



# flat-plate thermal collector **TS500**

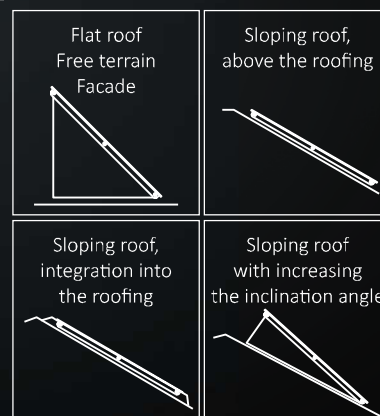
Collector with increased absorber area. Its design originates from the most popular TS 300 collector type. The copper pipe meander is attached to the absorber using a patented technology. The TS 500 is suitable for all common applications like DHW heating, pool water heating and

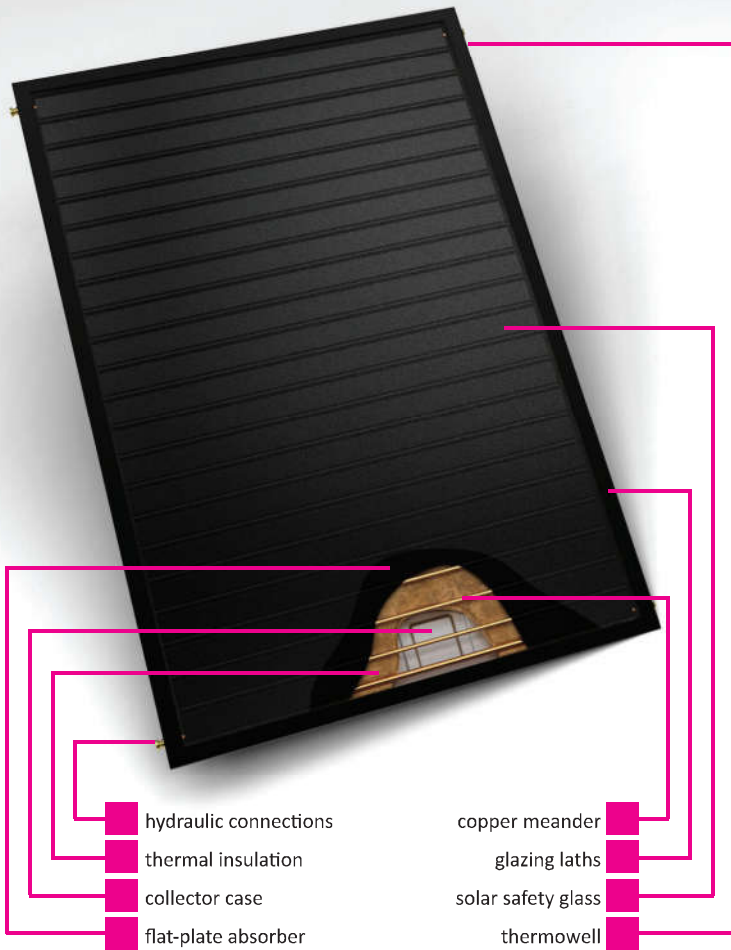
space heating support. It is particularly suited for multi-dwelling buildings and other systems where large number of collectors need to be installed. Just like other types of TS collector, the TS 500 provides good thermal power output, reliability, long lifetime and attractive design.

## Why choose TS500?



Large-area version of the best selling type of pressed metal case TS collector. Features modern design, and is made of recyclable materials. Suitable for any type of roof - including yours.





### Flat-plate solar collector TS500:

Flat-plate collector with increased area. Designed for solar systems with circulating pumps. It is installed in vertical position. Collectors are connected in parallel to each other. Maximum 8 collectors connected in one row.

