

High grade solar thermal components  
Made in Berlin

# K720-TS

## FLAT PLATE COLLECTOR



K7 – THE ATTRACTIVE ALL-ROUNDER  
Efficiency and elegance combined

Thin, metallic shining border  
inside provides an elegant look.

Outstanding glass strips – collectors can be pushed together  
optically closer than normal frame collectors.

Plastic caps with appealing design as impact protection  
and drainage of the first sealing level

# Technical Data

<b>Type of construction</b>	Flat plate collector for thermosiphon systems for on-roof, flat-roof and field mounting	
<b>Absorber type</b>	KBB absorber with aluminum sheet and copper tubes Absorber with 8 harp tubes $\varnothing$ 8 mm and 2 manifolds $\varnothing$ 18 mm	
<b>Measurements (L x B x H)</b>	1884 x 1035 x 77 mm	
<b>Gross area</b>	1,95 m <sup>2</sup>	
<b>Aperture area</b>	1,84 m <sup>2</sup>	
<b>Total weight dry</b>	29 kg	
<b>Liquid content</b>	1,1 l	
<b>Reference area</b>	Gross area	Aperture area
<b>Efficiency <math>\eta_{0,b}</math></b>	71,1 %	75,4 %
<b>Heat loss coefficient a1</b>	3,472 W/m <sup>2</sup> K	3,680 W/m <sup>2</sup> K
<b>Heat loss coefficient a2</b>	0,012 W/m <sup>2</sup> K <sup>2</sup>	0,013 W/m <sup>2</sup> K <sup>2</sup>
<b>Annual collector output (Würzburg, 50°C)</b>	454 kWh/m <sup>2</sup>	
<b>Max stagnation temperature</b>	188°C ( $G_s=1000$ W/m <sup>2</sup> , $\vartheta_{as}=30^\circ\text{C}$ )	
<b>Absorber coating</b>	High selective coating on aluminum sheet	
<b>Absorption / emissivity</b>	95 % / 5 %	
<b>Covering</b>	Low iron, structured solar safety glass (ESG)	
<b>Transmission of covering</b>	91,5 %	
<b>Impact resistance of covering</b>	Cover passed the optional impact resistance tests acc. ISO 9808	
<b>Nominal flow</b>	90 l/h (low flow: 40 l/h)	
<b>Nominal pressure loss</b>	4 mbar (low flow: 2 mbar, water/propylene-glycol / 20°C)	
<b>Hydraulic connection</b>	Parallel connection with collectors side-by-side	
<b>Collector connection</b>	Sideways 4 connectors $\varnothing$ 18mm bare tube for compression fitting	
<b>Max operation pressure</b>	10 bar	
<b>Thermal insulation</b>	Mineral wool 30 mm	
<b>Collector case</b>	Aluminum frame, glass strip powder coated	
<b>Permissible wind and snow load</b>	3 kN/m <sup>2</sup> suction, 3 kN/m <sup>2</sup> pressure	
<b>Angle of inclination</b>	15° – 75°	
<b>Recommended heat transfer fluid</b>	Antifreeze mix based on propylene-glycol	
<b>Transport capacity</b>	10 years	



KBB Kollektorbau GmbH  
 Bruno-Bürger-Weg 142-144  
 D-12439 Berlin  
 Phone: +49(0)30-6781789-0  
 Fax: +49(0)30-6781789-50  
 info@kbb-solar.com  
 www.kbb-solar.com