

High grade solar thermal components
Made in Berlin

K5-3Giga+

LARGE SCALE COLLECTOR



Large scale collector with 7,5 m²
for medium to big systems

AR-glass and foil cover
for medium to high temperature applications

Elegant design with
small gross to net ratio

2 pole mounting system
for fast and simple installation

Technical Data

Type of construction	Large scale collector for on-roof, flat-roof and field mounting, other mounting types on demand	
Absorber type	KBB absorber with aluminum sheet and copper tubes Meander with \varnothing 28 mm manifold	
Dimensions (L x B x H)	2160 x 3450 x 118 mm	
Gross area	7,45 m ²	
Aperture area	6,96 m ²	
Total weight dry	136 kg	
Liquid content	6,2 l	
Reference area	Gross area	Aperture area
Efficiency $\eta_{0,b}$ / η_0	75,2 %	80,5 %
Heat loss coefficient a_1	2,416 W/m ² K	2,586 W/m ² K
Heat loss coefficient a_2	0,008 W/m ² K ²	0,009 W/m ² K ²
Annual collector output (Würzburg, 50°C)	580 kWh/m ²	
Annual collector output (Würzburg, 75°C)	413 kWh/m ²	
Stagnation temperature	240°C ($G_s=1000$ W/m ² , $\vartheta_{as}=30$ °C)	
Absorber coating	High selective coating on aluminum sheet	
Absorption / emissivity	95 % / 5 %	
Covering	- Low iron, structured solar safety glass (ESG) with antireflective coating - Foil for reduction of convection losses between glass and absorber	
Transmission of covering	96,5 %	
Impact resistance of covering	Cover passed the optional impact resistance tests acc. ISO 9808	
Hydraulic connection	Parallel connection with collectors side-by-side	
Collector connection	Sideways 4 connectors \varnothing 28mm bare tube or 1¼" male flat sealing	
max. operation pressure	10 bar	
Heat insulation	Mineral wool 70 mm	
Collector case	Aluminum frame, glass strip powder coated	
Permissible wind and snow load	3 kN/m ² suction, 3 kN/m ² pressure	
Angle of inclination	15° – 75°	
Recommended heat transfer fluid	Antifreeze mix based on propylene-glycol	
Transport capacity	- 40'-high-cube-container:	54 collectors
	- truck with 13,6 loading meter:	60 collectors
Guarantee	10 years	



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