

# Heat Pipe Collector

■ **745kWh/m<sup>2</sup>/a**  
**energy gain**

- EU Keymark Certified
- 5 Year Warranty
- Individually serial numbered for Guarantee
- Year round functionality
- Versatile and easy to install
- Small capacity of heat transfer fluid
- Functions well in cold climate, windy and rainy weather conditions
- Extremely durable
- Can achieve temps of 230 °C
- Can be used to heat domestic hot water, spa and swimming Pool, commercial water heating system
- Accept Private Label Production

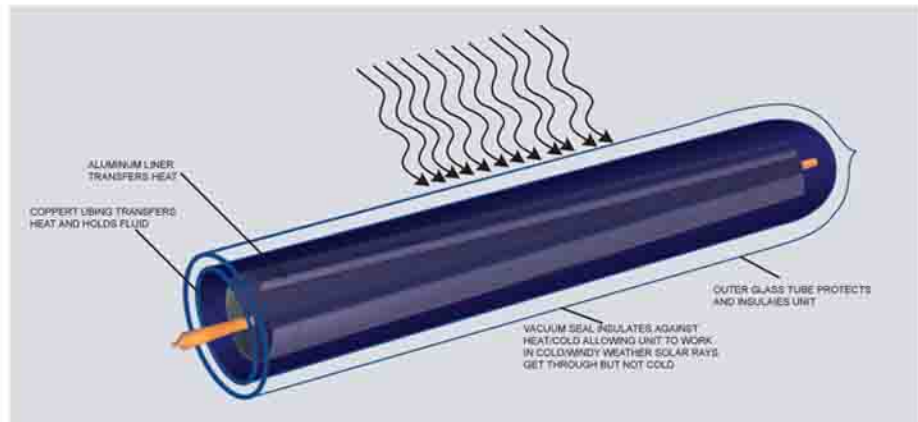


Email: [info@cibsolar.com](mailto:info@cibsolar.com)    [www.cibsolar.com](http://www.cibsolar.com)    Fax: +86-0316-3316992



## How does collector work

The absorber of the solar collector is all-glass evacuated solar collector tubes, solar selective surface with high absorptance and low emittance and vacuum insulation are key factors that contribute to the high efficiency of the collector. The evacuated tube is similar in concept to an elongated thermos bottle with the region between the outer glass tube and the inner glass tube being evacuated and vacuum sealed. The outside of the inner glass tube is coated with a selective surface as shown in the diagram below. Thermal losses due to conduction and convection are drastically reduced by the vacuum insulation coating. This combination of the selective surface coating and vacuum insulation enables the tubular solar collector to achieve high heat extraction efficiencies, especially in cold climate applications. Inside each evacuated tube is a heat pipe that is pressed into an aluminum fin in that serves to enhance the heat transfer between the heat pipe and the inside surface of the inner tube. Heat pipe hold small volume liquid inside and evacuated itself, the liquid evaporates at much lower temperature when the Sun heats the collector tube, the vapour goes up within the heat pipe to the condenser end where heat is exchanged to the heat transfer fluid in the collector array, then vapour condenses and flows back to the bottom of the heat pipe to repeat the cycle.



## Specifications

MODELS	HP-16/47-1500	HP-16/58-1800
Number of tubes	16 pcs	16 pcs
Cover tube diameter	47 mm	58 mm
Inner tube diameter	37 mm	47 mm
length	1500 mm	800 mm
Casing material	Aluminum Profile	
Insulation material	Aluminum silicate + polyurethane	
Insulation thickness	35 mm	
Gross Area	1.69 m <sup>2</sup>	2.34 m <sup>2</sup>
Aperture area	1.09 m <sup>2</sup>	1.62 m <sup>2</sup>
Weight empty	45kg	58 kg
Max. Pressure	0.6 MPa	
Inlet/outlet connections	3/4"	
Heat transfer fluid content	0.6litres/0.16gallon	0.65 litres/0.17gallon
Stagnation temp	250°C	
Collector Dimensions	1660×1080×145mm	1970 × 1120 × 160mm

