

**TES**<sup>TM</sup>

SOLAR ENERGY PRODUCTS  
ENERGY SAVING EQUIPMENT

# Collect Free Solar Energy For You

Zhuhai Tianke Energy Saving Equipment Manufacture Co., Ltd.  
Yongli Industrial Zone, Lianzhou Town, Zhuhai City, P. R. China  
Leading Desinger & Manufacturer of Solar Panel Collectors  
And Energy Saving Heating Equipments  
Websites: [www.teswin.com](http://www.teswin.com)

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Certifi. EN 12975 - 2

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**Zhuhai Tianke Energy-Saving Equipment Manufactory Company, Limited**

Yongli Industrial Zone, Lianzhou Town, Zhuhai City, P.R. China

Tel:+86-756-5564908 Fax:+86-756-5564352

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## TES™ Flat Plate Solar Thermal Collectors

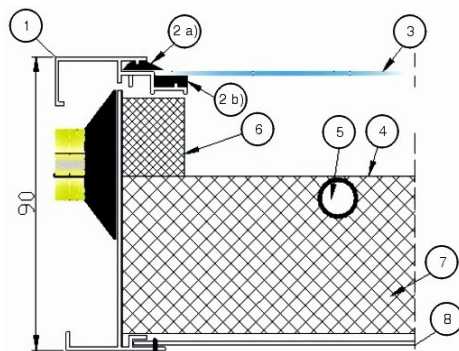


● Vertical version for roof mount



● Horizontal version for wall mount

### Features & Advantages



- (1) Aluminum Frame
- (2) Rubber Sealing
- (3) Tempered Glass Cover
- (4) Absorber Wing
- (5) Absorber Tubes
- (6) Side Insulations
- (7) Backside Insulations
- (8) Back Housing

- Cooper fin absorbers with Black Chrome finish
- Ø10mm full copper riser tubes
- Ø22mm full copper heaters
- 50mm glass wool insulations
- Anodized aluminum frame profile, corrosion resistant
- 4mm tempered glass cover with EPDM rubber sealing
- 0.3mm galvanized steel sheet backside housing
- 1.4Mpa test pressure & 1.0Mpa max working pressure
- 97%±2% total thermal efficiency
- 5%±3% total thermal loss
- EN 12975-2 & ISO 9806-1 directive test approved
- Comply with CE & RoHS directives & certified
- IP65 protection degree
- Over 30 years lasting and reliable life design



### Model Numbers & Dimensions

Model	Version	Dimensions (mm)	Riser Tubes	Headers	Absorber Fins	Heated Area	G.W.
1.5 M <sup>2</sup>	Vertical	1500x1000x90	9 pcs	2 pcs	9 pcs	1.5 SqM	33 Kgs
2.0 M <sup>2</sup>	Vertical	1000x2000x90	9 pcs	2 pcs	9 pcs	2.0 SqM	45 Kgs
2.5 M <sup>2</sup>	Vertical	1250x2000x90	11 pcs	2 pcs	11 pcs	2.5 SqM	55 Kgs
3.0 M <sup>2</sup>	Vertical	1500x2000x90	14 pcs	2 pcs	14 pcs	3.0 SqM	66 Kgs
1.5 M <sup>2</sup>	Horizontal	1500x1000x90	14 pcs	2 pcs	14 pcs	1.5 SqM	33 Kgs
2.0 M <sup>2</sup>	Horizontal	2000x1000x90	19 pcs	2 pcs	19 pcs	2.0 SqM	45 Kgs
2.5 M <sup>2</sup>	Horizontal	2000x1250x90	19 pcs	2 pcs	19 pcs	2.5 SqM	55 Kgs
3.0 M <sup>2</sup>	Horizontal	2000x1500x90	19 pcs	2 pcs	19 pcs	3.0 SqM	66 Kgs

## TES™ Solar Thermal Boiler/Storage Water Tanks

- ★ Patented Double Jacket Design
- ★ Insulated & Pressurized

### ● Horizontal version for wall mount:



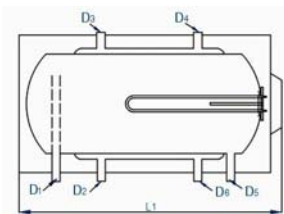
### ● Vertical version for stand mount:



