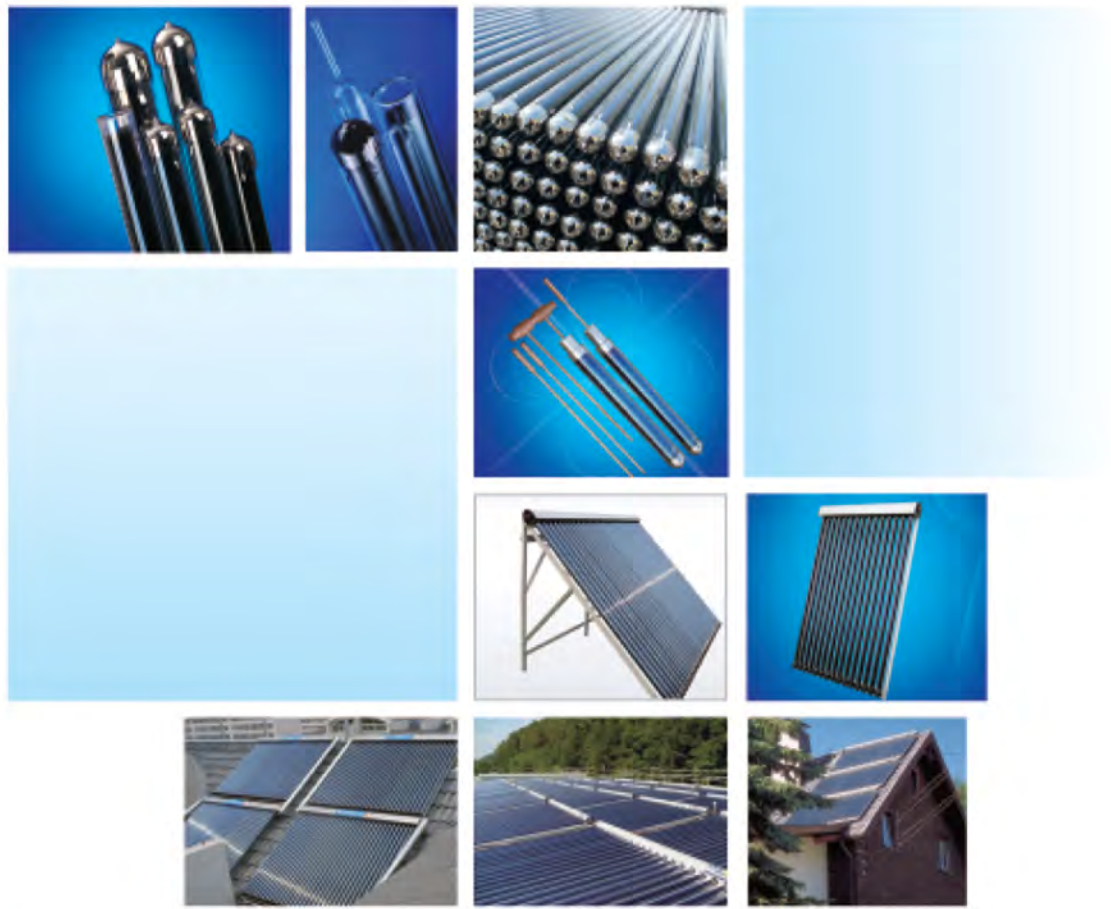


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>> P products Series



>> Certification & Honour



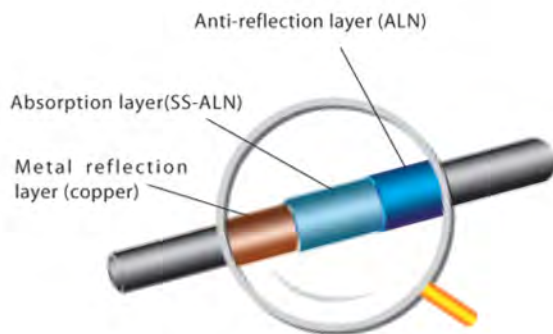
>> All Glass Evacuated Solar Collector Tubes



