Solar Energy westech

TEN YEAR 10 WARRANTY

HEAT PIPE SOLAR TUBE COLLECTOR

SP-S58 Series

With 58x1800mm evacuated heat pipe vacuum tubes

EXCELLENT VALUE:

- High performance evacuated heat pipe tube collectors
- Maintenance free

QUICK & EASY INSTALLATION:

- All parts can be carried individually onto the roof for assembly
- Tubes simply plug into dry pockets within the manifold casing

WEATHER RESISTANT:

- Capable of resisting 35mm diameter hailstones, 80m/h (130 km/h) winds and snow load 1000 Pa

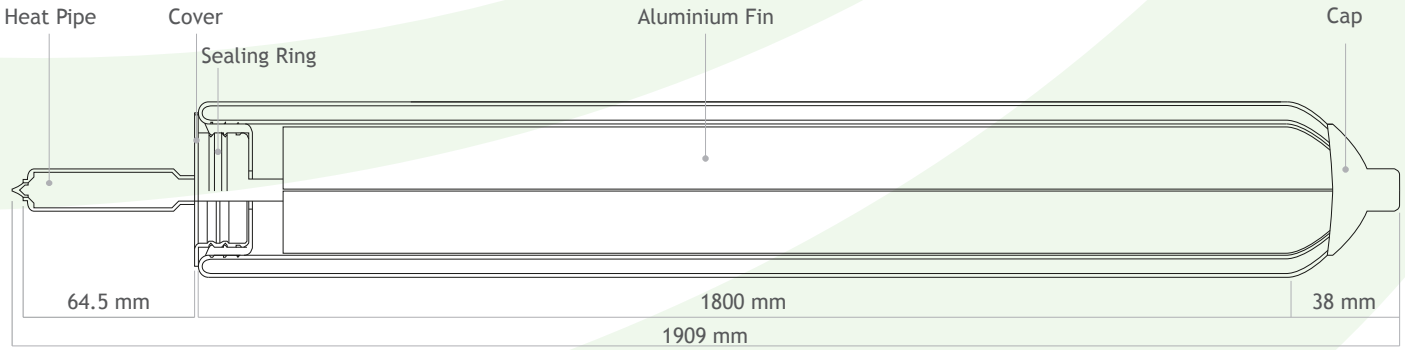
DURABLE, FLEXIBLE AND STYLISH:

- 10 years warranty, plus long lifespan
- Works best in a south facing direction or can be adapted to work in an east / west facing direction
- Mounting options – Fixes directly onto a pitched roof
- Adjustable A-frames available for flat roofs or ground mounting

FULLY COMPLIANT WITH WORLDWIDE STANDARDS:

- Solar Keymark No: 011-7S695 R
- ETL No: 01746 (qualified for Energy Technology List in UK)
- Eligible for Renewable Heat Incentive (RHI) and UK Government grants

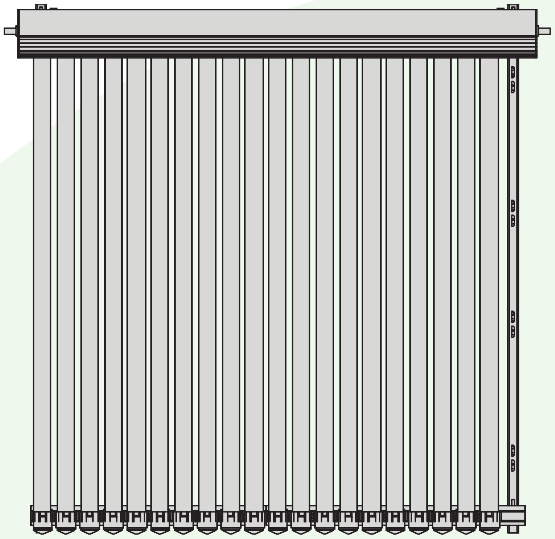
EVACUATED HEAT PIPE VACUUM TUBE: MODEL SP-TT58

