

On-roof collector

SK500N-ECO-AL

SK500L-ECO-AL

SK500N4-ECO-AL



On-roof collector SK500-ECO-AL

The main advantage of this collector is its ability to be used on any roof and in any situation, whether on a flat roof, in a garden, on a building facade or as part of a large system. The aluminium full-surface absorber and its highly-selective vacuum coating, high-quality insulation and the attractive and sturdy aluminium tray make the SK500-ECO-AL one of the best collectors of its type.

Specifications SK500-ECO-AL

Name		SK500N-ECO-AL	SK500L-ECO-AL	SK500N4-ECO-AL
Collectortype		Flat collector		
Mounting type		On-roof mounting		
Gross area	m ²	2,57		
Aperture area	m ²	2,3		
Absorber area	m ²	2,2		
Length	mm	2079	1239	2079
Width / Width incl. Connection	mm	1239 / 1257	2079 / 2098	1239 / 1257
Height	mm	100		
Weight empty	kg	40		
Collector capacity	l	1,6		
Max. operating pressure	bar	10		
Idle temperature	°C	198		
Recommended throughput	l/m ² h	15 - 40		
Collector field piping		max. 6 units in series*		
Min. collector incline	°	15		
Max. collector incline	°	75		
Connections		1" female/male screw connection in top left and right		as SK500-ECO-AL + bottom left and right
Absorber		Full surface aluminium absorber; Highly selective vacuum coating		
Hydraulic design		Harp		
Absorption (α) / Emission (ε)		0,95 / 0,05		
Collector housing		Deep-drawn, salt water resistant aluminium tray		
Heat insulation		50 mm mineral wool		
Collector glazing		3.2 mm toughened, low iron solar safety glass		
Efficiency (Aperture/Absorber) η_{0a} / η_{0A}		0,763 / 0,811	0,759 / 0,810	0,778 / 0,831
Heat transfer coefficient a_{1a} / a_{1A}	W/(m ² K)	3,322 / 3,530	3,365 / 3,590	3,820 / 4,077
Temperature depending heat transfer coefficient a_{2a} / a_{2A}	W/(m ² K ²)	0,018 / 0,019	0,020 / 0,021	0,009 / 0,010
Angle correction factor $K_a(50^\circ)$		0,96		
Solar Keymark Reg.Nr.		011-7S190 F	011-7S1568 F	011-7S1496 F

* To compensate for thermal expansion flexible connections (e.g. IWS50) have to be used for 4 or more SK500L-ECO-AL collectors

Mounting systems SK500-ECO-AL



Bench screw SSP



Roof brackets DBP



Concrete ballast BBALSK



Support plate BDA

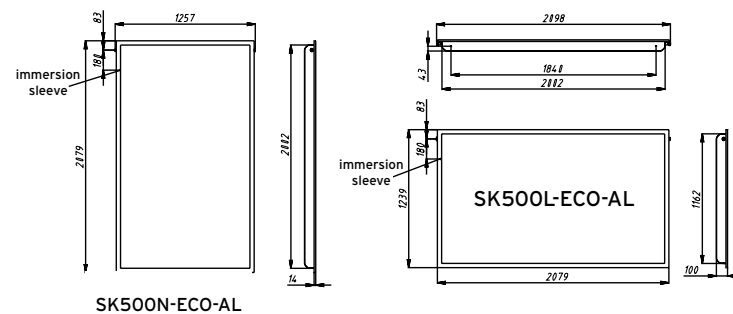


Saddle clamp FKP

Mounting SK500-ECO-AL

All hardware and sheet metal is prefabricated by SONNENKRAFT and the unit is delivered with a full set of accessories. You can install the collector yourself. Easy-to-understand instructions are provided.

Dimensions SK500-ECO-AL



Features of SK500-ECO-AL roof mounted collector

- Elegant 2.5m² units, suitable for all types of assembly
- Highly-selective absorber coating heats water to high temperature in rapid time
- Hail-resistant solar glass
- Weather-resistant materials mean long service life
- Full surface aluminium absorber with highly-selective coating
- Elegant, deep-drawn aluminium tray
- High-quality rear wall insulation using 50mm thick, non-decaying mineral wool
- Easy-to-install detachable screw connections
- Available with four connections for larger installations (SK500N4-ECO-AL)