### Features & Advantages:

- Easy installation design with handles
- Stainless Steel, Anodized Aluminium or Painted housing available
- 50mm Polyurethane foam water tank insulation
- 2.5mm low carbon steel cylinder
- TINANO™ painted internal protection water tank
- Magnesium rod ant-scaling system
- Stainless steel or copper substitute electric heating elements
- 0.8KW to 4KW electric heating power available
- 1.9Mpa test pressure, 1.0Mpa working pressure
- Cold/tap water inlet, hot water outlet, solar fluid inlet & outlet
- Bipolar of four contacts thermostat control from 20°C to 80°C
- Comply with **CE & RoHS** directives
- IP65 protection degree
- Over 30 years lasting and reliable life design

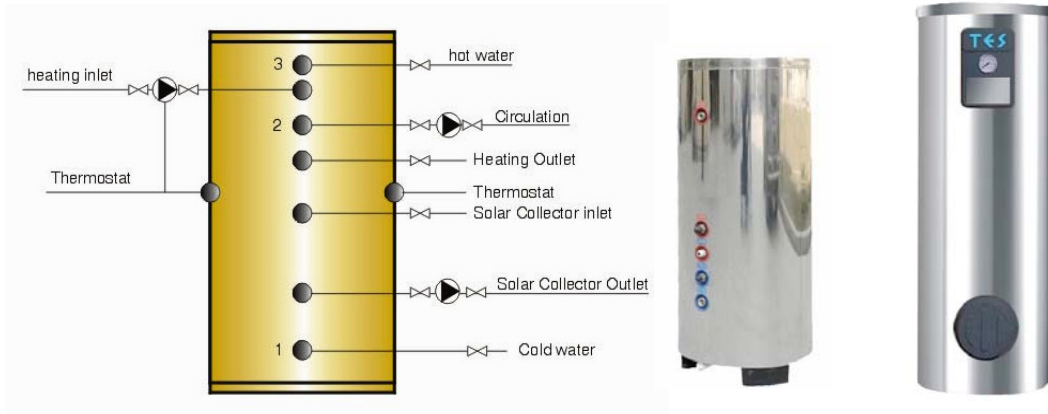
### Horizontal Boiler Water Tank Model Numbers & Dimensions



Mode Numbers:	120H1	160H1	200H1	300H1
Capacity of Water:	120Liter	160Liter	200Liter	300Liter
External Diameter:	500mm	500mm	500mm	500mm
Length /Al. Housing:	1015mm	1265mm	1460mm	2245mm
Length /S/S Housing:	1000mm	1270mm	1470mm	2245mm

D1: 3/4" - Hot Water Outlet    D2: 3/4" - Hot Fluid Inlet from Collector    D3, D4: 1/2" - Safety Element Point  
 D5: 1/2" - Cold/Tap Water Inlet    D6: 3/4" - Cold Fluid Outlet to Collector

