

## 200L THERMOSYPHON SOLAR HOT WATER SYSTEM

### 1) System-Components and description:

Part Name / Model No.	H-200Y
Description	Pressurized thermosyphon solar water heating system
Tank Capacity	200 Liters
Collector	HSC-01QT-10A (2.5 m <sup>2</sup> Enlarged version)
Collector size	2000 x 1250 x 82mm
Absorber surface	Nickel bottom coating + Selective black chrome surface.
Number of collector	1 collector
Gross collector Area	2.5 m <sup>2</sup>
Auxiliary Electric heater	1.5KW
Mounting bracket	SUS202 / 1.0mm quadrated stainless steel.
Control System + thermostat	S609E ( full automatic control system, Auto start/stop the electric heater under preset mode )
Fitting / Valves/ gauges	1 set of Brass fittings (Collector inlets and outlet, tank inlets and outlets, etc. ) 1 x check valve (one way valve) 1 x PT safety valves 1 x +/- pressure relief valve 1 x auto airvent

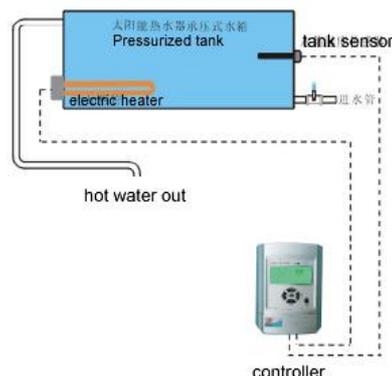
### 2) Collector Specification:

Absorber coating: Nickel bottom coating + Selective black chrome surface.  
 Optical Performance: Absorption: minimum 95% / Thermal Emission: ,maximum 12%  
 Risers tube: 1886mm x Φ10mm x δ0.45mm  
 Riser fin: Copper 1840mm x 125mm x δ 0.15mm  
 Header tube: 1310mm xΦ22mm x δ0.6mm  
 Number of Risers: 10 risers  
 Frame Casing: Anodized Aluminum alloy  
 Cover glass: 4mm tempered glass, low reflection, high transitivity up to 87%.  
 (optional: 3.2mm low-iron, tempered patterned solar glass, transitivity up to 92%)  
 Insulation: 25mm soft fiberglass layer + 25mm high- density fiberglass board.  
 Back sheet: 0.5mm aluminum board.  
 Sealing profile: EPDM-mixtured rubber  
 Connection: Ø22mm  
 Ext. Dimension: 2000 x 1250 x 82mm (L x W x H)  
 Gross /Absorber area: 2.5m<sup>2</sup>/2.38m<sup>2</sup>  
 Operation pressure: 6.5Kpa / 6.5bar



### 3) Controlling system

SR-609 ( Full automatic control system, Auto start / stop the auxiliary electric heater under preset mode)



#### 4) Water Storage tank:

Model Number	CT-200A
Capacity	200 litres
Internal Tank material	1.5mm high grade steel
Internal Tank lining material	4mm Environmental Crystal plastic (Cross Linked Polymer)
Internal Tank Diameter	465mm
Internal tank Length	1185mm
Outer Case Material	0.6 mm painted steel
Tank out Diameter	Dia. 555mm x 1321mm
Insulation thickness	45 mm Polyurethane
Working Pressure	8 bar max. (recommend 6.5bar)

#### APPENDIX: SOLAR ABSORBER DRAWING

### 10 Risers Absorber

Design for collector at 2000 x 1250 mm

