


SOLAR COLLECTOR CERTIFICATION AND RATING  SRCC OG-100	<u>CERTIFIED SOLAR COLLECTOR</u> SUPPLIER: Heliodyne, Inc. 4910 Seaport Avenue Richmond, CA 94804 USA MODEL: Gobi 406 000 COLLECTOR TYPE: Glazed Flat-Plate CERTIFICATION #: 100-2007-027B
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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)	39	29	20	A (-9°F)	37	28	19
B (5°C)	35	26	16	B (9°F)	33	24	16
C (20°C)	30	21	12	C (36°F)	28	20	11
D (50°C)	20	11	3	D (90°F)	19	11	3
E (80°C)	11	4		E (144°F)	10	3	

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:	2.503 m ²	26.94 ft ²	Net Aperture Area:	2.314 m ²	24.91 ft ²
Dry Weight:	46.4 kg	102 lb	Fluid Capacity:	3.6 l	1.0 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]	Y Intercept	Slope
SI Units: $\eta = 0.726 - 0.5988 (P)/I - 0.0010 (P)^2/I$	0.732	-4.1949 W/m ² ·°C
IP Units: $\eta = 0.726 - 0.1055 (P)/I - 0.0001 (P)^2/I$	0.732	-0.739 Btu/hr·ft ² ·°F

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

K_{arr} = 1.0	+0.0581 (S)	-0.2744 (S) ²
K_{arr} = 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

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