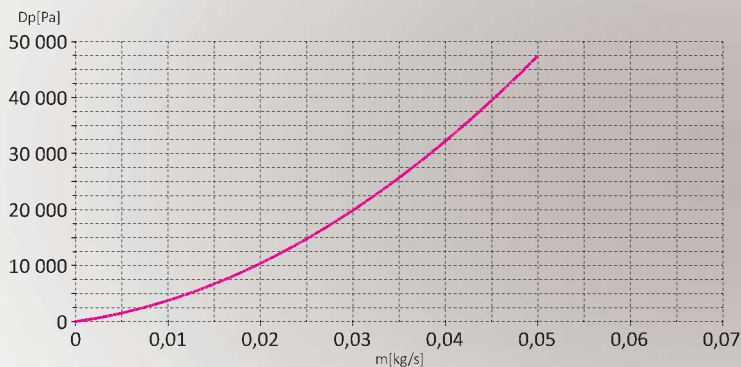
Collector's base consists of a compact pressed metal case made of Al-Mg sheet. A solar safety glass is attached to the case by glazing laths made of anodized aluminium profiles.

Absorber is made of specially shaped aluminium sheet with selective conversion layer. The sheet spans a copper pipe meander (patented solution).

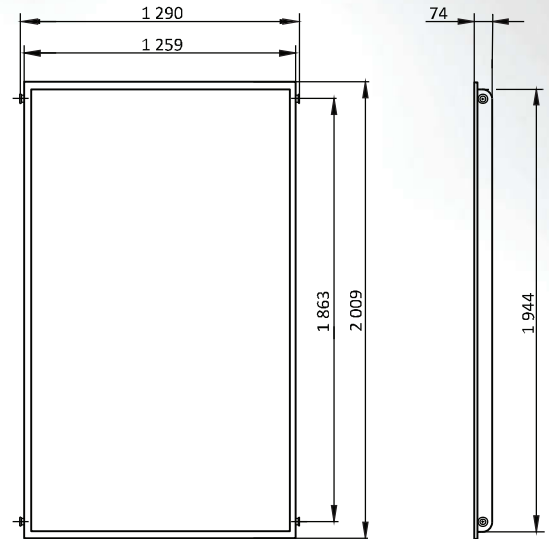
The TS 500 collector is produced in the following variants:

- with flanged connections (connection to solar circuit is provided by quick couplers  $\varnothing 26$  mm)
- with union nut connections

<b>TS500 (P)</b>	with flanged connections	S1587
<b>TS500 (M)</b>	with union nut connections	S1596



### Dimensions:



### Technical parameters:

<b>Dimensions</b>	2 009 x 1 290 x 74 mm
<b>Gross area</b>	2,53 m <sup>2</sup>
<b>Absorption area</b>	2,26 m <sup>2</sup>
<b>Aperture area</b>	2,26 m <sup>2</sup>
<b>Linkage dimensions</b>	1 290 mm
<b>Weight</b>	44,6 kg
<b>Liquid content</b>	1,72 l
<b>Max. operation pressure of heat transfer liquid</b>	600 kPa
<b>Recommended flow rate of heat transfer liquid</b>	30-100 l/h per one collector
<b>Connections</b>	<ul style="list-style-type: none"> <li>• union nut connections 3/4"</li> <li>• flanged pipe connections <math>\varnothing 26</math>mm</li> </ul>
<b>Thermowell</b>	for sensor $\varnothing 6$ mm
<b>Cover glass</b>	solar safety glass, thickness 4mm
<b>Collector case</b>	stamping made of non-corrosive Al-Mg sheet
<b>Thermal insulation</b>	mineral felt, thickness 40mm
<b>Selective absorber coating</b>	ALOX (black)
<b>Solar absorptivity <math>a_{AM1.5}</math></b>	95%
<b>Thermal emissivity <math>e_{82^\circ C}</math></b>	13% ALOx
<b>Optical efficiency</b>	81%
<b>Recommended operation temperature</b>	below 100°C
<b>No-load temperature (1000W/m<sup>2</sup>, 30°C)</b>	196°C
<b>Max. thermal power output of the collector (1000 W/m<sup>2</sup>)</b>	1 828 W



THERMO/SOLAR Žiar s.r.o.  
 Na vartičke 14  
 965 01 Žiar nad Hronom  
 Tel.: +421-45-601 6080  
 E: info@thermosolar.sk  
 W: www.thermosolar.sk