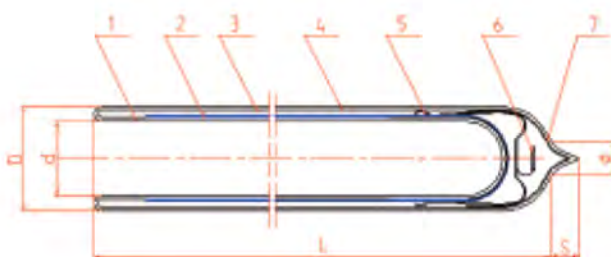
➔ Product Introduction

Infinity Solar Water Heaters use evacuated tube technology that produces the most efficient Solar Water Heaters available. Each evacuated tube consists of two glass tubes made of impact resistant borosilicate glass. Between the two glass tubes is a vacuum space that contains 3 layers of special selective coatings that permit excellent solar heat absorption yet all but eliminates heat loss. This allows Infinity Solar Water Heaters to provide maximum efficiency on cloudy days when flat plate panels no longer function.

- Evacuated Tubes are over 90% efficient.
- Evacuated Tubes are efficient even in low light and on cloudy days.
- Evacuated Tubes will withstand high winds and hail
- Round glass Tubes always receive maximum rays from the sun.
- Infinity offers a 25 year product warranty.



➔ Product Drawing



- ① inside tubes
- ② selective coating
- ③ vacuum jacket
- ④ outside tubes
- ⑤ supporter
- ⑥ getter
- ⑦ mirror

⇒ Technical Data

Item Specification	One Target	Three Targets	Titanium (high temperature application)
Absorptance of Selective Coating (AM1.5)	$\alpha \geq 92.5\%$	$\alpha \geq 93.5\%$	$\alpha \geq 96.0\%$
Emission of Selective Coating (80°C ± 5°C)	$\varepsilon_{\text{H}} \leq 7.5\%$	$\varepsilon_{\text{H}} \leq 6.5\%$	$\varepsilon_{\text{H}} \leq 4.0\%$
Stagnation Parameter	$Y \geq 220\text{m}^2\text{/kW}$	$Y \geq 240\text{m}^2\text{/kW}$	$Y \geq 240\text{m}^2\text{/kW}$
Solar Radiance Exposure	$H \leq 3.3\text{MJ}/\text{m}^2$	$H \leq 3.0\text{MJ}/\text{m}^2$	$H \leq 3.0\text{MJ}/\geq$
Average Heat Loss Coefficient	$U_{\text{LT}} \leq 0.75\text{W}/(\text{m}^2\text{C})$	$U_{\text{LT}} \leq 0.70\text{W}/(\text{m}^2\text{C})$	$U_{\text{LT}} \leq 0.70\text{W}/(\text{m}^2\text{C})$
Selective Coating Material	AL-N/AL	SS-AL-N/Cu	Ti
Vacuum Quality	$P = 3 \times 10^{-3}\text{Pa}$		
Pressure-proof	0.6MPa		
Impact Resistance	Steel Ball Test: steel ball with diameter of 30mm fall on the evacuated tube vertically from 450mm height, the evacuated tube is not damaged		
Transmittance of GlassTube	$T \geq 0.89(\text{AM1.5ISO9806-1:1994})$		
Material of GlassTube	Borosilicate Glass 3.3		
Knots of GlassTube	Knots($\varnothing \leq 1\text{mm}$) ≤ 2 pieces in area of 10mm × 10mm; Knots($\varnothing \leq 2.5\text{mm}$) ≤ 5 pieces in the whole tube		
Stone of GlassTube	Stones($\varnothing \leq 1\text{mm}$) ≤ 1 piece in area of 10mm × 10mm; Stones(1.0mm $\leq \varnothing \leq 1.5\text{mm}$) ≤ 2 pieces in the whole tube		

