functions:
1. Time display 2. Auto mode
3. Water temperature display
4. Water level display 5. Water level pre-setup
6. Manual water loading
7. Temperature controlled water loading
Application: Non-pressurized solar water heater



Model: SR802
Power-relay

Dimension: 100x100x65mm
Suitable power: ≤ 4000W
Available ambient temperature: -10 ~ 50°C



Model: SR801
Power-relay

Dimension: 250x185x130mm
Suitable power: ≤ 6000W
Available ambient temperature: -10 ~ 50°C



Model: JAT
Assistant tank

Inner tank: SUS304-2B stainless steel
Outer tank: colored / enamel / stainless
fluorine carbon steel
Insulation layer: polyurethane foam
Capacity : 3L, 5L, 8L, 10L, 12L, 25L, 50L
Application: Non-pressurized solar water heater

Solar Accessories



Model: JEH1
Electric heater

Rated voltage: 110V/220V
Rated power: 1500W
Application: Non-pressurized solar water heater



Model: JEH2
Electric heater

Rated power: 1500W, 3000W
Rated voltage: 220V
Connection thread size: 1 inch
Material: Incoloy 800



Model: JNG-M
Solar water heater

Vacuum tube size: φ58x500mm
Tube quantity: 5 pieces



Model: JHC-M
Heat pipe solar collector

Vacuum tube size: Φ58x500mm
Tube quantity: 5 pieces



Model: JUC-M
U-type solar collector

Vacuum tube size: Φ58x500mm
Tube quantity: 5 pieces



Model: A06
Flushing and filling

Material: brass
Application: Split solar water heater



Model: JAVV
Air vent valve

Connection thread size: 1/2 inch
Max. Temperature: 120°C
Normal working pressure: 0.7MPa
Max. working pressure: 1.4MPa



Model: JTP
T & P valve

Maximum opening temperature: 95°C
Rated working pressure: 0.6MPa
Max. working pressure: 1.5MPa



Model: JCV
Check valve

Maximum working pressure: 1.6MPa
Working temperature: -30 to 150 C
Size: 1/2 inch 3/4 inch 1inch



Model: JTMV
Thermostatic mixing valve

Max. working pressure: 16bar
Max. working temperature: 120°C
Regulating condition: 38 C -60 C
Division of the setting scale: 1 C
Adjustment accuracy: 1 C
Body: brass
O-Ring: ethylene-propylene
Spring: stainless steel
Size: 1/2inch 3/4inch 1inch

Solar Accessories



Thickness: 4mm
Material: SS304 stainless steel
Application: solar collector slope roof mount

Model: JRH1
Roof hook



Thickness: 4mm
Material: galvanized steel
Application: solar collector slope roof mount

Model: JRH2
Roof hook



Thickness: 4mm
Material: 304 stainless steel
Application: solar collector slope roof mount

Model: JRH3
Roof hook



Stainless steel pipe size: 1/2inch / 3/4inch / 1inch
Jacketing material: UV resistant
Insulation thickness: 13mm / 20mm
Temperature sensor wire: 2-wire silicone cable

Model: JTWP
Twin way pre-insulated solar hose



Connection thread size: 1/2inch / 3/4inch / 1inch
Material: stainless steel

Model: SSRP
Flexible stainless steel tube



Size: 1/2inch / 3/4inch / 1inch
Application: flexible stainless steel tube

Model: SNCW
Nipples, C-rings and washers



Specification: T1/2inch×1/2inch×1/2inch
T3/4inch×3/4inch×3/4inch
T1inch×1inch×1inch
Material: brass

Model: JFET
Female equal tee



Specification: T3/4inch×1/2inch×3/4inch
T1inch×1/2inch×1inch
Material: brass

Model: JRT
Reducing Tee



Specification: S25×1/2, S25×3/4, S25×1(inch)
S22×1/2, S22×3/4, S22×1(inch)
Material: brass

Model: JCFSMA
Compression fitting straight male adaptor



Specification: S1/2inch×1/2inch
S3/4inch×3/4inch
S1inch×1inch
Material: brass

Model: JES
Equal male straight

Solar Accessories



Specification: S25mm×25mm
Specification: S22mm×22mm
Material: brass

Model: JCFSC
Compression fitting straight coupling



Specification: S25mm
Specification: S22mm
Material: brass

Model: JP
Plug



Specification: L1/2inch×1/2inch
Material: brass

Model: JEF
Elbow female



Freezing Point:	-25℃	-30℃	-35℃	-40℃
Boiling Point:	105℃	106℃	107℃	108℃
Density:	1.06	1.06	1.07	1.09
PH Value:	10.5	10.5	10.5	10.5
Capacity:	4KG, 6KG			

Model: JAL
Antifreezing liquid



Size: G1/2", male thread, Φ8*200mm
Application: Pressurized solar water heater

Model: JT
Thermowell



Application for Non-pressurized solar heater

Model: JS
Sensor



Application: Non-pressurized Solar Water Heater

Model: JMR1
Magnesium rod



Size: 3/4 inch
Application: pressurized Solar Water Heater

Model: JMR2
Magnesium rod



Size: 1/2inch / 3/4inch / 1inch
Material: brass
Application: Flexible stainless steel tube

Model: J001
Planish



Application: Flexible stainless steel tube

Model: J002
Pipe cutter