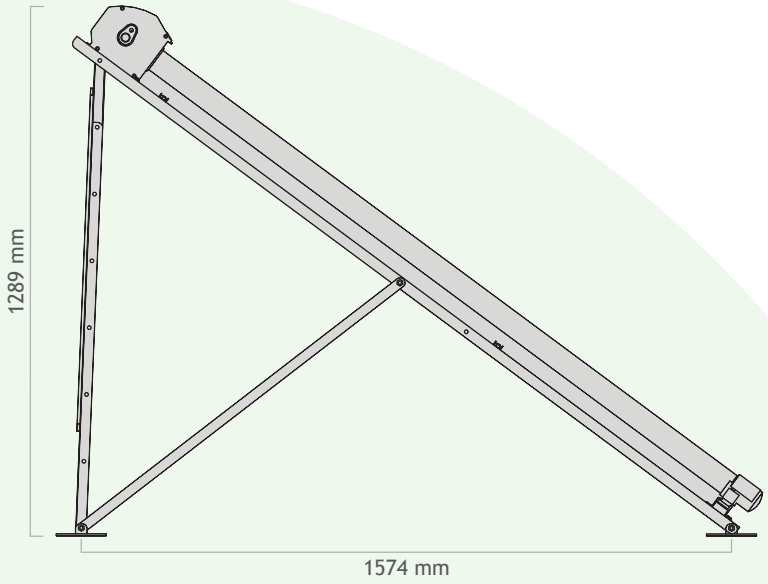


Size of Conderser	ϕ14 × 64.5 mm
Length of Glass Tube	1800 mm
Outer Tube Diametre	ϕ58 mm
Inner Tube Diametre	ϕ47 mm
Glass Thickness	2 × 1.6 mm
Glass Material	Borosilicate Glass 3.3

Absorptive Coating	ALN/AIN - SS/CU
Absorption Coefficient	>92%
Emission Coefficient	<8%
Vacuum	P<3.5 × 10^{-3} Pa
Net Weight	2.70 kg
Hot Water Output (17Mj/m^2.dayΔT=45°C)	9L

TECHNICAL DATA





	SP-S58/1800A-**10**	SP-S58/1800A-**20**	SP-S58/1800A-**30**
Dimensions			
Width of collector	890 mm	1689 mm	2488 mm
Length of collector	1980 mm	1980 mm	1980 mm
Overall area	1.764 m^2	3.344 m^2	4.926 m^2
Aperture area	0.944 m^2	1.86 m^2	2.853 m^2
Absorber surface area	0.815 m^2	1.63 m^2	2.444 m^2
Height above roof surface	155 mm	155 mm	155 mm
Manifold capacity	0.65 L	1.20 L	1.90 L
Inlet and Outlet pipe dimensions	22 mm	22 mm	22 mm
Weight - empty	36.88 kg	69.60 kg	102.80 kg
Mounting			
Working angles	20° - 70°	20° - 70°	20° - 70°
Operation Data			
Absorber efficiency η_{oA}	0.691	0.691	0.691
Aperture efficiency η_{oa}	0.592	0.592	0.592
Heat loss coefficient a1 based on aperture area	1.9789W/m^2K	1.9789W/m^2K	1.9789W/m^2K
Heat loss coefficient a2 based on aperture area	0.0149W/m^2K^2	0.0149W/m^2K^2	0.0149W/m^2K^2
Peak power performance of absorber area (G = 1000W/m^2)	690.67W/m^2	690.67W/m^2	690.67W/m^2
Annual energy collected (G=1000w/m^2)	563.17Kwh	1126.33Kwh	1688.8Kwh
Minimum working temperature	-35°C	-35°C	-35°C
Maximum operating pressure	8 bar	8 bar	8 bar
Stagnation temperature	194°C	194°C	194°C
Heat transfer fluid	Water/Glycol	Water/Glycol	Water/Glycol
Flow Rate			
Flow rate	60 L/hr	120 L/hr	180 L/hr
Minimum	60 L/hr	120 L/hr	180 L/hr
Maximum	120 L/hr	240 L/hr	360 L/hr
Material			
Manifold casing	Extruded anodised aluminium		
Insulation	Rockwool 60 - 80 mm		
Frame	Stainless steel		
Tube	1.6 mm borosilicate glass 3.3		
Header Pipe	Copper		

Westech Solar (UK) Ltd.
Unit 1, Bobby Fryer Close, Garsington Road, Oxford, OX4 6ZN

Tel: +44 (0)1865 862 863
Mob: +44 (0)798 5637 510
Email: info@westech-solar.co.uk
www.westech-solar.co.uk

WesTech Solar Collectors are available from: