


<p>SOLAR COLLECTOR CERTIFICATION AND RATING</p>  <p>SRCC OG-100</p>	<p>CERTIFIED SOLAR COLLECTOR</p> <p>SUPPLIER: Heliodyne, Inc. 4910 Seaport Avenue Richmond, CA 94804 USA</p> <p>MODEL: Gobi 408 000 COLLECTOR TYPE: Glazed Flat-Plate CERTIFICATION #: 100-2007-027C</p>
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COLLECTOR THERMAL PERFORMANCE RATING							
Megajoules Per Panel Per Day				Thousands of Btu Per Panel Per Day			
CATEGORY (Ti-Ta)	CLEAR DAY 23 MJ/m ² ·d	MILDLY CLOUDY 17 MJ/m ² ·d	CLOUDY DAY 11 MJ/m ² ·d	CATEGORY (Ti-Ta)	CLEAR DAY 2000 Btu/ft ² ·d	MILDLY CLOUDY 1500 Btu/ft ² ·d	CLOUDY DAY 1000 Btu/ft ² ·d
A (-5°C)	46	35	24	A (-9°F)	44	33	22
B (5°C)	42	31	20	B (9°F)	40	29	19
C (20°C)	36	25	14	C (36°F)	34	24	13
D (50°C)	24	14	4	D (90°F)	23	13	4
E (80°C)	13	4		E (144°F)	12	4	

A-Pool Heating (Warm Climate) B-Pool Heating (Cool Climate) C-Water Heating (Warm Climate) D-Water Heating (Cool Climate) E-Air Conditioning

Original Certification Date: October 17, 2007

COLLECTOR SPECIFICATIONS

Gross Area:	2.994 m ²	32.23 ft ²	Net Aperture Area:	2.781 m ²	29.94 ft ²
Dry Weight:	57.1 kg	126 lb	Fluid Capacity:	4.3 l	1.1 gal
Test Pressure:	1103 kPa	160 psig			

COLLECTOR MATERIALS

Frame:	Aluminum Extrusion
Cover (Outer):	Low Iron Tempered Glass
Cover (Inner):	None
Absorber Material:	Tube - Copper / Plate - Aluminum
Absorber Coating:	Sputtered Selective
Insulation (Side):	Isocyanurate Foam
Insulation (Back):	Isocyanurate Foam & Fiberglass

PRESSURE DROP

Flow		Δ P	
ml/s	gpm	Pa	in H ₂ O

TECHNICAL INFORMATION

Efficiency Equation [NOTE: Based on gross area and (P) = Ti-Ta]	<u>Y Intercept</u>	<u>Slope</u>	
SI Units: $\eta = 0.73 - 0.6002 (P)/I - 0.0010 (P)^2/I$	0.736	-4.205	W/m ² ·°C
IP Units: $\eta = 0.73 - 0.1058 (P)/I - 0.0001 (P)^2/I$	0.736	-0.741	Btu/hr·ft ² ·°F

Incident Angle Modifier [(S) = 1/cos θ - 1, 0° ≤ θ ≤ 60°]

K _{air} = 1.0	+0.0581 (S)	-0.2744 (S) ²
K _{gr} = 1.0	-0.23 (S)	(Linear Fit)

Model Tested:	Gobi 336 000
Test Fluid:	Water
Test Flow Rate:	50 ml/s 0.79 gpm

REMARKS:

October, 2007

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