



## [Calpak ES Selective Collector]

High efficiency and performance at  
best value for money!

**Calpak**  
*powered by the sun*

# [Calpak ES 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 ES collector is designed and manufactured to exploit the maximum amount of solar radiation even in areas with low insolation, achieving in this way low cost energy.

The combination of high efficiency and competitive pricing enables value for money installations.

The ES collector's features are:

- Anodized aluminium frame
- Aluminium back cover
- Tempered solar glass 4 mm thick
- Absorber with High Selective aluminium fin
- Laser Welded on Copper risers 8 mm thick
- with 22 mm headers
- 30 mm Glass Wool back insulation and 10 mm side insulation
- EPDM gasket and silicon foam for Sealing



250 ES

Technical specifications		195 ES/200 ES	230 ES	250 ES	275 ES
<b>Collector</b>					
External Dimensions	length	1503/2006 mm	1893 mm	2006 mm	2260 mm
	width	1305/1007 mm	1183 mm	1257 mm	1180 mm
	height	85 mm	85 mm	85 mm	85 mm
Weight		35 kg	36 kg	41 kg	46 kg
Gross area		1,96/2,02 m <sup>2</sup>	2,25 m <sup>2</sup>	2,52 m <sup>2</sup>	2,66 m <sup>2</sup>
Cover material		4 mm Tempered glass			
<b>Absorber</b>					
Aperture area		1,79/1,83 m <sup>2</sup>	2,03 m <sup>2</sup>	2,33 m <sup>2</sup>	2,52 m <sup>2</sup>
Absorber material	Selective aluminium fin				
	laser welded copper risers $\varnothing$ 8 mm	11/8	10	11	10
		Header and footer copper pipe 22 mm			
Surface treatment		Selective aluminium			
Absorption coefficient		a > 0,94			
Emission coefficient		e < 0,05			
Fluid content		1,5 L	1,8 L	1,9 L	2,5 L
<b>Insulation and casing</b>					
Insulation material		Glass wool			
Insulation thickness		30mm			
Casing material (framework/back cover)		Anodized aluminum			
Sealing material		EPDM			
Diameter of connections		$\varnothing$ 22 mm			
<b>Limitations and efficiency</b>					
Maximum temperature of operation		165°C			
Maximum operating pressure		16 bar			
Instantaneous efficiency (ITW)		n <sub>0</sub> = 0,801			
Heat loss coefficient (ITW)		a <sub>1</sub> = 3,653			