## Vertical Solar Boiler/Storage Water Tanks



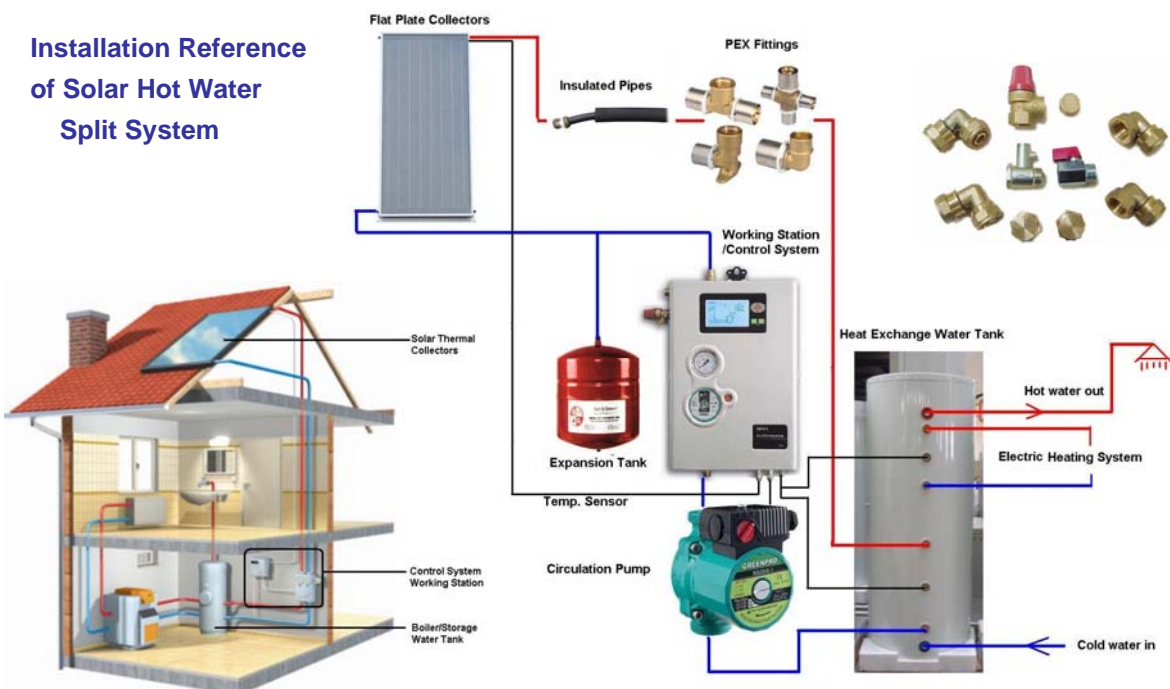
### Vertical Storage Water Tanks Model Numbers & Dimensions - 2 Jackets

● TINANO™ coating protection inner tank	<b>Model:</b>	<b>120V2</b>	<b>160V2</b>	<b>200V2</b>	<b>300V2</b>
● 50mm Polyurethane foam insulations	Capacity:	120Liter	160Liter	200Liter	300Liter
● Magnesium rod antiscaling system	Diameter:	560mm	560mm	560mm	560mm
● Electric heating element of 1.5Kw--4Kw	Height:	1440mm	1440mm	1255mm	1820mm

### Vertical Storage Water Tanks Model Numbers & Dimensions - 1 Jacket

<b>Model:</b>	<b>120V1</b>	<b>160V1</b>	<b>200V1</b>	<b>300V1</b>	<b>400V1</b>	<b>500V1</b>	<b>700V1</b>	<b>1000V1</b>
Capacity:	120Liter	160Liter	200Liter	300Liter	400Liter	500Liter	700Liter	1000Liter
Diameter:	560mm	560mm	560mm	560mm	700mm	700mm	800mm	900mm
Height:	1440mm	1440mm	1255mm	1820mm	1487mm	1840mm	2100mm	2100mm

### Installation Reference of Solar Hot Water Split System



## TES™ Compact Solar Water Heaters

- Combine the solar collector & water tank together, low profile and easy to install



## Features & Advantages

The Solar Thermal Collectors:	The Boiler Water Tank:
● Anodized aluminum frame profile, corrosion resistant	Anodized aluminium or s/s external housing
● 4mm tempered glass cover with EPDM rubber sealing	50mm Polyurethane foam water tank insulations
● Galvanized steel or aluminum backside sheet	2.5mm steel or copper cylinders
● Copper or aluminum unified sheet absorbers	1.5mm steel or copper jackets
● 30mm glass wool side insulation	TINANO coating cylinder internal finish
● 50mm glass wool backside insulation	Anti-scaling magnesium rod system
● 97%±2% total thermal efficiency	1.4Mpa test pressure & 1.0Mpa working pressure
● 5%±3% total thermal loss	Electric resistance heater 0.8Kw--4Kw available
● Pressurized closed loop system, no pumps needed	Bipolar of four contacts(20°C to 80°C) Thermostat
● EN 12975-2 & ISO 9806-1, EN 12975-2 and ISO 9806-2	directive standard test approved
● Comply with CE & RoHS directives & certified	
● Stable operation in extremely low temperatures of -40°C	
● IP65 protection degree, workable in any climate	
● Over 30 years lasting and reliable life design	

