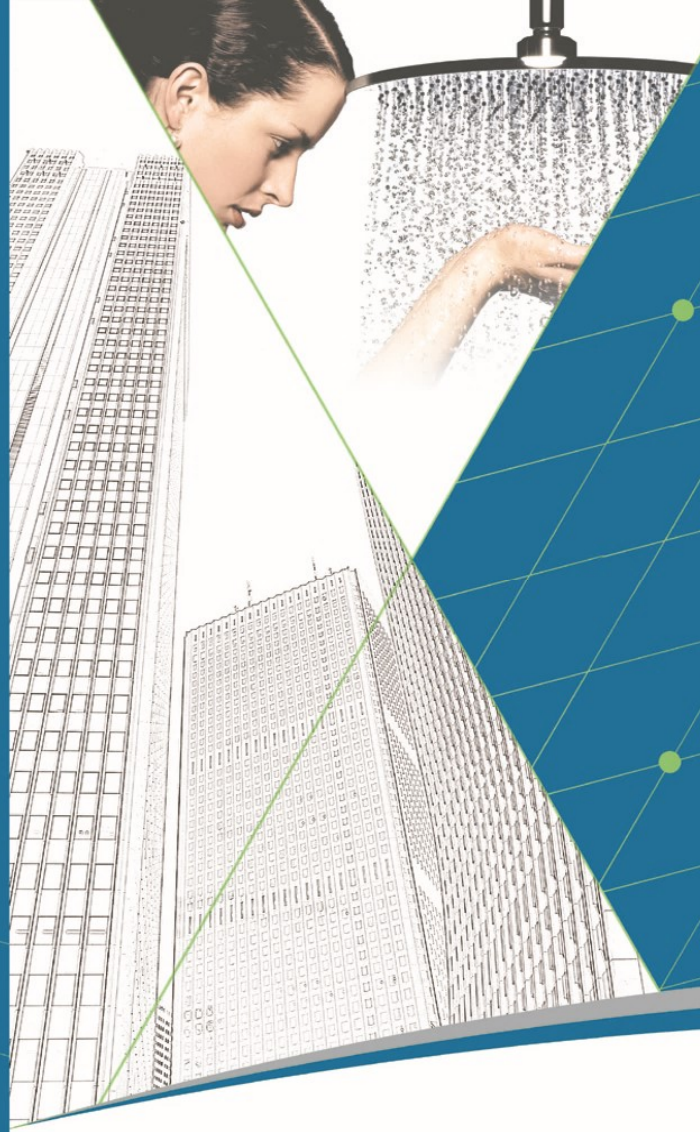
NELSON SOLAR®



NELSON SOLAR®

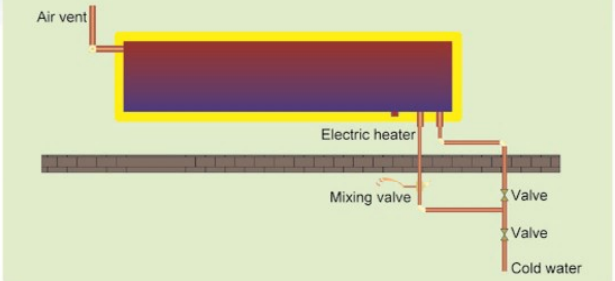
# NON-PRESSURIZED SOLAR WATER HEATER

## KEY SPECIFICATION:

| Type (One) | Area ($M^2$) | Vacuum tube | | | Volume (liters) | Gross wet(kg) | 20GP/40GP/40HC loeding qty(sets) |
|---|---|---|---|---|---|---|---|
| | | Length(mm) | DIA(mm) | Qty(pcs) | | | |
| JDL-15-58/1.8 | 1.92 | 1800 | 58 | 15 | 135 | 49 | 0.52(56/115/132) |
| JDL-18-58/1.8 | 2.3 | 1800 | 58 | 18 | 156 | 58 | 0.62(47/96/111) |
| JDL-20-58/1.8 | 2.55 | 1800 | 58 | 20 | 172 | 65 | 0.68(43/88/102) |
| JDL-24-58/1.8 | 3.06 | 1800 | 58 | 24 | 206 | 76 | 0.79(37/76/88) |
| JDL-30-58/1.8 | 3.82 | 1800 | 58 | 30 | 260 | 92 | 0.97(30/62/71) |

## CHARACTERISTICS:

This type uses the all glass evacuated solar collector tubes as the heat-absorbing element. The high vacuum degree of the clearance between the outer and inner tube reduces the heat emission which is caused by convection and conduction. The layer films(coating) of the all glass evacuated tubes transfer the sun energy into heat energy. The high absorption and low emittance rate of Jiadele's layer fils is unique. Depending on the different density between hot water and cold water, a water flowing cycle is created in the tube. Hot water flows automatically upwards while the cold water flows downward. The water in the storage tank will be heated from this natural circulation.




## KEY SPECIFICATION:

- Inner tank: stainless steel SUS304-0.5mm
- Vacuum tube: AL-N/AL/58-1800
- Outer tank: Galvanized steel-0.4mm
- Frame: galvanized steel-1.5mm
- Insulation: Polyurethane
- Reflector: aluminum

## REMARK:

- Solar heat storage tank diameter(mm): 360/460
- Thickness, insulated(mm):50
- Vent connection(inch):3/4
- Electric heater connection(inch):1
- Water connection(inch):3/4
- Collector angle(degree):20/45



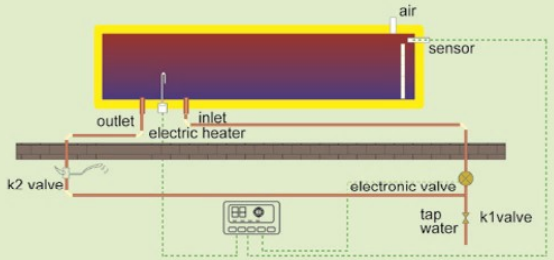
# AUTOMATICAL CONTROLLED NON-PRESSURIZED SOLAR WATER HEATER

## KEY SPECIFICATION:

| Type (One) | Area ($M^2$) | Vacuum tube | | | Volume (liters) | Gross wet(kg) | 20GP/40GP/40HC loeding qty(sets) |
|---|---|---|---|---|---|---|---|
| | | Length(mm) | DIA(mm) | Qty(pcs) | | | |
| JDL-15-58/1.8 | 1.92 | 1800 | 58 | 15 | 135 | 49 | 0.52(56/115/132) |
| JDL-18-58/1.8 | 2.3 | 1800 | 58 | 18 | 156 | 58 | 0.62(47/96/111) |
| JDL-20-58/1.8 | 2.55 | 1800 | 58 | 20 | 172 | 65 | 0.68(43/88/102) |
| JDL-24-58/1.8 | 3.06 | 1800 | 58 | 24 | 206 | 76 | 0.79(37/76/88) |
| JDL-30-58/1.8 | 3.82 | 1800 | 58 | 30 | 260 | 92 | 0.97(30/62/71) |

## CHARACTERISTICS:

This type uses the all glass evacuated solar collector tubes as the heat-absorbing element. The high vacuum degree of the clearance between the outer and inner tube reduces the heat emission which is caused by convection and conduction. The layer films(coating) of the all glass evacuated tubes transfer the sun energy into heat energy. The high absorption and low emittance rate of Jiadele's layer fils is unique. Depending on the different density between hot water and cold water, a water flowing cycle is created in the tube. Hot water flows automatically upwards while the cold water flows downward. The water in the storage tank will be heated from this natural circulation.



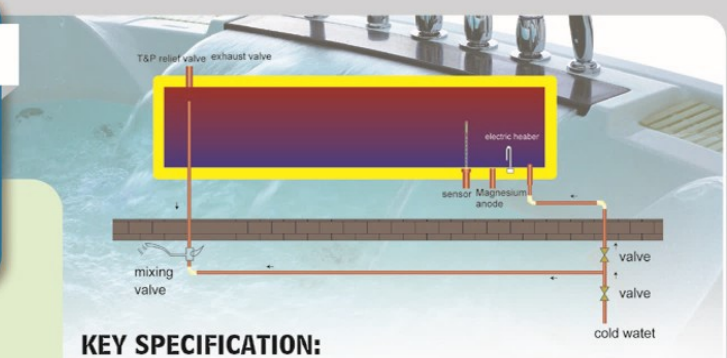

## KEY SPECIFICATION:

- Inner tank: stainless steel SUS304-0.5mm
- Vacuum tube: QB-AL-N/AL-47-1500
- Outer tank: stainless steel SUS201
- Frame: stainless steel SUS201-1.2mm
- Insulation: Polyurethane
- Reflector: stainless steel

