

Solar Tube Company Evacuated Tube Collector Specification

Features and Benefits

- High performance evacuated tube collectors
- Available in 10, 15, 20, 25 and 30 tube panels
- Can be mounted free-standing or on a pitched roof
- Solar keymarked and EN12975-2 certified
- Heat pipes – offer low maintenance
- Easy to install, simple roof fixings
- 10 year warranty, 20+ year lifespan
- Market leading efficiency $\eta_0 = 73.4\%$

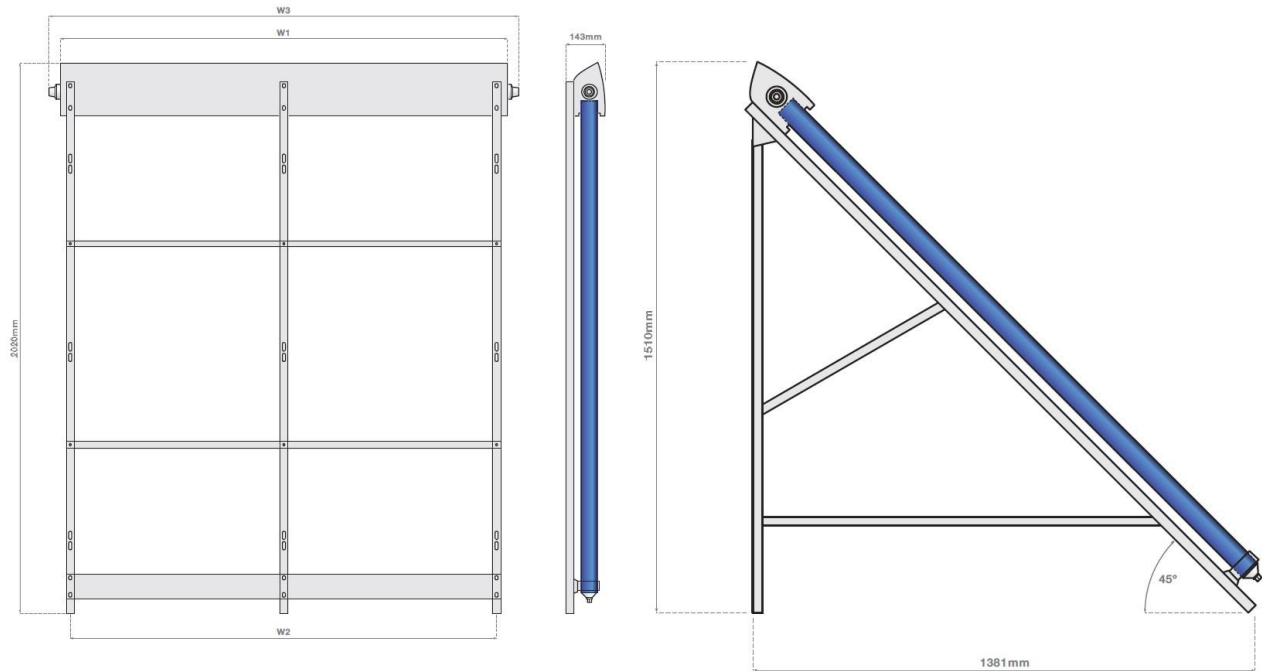


Triple Layer Selective
Absorber Coating

24mm High Conductivity
Heat Pipe Condenser

Evacuated Borosilicate
Glass Tube





Evacuated Tube Collectors - Sizing and Output

Tubes	W1 (mm)	W2 (mm)	W3 (mm)	Wet Weight (kg)	Aperture Area (m ²)	Annual Output* (kWh)
10	860	780	950	40.0	0.93	792
15	1250	1170	1340	58.0	1.40	1188
20	1640	1560	1730	62.0	1.87	1590
25	2030	1950	2120	96.0	2.33	1980
30	2420	2340	2510	114.1	2.79	2376

Technical Specification

Zero Heat Loss Efficiency, η_0	73.4%
Primary Heat Loss Coefficient, a_1	1.529 W/m ² K
Primary Heat Loss Coefficient, a_2	0.0166 W/m ² K ²
Incident Angle Modifier, K_{T50°	1.37
Instantaneous Efficiency**, $\eta_{0.05a}$	62.4%
Specific Output*	850 kWh / m ² / year
Stagnation Temperature	200.3°C
Maximum Operating Pressure	10 bar
Collector Frame and Manifold	Aluminium
Selective Absorber Coating	CerMet
Absorber Contact Sheet	Aluminium
Evacuated Tube	Borosilicate Glass 1800mm x 58mm (OD) x 47mm (ID)
Tube Spacing	78mm
Testing & Certification	EN12975-2 & Solar Keymark Registration No. 011-7S722 R

*Based on a collector located in Southampton, UK in an unshaded position facing South and tilted at 45°.

**Based on 800 W/m² irradiation and 40°C temperature difference between ambient air and collector.