



Technical Data – Evacuated Tube Heat Pipe Collectors

Model	ITS-58/1800-12	ITS-58/1800-18	ITS-58/1800-24	ITS-58/1800-30
Evacuated Tube Heat Pipe Type	58/1800			
Number of Tubes	12	18	24	30
Manifold material	High Purity copper			
Connecting Ports	2 x 22mm copper pipe			
Manifold casing	Baked epoxy coated Aluminum Extrusion			
Fitment area (m)	1m x 2m	1.5m x 2m	2m x 2m	2.6m x 2m
Output Power (yearly average kWh/day for Cape Town)	4.8	7.2	9.6	12
Output Power (yearly average kWh/day for Gauteng)	4.8	7.2	9.6	12
Output Power (yearly average kWh/day for Windhoek)	5.5	8.2	10.9	13.6
Certification	Solar keymark En 12975-2:2006			
Certification test center	TUV Rheinland			
Additional testing	SABS			
Manufacturing Quality Assurance	ISO9001:2000			

Technical Data – Evacuated Tube Heat Pipe

Model	58/1800
Glass Material	High-quality borosilicate glass 3.3
Outer glass tube diameter	58mm
Inner glass tube diameter	47mm
Outer glass tube length	1800mm
Glass wall thickness	2mm
Single tube weight	2.9kg
High vacuum long term stability	≤ 2X 10 ⁻³ Pa
Absorptive coating	Graded SS-ALNAL/Cu
Absorption coefficient	> 94%
Emittance	< 6% (80°C)
Heat loss	<0.8W/m ² °C
Heat Pipe type	High efficiency extended lifetime
Heat Pipe material	High purity copper
Heat Pipe fluid	Non outgassing water based fluid (non acetone)
Stagnation Temperature	250°C
Start-up temperature	25°C
Start-up time	< 2 min
Freezing tolerance	-35°C
Pressure resistance	6 Bar
Hail resistance	Ø 25mm
Wind resistance	30m/s
Heat impact resistance	No damage 3 time alternating impact 25°C and 90°C
Warranty	10 years
Life expectancy	>25 years