## REMARK:

- Solar heat storage tank diameter(mm): 310/410
- Thickness, insulated(mm):50
- Vent connection(inch):3/4
- Electric heater connection(inch):1
- Water connection(inch):3/4
- Collector angle(degree):30/45

# COMPACT PRESSURIZED SOLAR WATER HEATER




## CHARACTERISTICS:

Work with high pressure. Therefore, the warm water comes out with pressure too. It uses the heat pipe to deliver heat energy, water is heated rapidly. Each tube can work alone, so it can work even if one tube is broken.

## KEY SPECIFICATION:

- Inner tank: SUS 304-2B food grade stainless steel sheet, thickness:1.2mm
- Outer tank: galvanized steel, thickness: 0.40mm
- Frame: galvanized sheet with electrostatic plastic coating, thickness: 1.5mm
- Vacuum tube: high boron silicon glass with aluminum/red copper/ stainless steel bloomed, ST=300;
- Insulation layer: Polyurethane, thickness: 55mm

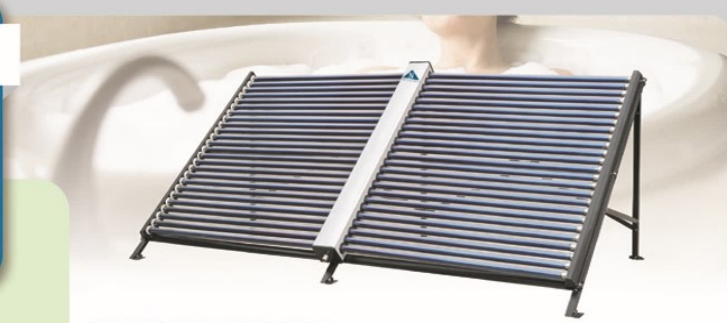
## REMARK:

- Solar heat storage tank diameter(mm): 370/480
- Thickness, insulated(mm):50
- Vent connection(inch):3/4
- Electric heater connection(inch):1.25
- Water connection(inch):3/4
- Collector angle(degree):20/45
- Test pressure(pa):0.9MPa
- Operating fluid ppressure(pa):0.6MPa
- Distance from tube to tube:90

## KEY SPECIFICATION:

| Type (One) | Area ($M^2$) | Vacuum tube | | | Volume (liters) | Gross wet(kg) | 20GP/40GP/40HC loeding qty(sets) |
|---|---|---|---|---|---|---|---|
| | | Length(mm) | DIA(mm) | Qty(pcs) | | | |
| JDL-HP15-58/1.8 | 2 | 1800 | 58 | 15 | 150 | 77 | 0.62(47/96/112) |
| JDL-HP20-58/1.8 | 2.71 | 1800 | 58 | 20 | 200 | 98 | 0.79(37/76/88) |
| JDL-HP25-58/1.8 | 3.24 | 1800 | 58 | 25 | 250 | 114 | 0.94(31/63/74) |
| JDL-HP30-58/1.8 | 4.05 | 1800 | 58 | 30 | 300 | 136 | 1.12(26/53/62) |

# NON PRESSURIZED SOLAR COLLECTOR



## CHARACTERISTICS:

All-glass vacuum tube solar collectors are widely used for its good thermal insulation performance, coating with high solar absorption rate and low emission rate ,high heat efficiency etc. It is mainly compsoed of solar vacuum tube, manifold , tail bracket ,seal components and so on,There are mainly two types such as Single side vertical pipe arrangement and double sides horizontal pipe arrangment.The solar collector widely used in hotels, hospitals, schools, armys, factories and other places.

