



## [Calpak GA Selective Collector]

Engineered to deliver utmost  
performance & durability!

**Calpak**  
*powered by the sun*

# [Calpak GA Selective Collector]

Calpak, having a 35 year experience in the design and production of high quality and robust collectors, offers a high selective surface collector with laser welding for exceptional performance.

The GA collector is designed and manufactured to exploit the maximum amount of solar radiation even in areas with low insolation, achieving in this way the cheapest Kwh.

The combination of very high absorption, robustness and high pressure characteristics, enables high added value installations.

The GA collector's features are:

- A unipartite anodized aluminium frame
- An absorber with one single and full aluminium plate 0.5 mm thick with high selective surface treatment
- 10 laser welded vertical copper risers
- Water-Blown Environmental Friendly PU insulation without CFC, protected by a special aluminum foil (which also reflects the energy back to the absorber)



Power Output per collector unit (240GA)		
Tm-Ta	RADIATION	
	700 W/m <sup>2</sup>	1000 W/m <sup>2</sup>
10K	1103 W	1617 W
30K	894 W	1408 W
50K	666 W	1180 W



Technical specifications			
		200 GA	240 GA
<b>Collector:</b>			
External dimensions:	length	2070 mm	2350 mm
	width	1070 mm	1070 mm
	height	95 mm	95 mm
Weight		33,5 kg	38 kg
Gross area		2,21 m <sup>2</sup>	2,51 m <sup>2</sup>
<b>Absorber:</b>			
Absorber area		2,00 m <sup>2</sup>	2,32 m <sup>2</sup>
Absorber Material	Full aluminium plate of 0,5 mm		
	10 copper risers Ø 8 mm		
	Header & footer copper pipe 22 mm		
Surface treatment		Selective sputtered	
Absorption coefficient		a > 0,95	
Emission coefficient		e < 0,05	
Fluid content		1,5 l	2 l
<b>Insulation and casing:</b>			
Insulation material		Water-blown polyurethane	
Insulation thickness		40-45kg/m <sup>3</sup> , 30-35 mm thick	
Casing material (framework/back cover)		Anodized aluminum	
Sealing material		EPDM	
Diameter of connections		Ø 22 mm	
<b>Limitations and efficiency:</b>			
Maximum temperature of operation		175 °C	
Maximum operating pressure		10 bar	
Instantaneous efficiency (DEMOKRITOS)		n <sub>0</sub> = 0,79	
Heat loss coefficient (CENER)		a <sub>1</sub> = 3,28	