## Supply with support fixtures for Tile-Roof or Flat-Roof installation



## Model Numbers & Capacity

Model:	TES-120L	TES-160L	TES-160L	TES-200L	TES-200L	TES-200L	TES-300L	TES-300L
Tank Capacity:	120Liter	160Liter	160Liter	200Liter	200Liter	200Liter	300Liter	300Liter
Collectors:	1x1.5M <sup>2</sup>	1x2.0M <sup>2</sup>	1x2.5M <sup>2</sup>	1x2.5M <sup>2</sup>	1x3.0M <sup>2</sup>	2x2.0M <sup>2</sup>	1x3.0M <sup>2</sup>	2x2.0M <sup>2</sup>

## New TES™ Hyperion™ Series Compact Solar Water Heaters

- The Hyperion Series solar water heater systems are compact boilers, easy to install, more aesthetic with no visible piping between the collector and the water storage tank. These systems utilize the high quality and technology integrated in the rest of TES solar water heater systems but also offer higher efficiency than the previous solar collectors integrating a new absorber design.



Pipes were designed hid behind

### Hyperion LE™ Series

- The Hyperion LE series is made of Anodized Aluminum External cover and Black selective paint aluminum fin, copper pipe solar collector absorber. This is the most cost effective series but at no expense of quality, The black selective paint absorber offers exact same absorbing capability as the Higher-End Black Selective Chrome copper absorber but has a slightly higher amount of thermal losses.

### Hyperion HE™ Series

- The HE stands for High Efficiency. This series utilizes the same water tank as Hyperion LE series but uses a Black Selective Chrome copper fin, copper pipe solar collector absorber. This is the top range of solar collectors offering staggering efficiency, minimal thermal losses, and highest absorption capability than any other type of solar absorber coating. The Hyperion HE series is the series with the longest lifetime and highest efficiency but at the expense of beauty compared to ST and STi series which use a Stainless Steel Mirror outside cover material for the water tank.

### Hyperion ST™ Series

- The ST stands for Stainless Steel as this series utilizes a Mirror Stainless steel covered water storage tank. For the solar collector it utilizes the same Black Selective paint aluminum fin, copper pipe absorber as the Hyperion LE series.

### Hyperion STi™ Series

- The Hyperion STi series is the top range! Superb beauty and efficiency in one compact, easy to install package. This stunning solar water heater utilizes the Mirror Stainless steel outside cover water storage tank, and the highest efficiency Black Selective Chrome all-copper collector. This is the true "god of light" and son of sky!

### Available Model Numbers of Hyperion Series

Model No.	Capacity	Collectors	Total Collector Area
Hyperion LE, HE, ST, STi 120	120 liters	1 x 1.62m <sup>2</sup>	1.62m <sup>2</sup>
Hyperion LE, HE, ST, STi 160	160 liters	1 x 1.98m <sup>2</sup>	1.98m <sup>2</sup>
Hyperion LE, HE, ST, STi 200	200 liters	1 x 2.70m <sup>2</sup>	2.70m <sup>2</sup>
Hyperion LE, HE, ST, STi 250	250 liters	2 x 1.62m <sup>2</sup>	3.24m <sup>2</sup>
Hyperion LE, HE, ST, STi 300	300 liters	2 x 1.98m <sup>2</sup>	3.96m <sup>2</sup>