## MATERIAL:

- Applicable to solar hot water supply/ swimming pool heating/house heating
- Operates automatically; telecommuting controlling
- All-day/time-lapse mode
- The design allows for versatile architectonic integration
- Any type of back up heating can be combined

## KEY SPECIFICATION:

| Type (One) | Area ($M^2$) | Vacuum tube | | | Gross wet(kg) | 20GP/40GP/40HC loeding qty(sets) |
|---|---|---|---|---|---|---|
| | | Length(mm) | DIA(mm) | Qty(pcs) | | |
| JDL-15-58/1.8 | 2 | 1800 | 58 | 15 | 53 | 0.23(121/260/300) |
| JDL-18-58/1.8 | 2.43 | 1800 | 58 | 18 | 58 | 0.27(103/220/255) |
| JDL-20-58/1.8 | 2.71 | 1800 | 58 | 20 | 69 | 0.29(96/206/237) |
| JDL-25-58/1.8 | 3.24 | 1800 | 58 | 24 | 83 | 0.35(80/170/195) |
| JDL-30-58/1.8 | 4.05 | 1800 | 58 | 30 | 109 | 0.42(66/142/164) |
| JDL-50-58/1.8 | 6.5 | 1800 | 58 | 50 | 172 | 0.65(43/92/106) |

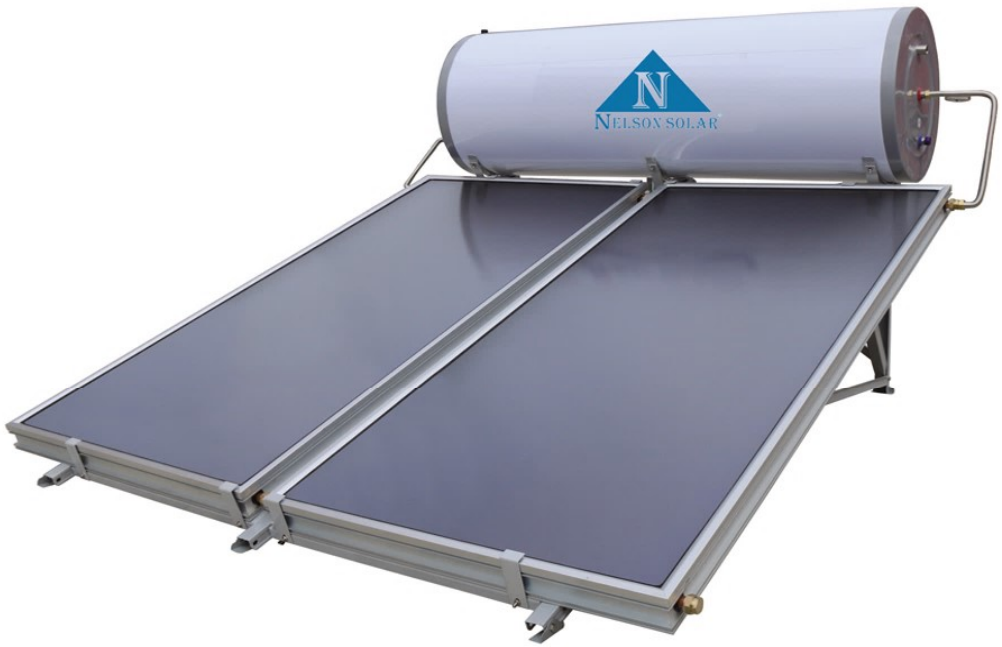
# COMPACT FLAT SOLAR WATER HEATER (DIRECT TYPE)

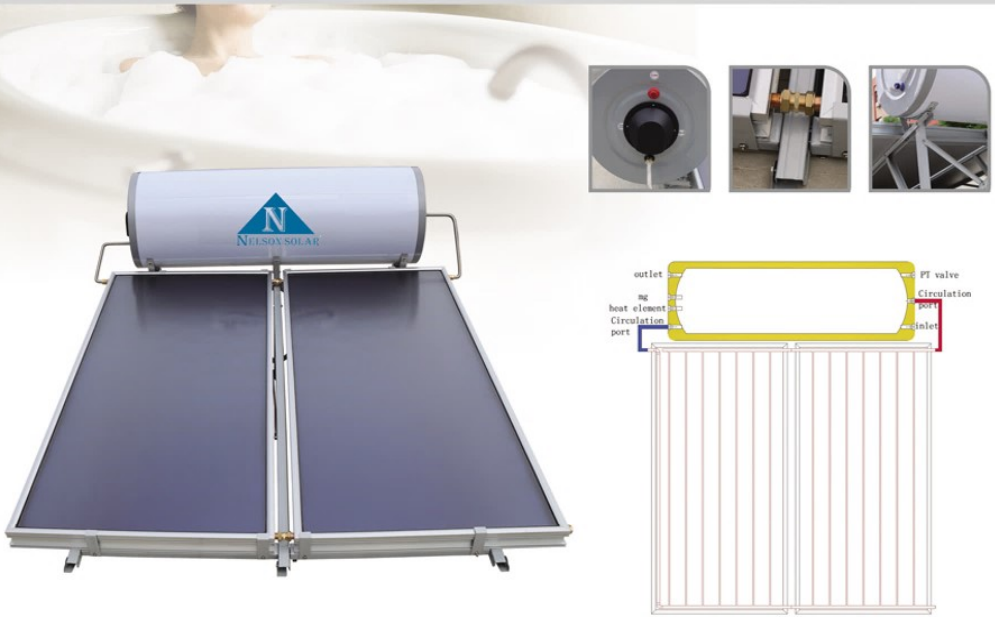
## FEATURES:

