

CS Solar Collector

Data sheet

General description

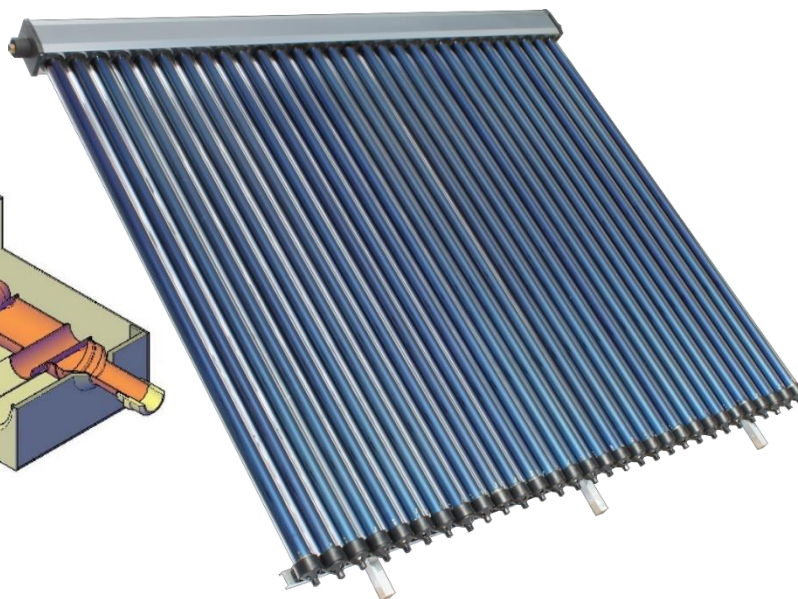
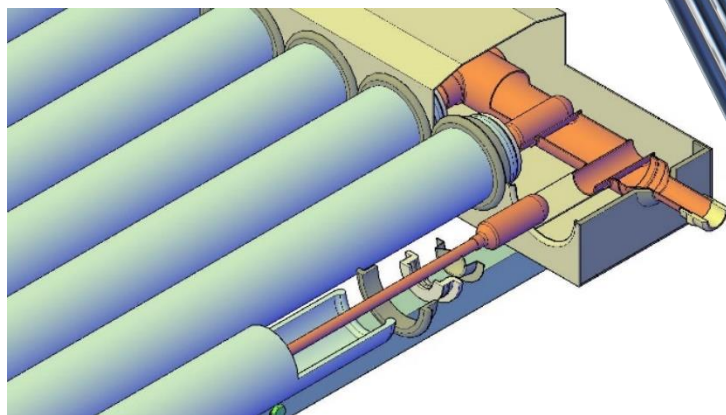


- Pressurized solar collector with vacuum tubes fitted with heat-pipes
- Usable throughout the year, it can be installed in various applications like: domestic hot water preparation, house heating, pool heating or in complex industrial applications
- The technology of vacuum tubes with heat pipe ensures an efficient and safe production of thermal energy, in a system that is easy to install and with low maintenance costs. Each tube works independently and the damage of a tube does not cause the solar system to malfunction but only to reduce the absorption and heating capacity

Main specifications



- Good performance even at low temperatures
- Hail resistance up to 30 mm and wind resistance up to 100 km/h
- The tubes are easy to replace, without the need to empty the tank
- Heat pipes resistant to temperatures down to -35 °C, with 22 mm condenser
- Equipped with thermal sensor socket on both sides
- Maximum working pressure – 8 bar
- Inlet / outlet connections – 3/4 "M
- Stagnation temperature in tubes / collector: 280 °C / 190 °C
- Flexible mounting on tilted roofs or horizontal surfaces
- Angle adjustment frames available for 10 - 65°
- **10-year warranty**
- Made in Romania 



Built-in materials

Heat exchanger:	Ø 42mm copper pipe
Exterior cover:	AISI 430 stainless steel with pvc foil protection
Thermal insulation:	20 mm rockwool covered in 30 mm rigid PU foam
Vacuum tubes:	Borosilicate glass, 58x1800 mm, 1.8 mm thickness
Absorption surface:	Cu/SS-ALN(H)/SS-ALN(L)/ALN
Heat-pipe:	High purity copper with 22mm condenser
Fastening elements:	PVC with UV protection
Sealing elements:	Silicone rubber
Fixing frame:	Aluminum profile 30x30x30x2 mm

Technical specs and performance

	CS 10	CS 12	CS 15	CS 20	CS 25	CS 30
Heat-pipe vacuum tubes	10	12	15	20	25	30
Absorption surface	0.99 sqm	1.18 sqm	1.48 sqm	1.98 sqm	2.46 sqm	2.97 sqm
Total surface	1.60 sqm	2.00 sqm	2.58 sqm	3.34 sqm	4.00 sqm	4.8 sqm
Weight (empty)	33 kg	38 kg	47 kg	62 kg	78 kg	92 kg
Collector size	200 x 80 x 18 cm	200 x 100 x 18 cm	200 x 129 x 18 cm	200 x 167 x 18 cm	200 x 200 x 18 cm	200 x 240 x 18 cm
Heat-exchanger volume	0.8 l	1.0 l	1.2 l	1.6 l	2.0	2.4 l
Recommended flow-rate	1 l/min	1.2 l/min	1.5 l/min	2.0 l/min	2.5 l/min	3.0 l/min
Maximum output ($\vartheta_m - \vartheta_a = 0$ K)	680 W	816 W	1020 W	1360 W	1700 W	2040 W
Maximum flow-rate	30 l/min					
Performance indicators	$\eta_0 = 0,726$ $a_1 = 1,668 \text{ W}/(\text{m}^2\text{K})$ $a_2 = 0,017 \text{ W}/(\text{m}^2\text{K})$					