### External Dimensions of Hyperion Series Solar Collectors

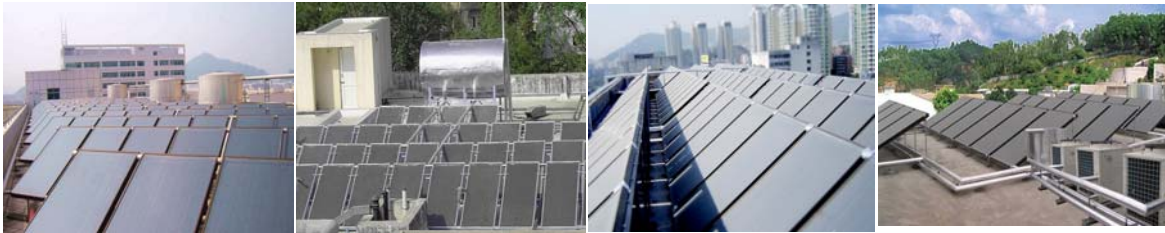
Dimensions	Heated Area (M <sup>2</sup> )	Max Working Pressure	Test Pressure	Total Thermal Efficiency	Total Thermal Loss
1800 x 900 x 90	1.62m <sup>2</sup>	1.0Mpa	1.4Mpa	97%±2%	5%±3%
1800 x 1100 x 90	1.98m <sup>2</sup>	1.0Mpa	1.4Mpa	97%±2%	5%±3%
1800 x 1500 x 90	2.70m <sup>2</sup>	1.0Mpa	1.4Mpa	97%±2%	5%±3%

## TES™ Solar Hot Water System Other Installation

- **Large Scale Solar Hot Water System**

Suitable for Hotels, Apartments, School Dormitories & Public Buildings etc.  
Need customized calculation and circulation system design

Reference Photos:



- **Solar Pool Heating System**

Suitable for Swimming Pools, Hotel Pools, Public or Private Pools etc.  
Need customized calculation and circulation system design

Reference Photos:



Welcome To [WWW.TESWIN.COM](http://WWW.TESWIN.COM)

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Zhuhai Tianke Energy-Saving Equipment Manufactory Co.,Ltd

[www.teswin.com](http://www.teswin.com) [tes@teswin.com](mailto:tes@teswin.com)

## TES -- Professional Manufacturer Of Environment Friendly Equipments



### FROM GREECE TO CHINA

Zhuhai Tianke Energy Saving Equipment Manufactory Co., Ltd. was invested by a experienced business man from Greece, who had owned over 25 years successful business activity in Europe. In 2004, he came to China and set up a series of new factories.

### TES CHINA FACTORY PROFILE

**TES** currently have 2 factories, occupies an area of more than 40,000 square meters, with more than 200 employees and a Research & Development department center of more than 20 engineers.

**TES** factory have many series of stamping, welding, surface painting and assembly producing lines. TES have complete control of product's design and construction to garranty the quality of every product.

**TES** operate the ISO9001:2008 international standard quality control system. All TES products comply with CE & RoHS directive, the solar thermal collector water heaters passed the EN 12975-2 & ISO 9806-1 directive standard tests.

**More than 80%** of TES green energy product & energy saving products are exported to Europe & Australasia countries, with buyer's brands or TES brand.

**TES** does not only utilize European advanced technology and management system but is also concerned in the human factor. We provide the most excellent conditions of living and working so as to ensure our products will be consumable. We are able to provide the best quality and service in order to keep our customers fully satisfied.

**TES** intends to provide Environment Friendly products for our users to save energy and protect our earth together.







## The TES Company Principles

The TES company principles have been, and continue to be a very important guidelines for our success. The TES principles provide the guide to our daily endeavours – within our company and in our market sector.



### TOP QUALITY

Products quality is our first principle, product's quality is also the base that grows our company & gained reputation from our buyers. We set up a full line of quality control system to inspect every part of our products before delivering out of the factory gate.



### INNOVATION

We are the technological trendsetter & trailblazer for our users. TES have a leading work team to practice new technologies.

### RESPONSIBILITY

We ensure all our processes are environmentally compatible and encourage the use of renewable forms of energy. We are committed to fulfilling our economical, ecological and social responsibilities.

### RELIABILITY

We were and will always be a reliable business partners. Our products are energy-efficient and easy to handle. They offer a high class standard & a long service life. They are designed with an eye to the future.

### INTERNATIONAL ORIENTATION

We think and act globally. Our products are designed comply with international standards & meet the environment friendly guidelines. We intend to be the best environment friendly equipments products manufacturer in the world.



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Certifi. EN 12975 - 2

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**Zhuhai Tianke Energy-Saving Equipment  
Manufactory Company, Limited**

Yongli Industrial Zone, Lianzhou Town

Doumen District, Zhuhai City

Guangdong Province

519165 P.R. China

Tel: +86-756-5564908

Fax: +86-756-5564352

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