

Apricus 30 tube collector

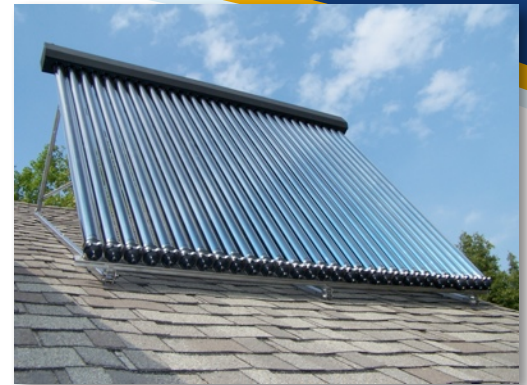
Product Specifications Sheet



Overview

Apricus solar collectors use high efficiency twin-glass evacuated tubes to absorb solar energy and convert it into usable heat. Freeze protected heat pipes transfer heat from within the evacuated tube up to an insulated copper header pipe through which a heat transfer liquid is circulated.

Suitable for domestic or commercial applications, Apricus solar collectors maintain strong efficiency levels even at high delta-t temperatures. For this reason Apricus collectors are ideal for cold regions and high temperature applications.



Physical Specifications

Overall Length	1980mm / 80"
Overall Height	156mm / 6.14"
Overall Width	2196mm / 86.4"
Aperture Area	2.83m ² / 30.45ft ²
Gross Area	4.26m ² / 45.83ft ²
Gross Dry Weight	95kg / 209lb
Fluid Capacity	710ml / 24fl oz
Max Operating Pressure	800kPa / 116psi
Stagnation Temperature	< 220°C / 432°F



Performance Variables⁽¹⁾

Eta ₀ (y-intercept)	0.687
a ₁ [W/(m ² K)]	1.505
a ₂ [W/(m ² K ²)]	0.011
Heat Capacity [kJ/(m ² /K)]	52.44
Peak Power Output ⁽²⁾	1944W / 6632Btu
Incidence Angle Modifier (passive tracking):	

Angle	0	20	40	50	60	70	90
Long	1.00	1.00	0.97	0.92	0.84	0.70	0.00
Trans	1.00	1.08	1.35	1.47	1.39	1.57	0.00

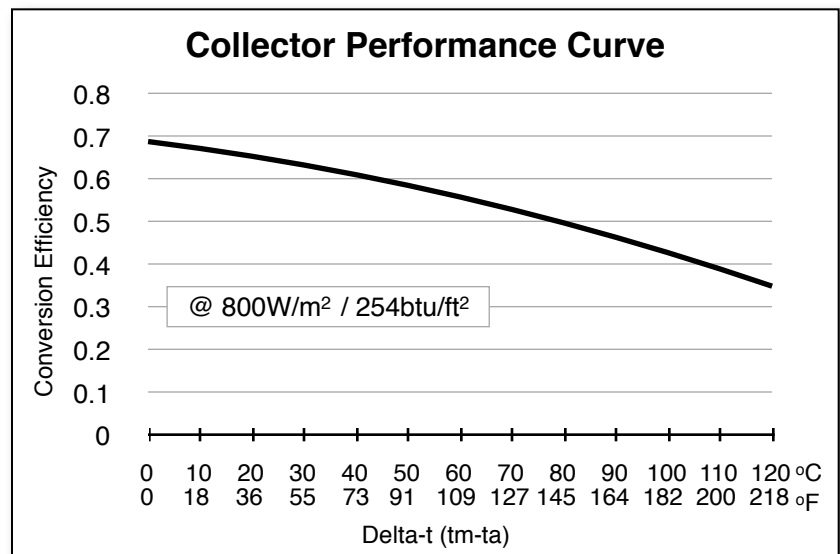


Key Material Specifications

Evacuated Tubes	Borosilicate 3.3 Glass
Absorber	Al-N on Al on Glass
Heat Pipes	High Purity Copper
Heat Transfer Fins	Aluminum
Rubber Components	HTV Silicone Rubber
Mounting Frame	439 Stainless Steel
Manifold Casing	5005-H16 Aluminum

Installation Guidelines

Max Flow Rate	15L/min / 3.9 US gpm
Max Tubes in Series	150 tubes
Install Angle Range	20-80°
Maximum Pressure Drop ⁽³⁾	10kPa / 3ft / 1.3psi



(1) Data from ITW test report 09COL805 (2) G=1000W/m², IAM angle = 0° (3) @20°C/68°F & 15L/min / 4US gpm