- Stylish streamline design.
- Thermosiphon circulation with less maintenance.
- Reliable auxiliary electric element with temperature controller and manual overheat protector.
- SUS 304-2B stainless steel inner tank anticorrosion and long service life.
- High-efficient solar collector for optimum heat absorption.
- Direct system exchange, only suitable for no freeze area.

## SYSTEM DESCRIPTION:

It is a direct system. The heat source mainly relies on the solar energy. Domestic water in the tank forms a direct circulation with the medium in the core passageway of the flat plate collector. The absorber coating of the collectors will absorb the sunlight, then convert sunlight into heat energy, and transfer the energy to the medium(water) in the core passageway through the absorber plate. While there will be a temperature difference in the medium(water) in the passageway, the density of hot water is smaller than that of the cold water, which will produce a buoyancy lift. In that way, the cold medium(water) flows to the bottom of the heat collector through the down pipe, while the hot medium(water) comes to the inner water tank through the upper pipe. Repeatedly, it heats all the water in the tank. Furthermore, the system has an electrical heater that can ensure sufficient hot water when in lack of sunlight due to continuous rainy days.




## KEY SPECIFICATION:

| | model | JDL-FPS/J150 | JDL-FPS/J200 | JDL-FPS/J300 |
|---|---|---|---|---|
| Water tank | Circulation type | | closed loop | |
| | Tank capacity | 150L | 200L | 300L |
| | External dimension(mm) | Φ580×1000 | Φ580×1250 | Φ580×1820 |
| | Outer tank material | | Color coating galvanized steel | |
| | Heat exchanger material | | SUS 304 Stainless steel/1.0mm | |
| | Heat exchanger area(m2) | 0.4 | 0.5 | 0.8 |
| | Inner tank material | | SUS 304 Stainless steel/1.2mm | |
| | Man working pressure | | 0.6Mpa | |
| | Man working pressure of jacket | | 0.3Mpa | |
| | Electric element | | 1.5KW | |
| Flat Solar Collector | Model No. | JDL-PG2.0 | JDL-PG2.5 | JDL-PG2.0 |
| | Dimension(LxWxT)(mm) | 2000x1000x80 | 2000x1250x80 | 2000x1000x80 |
| | Total area | 2.0m²x1pcs | 2.5m²x1pcs | 2.0m²x2pcs |
| | Absorber material | | Al. full plate | |
| | Absorber coating | | Selective black chrome/ Blue coating | |
| | Header pipe | | Red copper/Φ22x0.6 | |
| | Riser pipe | | Red copper/Φ10x0.5 | |
| | Quantity of riser pipe | 7 pcs | 9 pcs | 7pcs |
| | Welding | | Laser welding | |
| | Cover material | | Low iron tempered textured glass | |
| | Frame material | | Anodised aluminium alloy | |
| | Insulation material | | Fibre glass | |
| | Piping connector size | | Φ22 | |
| Mounting Bracket | Material | | Galvanized steel | |
| | Bracket style | | A: Flat foof B:Sloping roof | |
| Connection &Controller | Circulation pipe material | | 304 Stainless steel corrugared pipe3/4" | |
| | Connection fittings | | Φ22mm x G3/4' | |
| | T/P pressure relief valve | | 0.7Mpa/90℃ | |
| | Jacket pressure relief valve | | 0.3Mpa/G1/2' | |
| | Controller (selective) | | Automatical control of the electric element and monitor the water temperature | |
| Weight | Weight (empty) (kg) | 103 | 150 | 195 |
| | Weight (filled) (kg) | 253 | 350 | 495 |