


<b>SOLAR COLLECTOR CERTIFICATION AND RATING</b>    <b>SRCC OG-100</b>	<b>CERTIFIED SOLAR COLLECTOR</b>  <b>SUPPLIER:</b> <b>Apricus Inc.</b> 965 West Main Street Branford, CT06405 USA <b>MODEL:</b> AP-10 <b>COLLECTOR TYPE:</b> Tubular <b>CERTIFICATION#:</b> 2007033C
--	---

### COLLECTOR THERMAL PERFORMANCE RATING

Megajoules Per Panel Per Day				Thousands of BTU Per Panel Per Day			
CATEGORY	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY	CATEGORY	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY
A (-5 °C)	15.7	11.9	8.0	A (-9 °F)	14.9	11.2	7.6
B (5 °C)	15.0	11.1	7.3	B (9 °F)	14.2	10.6	6.9
C (20 °C)	13.9	10.0	6.1	C (36 °F)	13.1	9.5	5.8
D (50 °C)	11.6	7.8	4.0	D (90 °F)	11.0	7.4	3.8
E (80 °C)	9.2	5.4	2.0	E (144 °F)	8.8	5.4	2.0

Original Certification Date: 24-AUG-09

### COLLECTOR SPECIFICATIONS

<b>Gross Area:</b>	1.344 m <sup>2</sup>	14.46 ft <sup>2</sup>	<b>Net Aperature Area:</b>	0.94 m <sup>2</sup>	10.12 ft <sup>2</sup>
<b>Dry Weight:</b>	34.8 kg	77. lb	<b>Fluid Capacity:</b>	.3 liter	0.1 gal
<b>Test Pressure:</b>	1103. KPa	160. psg			

### COLLECTOR MATERIALS

<b>Frame:</b>	Stainless Steel
<b>Cover (Outer):</b>	Glass Vacuum Tube
<b>Cover (Inner):</b>	None

### Pressure Drop

Flow		ΔP	
ml/s	gpm	PA	in H <sub>2</sub> O

<b>Absorber Material:</b>	Tube - Copper / Plate - Aluminum
<b>Absorber Coating:</b>	Aluminum Nitride

<b>Insulation Side:</b>	Vacuum
<b>Insulation Back:</b>	Vacuum

### TECHNICAL INFORMATION

<b>Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Taj]</b>				<b>Y INTERCEPT</b>	<b>SLOPE</b>
<b>S I UNITS:</b>	$\eta = 0.456$	$-1.35090 (P)/I$	$-0.00381 (P)^2/I$	<b>0.458</b>	<b>-1.58 W/m<sup>2</sup>.°C</b>
<b>I P UNITS:</b>	$\eta = 0.456$	$-0.23796 (P)/I$	$-0.00037 (P)^2/I$	<b>0.458</b>	<b>-0.30 Btu/hr.ft<sup>2</sup>.°F</b>
<b>Incident Angle Modifier [(S)=1/cosθ - 1, 0°&lt;θ&lt;=60°]</b>			<b>Model Tested:</b>	2007033A	
<b>Kα = 1</b>	1.306 (S)	-1.034 (S) <sup>2</sup>	<b>Test Fluid:</b>	Water	
<b>Kα = 1</b>	0.23 (S)	Linear Fit	<b>Test Flow Rate:</b>	83 ml/s 1.32 gpm	

**REMARKS:** Tested with long axis of tubes oriented north-south. IAM perpendicular to the tubes is listed above. IAM parallel to the tubes = 1.0 - 0.09(S)

December, 2009  
Certification must be renewed annually, For current status contact:  
**SOLAR RATING & CERTIFICATION CORPORATION**  
c/o FSEC ♦ 1679 Clearlake Road ♦ Cocoa, FL 32922 ♦ (321) 638-1537 ♦ Fax (321) 638-1010

[Return to Search](#)