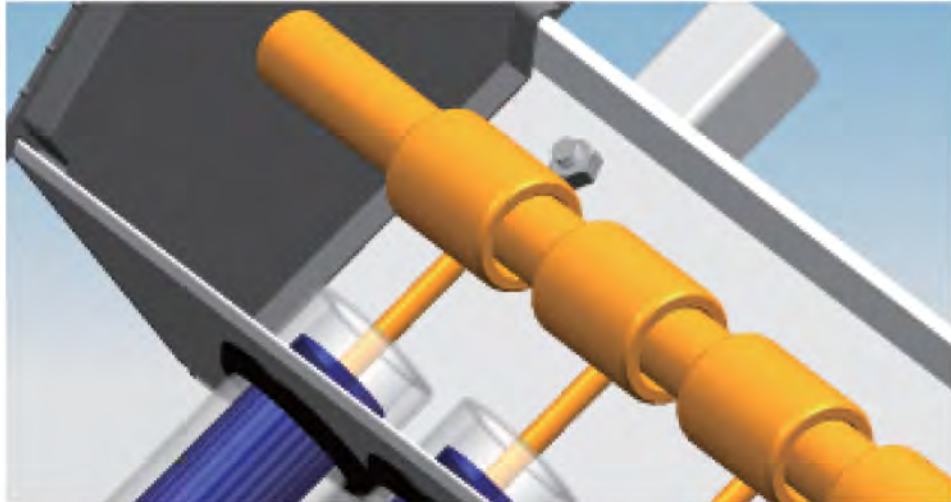
⇒ Specifications

Item	Data(mm)		
	$\varnothing 47/37$	$\varnothing 58/47$	$\varnothing 70/58$
Diameter of Outer/Inner Tube	$\varnothing 47/37$	$\varnothing 58/47$	$\varnothing 70/58$
Length of Tube	1500;1600;1800;1920	1800;1920;2000;2100	150;1800;2100
Thickness of Tube	1.60 ± 0.15	2.0 ± 0.15	2.2 ± 0.15

⇒ Package Quantity

Specification	Quantity each carton	20 ft Container	40 ft Container
$\varnothing 47/1500\text{mm}$	15 pcs/20 pcs/24 pcs	5040 pcs	12000 pcs
$\varnothing 47/1800\text{mm}$	15 pcs/20 pcs/24 pcs	4600 pcs	10200 pcs
$\varnothing 58/1800\text{mm}$	10 pcs/15 pcs	2600 pcs	64200 pcs

➔ Introduction of Heat Pipe/A type



Infinity Solar Water Heating Units have a unique copper heat exchange at every tube. This unique feature enables Infinity units to work at 92.6% efficiency, the best in the industry.



➔ Specifications of Heat Pipe/A type

Series	Heat absorbing tube			Condenser			Gap between tubes	Inlet & Outlet (mm)	Maximum Operating Pressure
	pieces of tube	Diameter	Thickness	Diameter	Thickness	Length			
471500	10-20	Ø8	0.7	Ø38	1.5	50	66	22	0.7
471800							66		
58/1800							75		

Note: We can produce custom tubes to meet your specific requirements.



➔ Main advantages

- Heat pipe is designed to withstand 150 mph winds.
- Infinity Solar Water Heaters will withstand 2" hail.
- Heat pipe units are designed for high pressure applications.
- Unlike flat plate units, heat pipes are not subject to hard water incrustation.

>> Introduction of Heat Pipe Solar collector

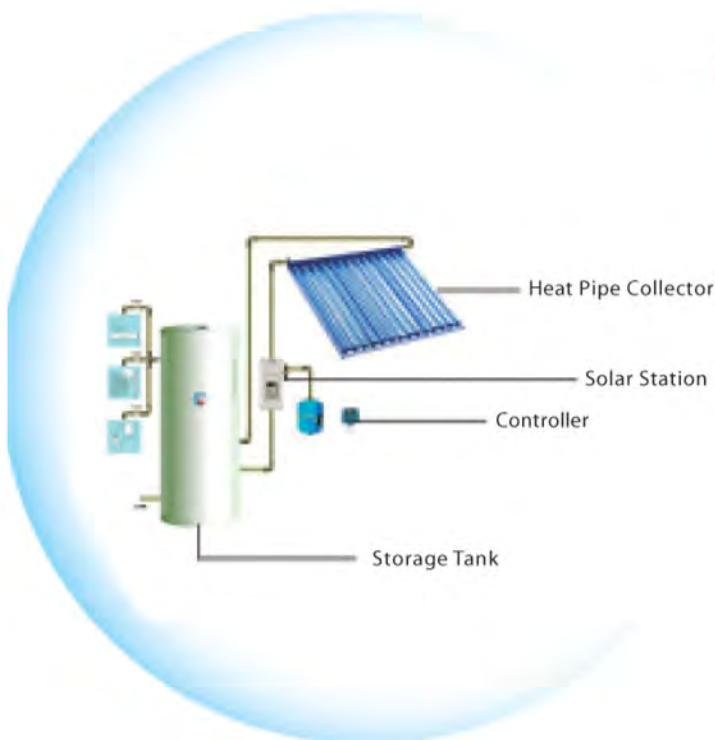
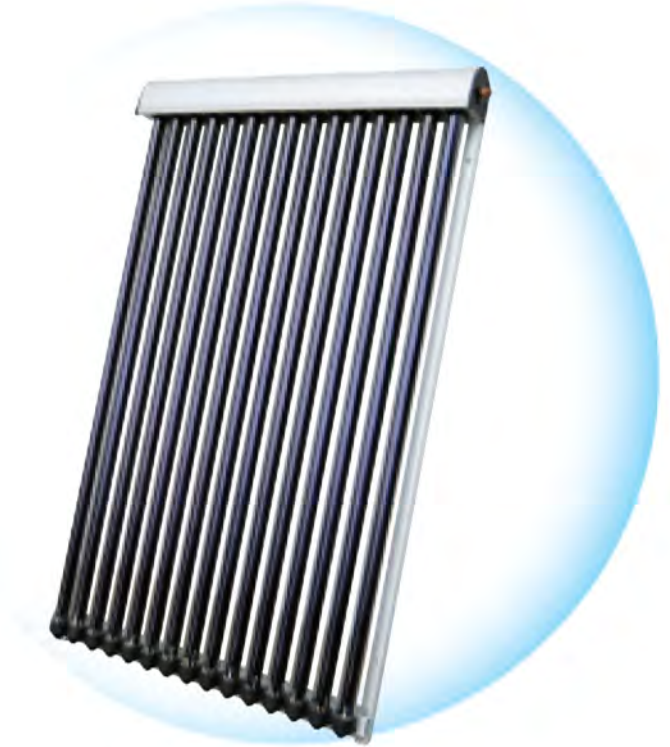
Infinity Solar Water Heaters have an inorganic high efficiency medium within the copper heat exchanger. This enables the unit to be 92.6% efficient.

Applications:

- Domestic Hot Water Systems
- Multi Tenant Heating Systems
- Hotel and Restaurant Hot Water Systems
- Industrial Hot Water and Steam Applications

Mounting Types:

- Roof mounting - Flat roof/vertical
- Wall mounting
- Horizontal mounting (Note: The manifold must always be mounted on top. The minimum angle for on-roof and flat roof



➔ Other Infinity Solar Products

Modular Zone Control System

- Monitors water temperature
- Pumps water through the system
- Shuts down flow at night
- Permits other appliances to be attached to system

Preheat Water Tanks

- Available with gas and electric alternative heating system
- Available up to 550 gallon capacity

➤ Specifications (the parameter is suitable for both A and B series)

Specification	Quantity of tubes	gap between tubes(mm)	Inlet & outlet (mm)	dimension ((L × W × H)mm)	Absorber Area(m ²)	Maximum operation pressure(Mpa)	Netto Weight
LN47/1500-12	12	66	22	1635 × 891 × 135	0.8	0.7	27
LN47/1500-14	14			1635 × 1023 × 135	0.9		32
LN47/1500-16	16			1635 × 1155 × 135	1.1		36
LN47/1500-18	18			1635 × 1287 × 135	1.2		40
LN47/1500-20	20			1635 × 1749 × 135	1.3		45
LN47/1800-12	12	66	22	1935 × 891 × 135	1.0	0.7	32
LN47/1800-14	14			1935 × 1023 × 135	1.1		37
LN47/1800-16	16			1935 × 1155 × 135	1.3		41
LN47/1800-18	18			1935 × 1287 × 135	1.5		45
LN47/1800-20	20			1935 × 1749 × 135	1.6		50
LN58/1800-12	12	75	22	1935 × 990 × 145	1.2	0.7	41
LN58/1800-14	14			1935 × 1140 × 145	1.4		47
LN58/1800-16	16			1935 × 1290 × 145	1.6		53
LN58/1800-18	18			1935 × 1440 × 145	1.8		60
LN58/1800-20	20			1935 × 1590 × 145	2.0		66

➤ Matching Products

Technical Data of stand

Material	6063 Aluminum Alloy
Material Thickness	2.0 mm
Connector	SUS 304 Stainless Steel



➤ Connection



Heat Pipe Solar collector

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