OG-100 ICC-SRCC™ CERTIFIED SOLAR COLLECTOR # 10002143

SUPPLIER:
Dimas SA
2nd KLM Argos-Nafplion
Argos, 21200 Greece
www.dimas-solar.gr

BRAND: Dimas SA
MODELS: ENERGY+ ARGO 29
COLLECTOR TYPE: Glazed Flat Plate
CERTIFICATION #: 10002143
ORIGINAL CERTIFICATION: September 20, 2021
RENEWAL EXPIRATION DATE*: November 01, 2022
**Certifications must be renewed annually*

Compliance with the following standard: **ICC-901/SRCC Standard 100-2020**

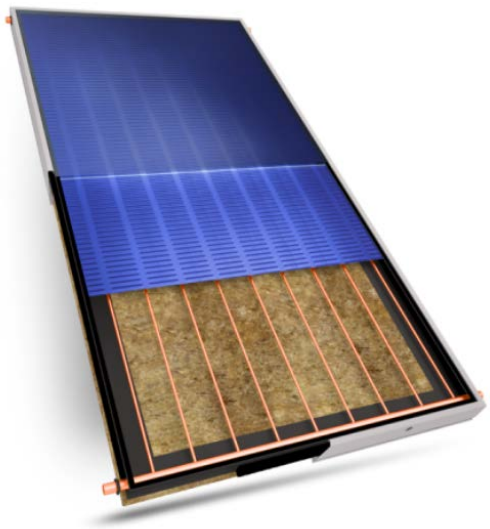
This solar collector listed below has been evaluated, rated and certified by the Solar Rating & Certification Corporation (ICC-SRCC™), an ISO/IEC 17065 accredited Certification Body, in accordance with the latest version of the ICC-SRCC *Rules for Solar Heating & Cooling Product Listing Reports*. This award of certification is subject to all terms and conditions of the ICC-SRCC OG-100 and the documents incorporated therein by reference. Thermal performance ratings calculated in accordance with standard OG-100 rating conditions are provided below. This document must be reproduced in its entirety.

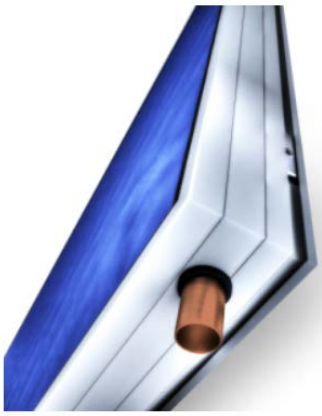
OG-100 SOLAR THERMAL COLLECTOR STANDARD PERFORMANCE RATINGS

Kilowatt-hours (thermal) Per Collector[1] Per Day				Thousands of Btu Per Collector[1] Per Day			
Climate → **Category (T_i-T_a)**	High Radiation (6.3 kWh/m²•day)	Medium Radiation (4.7 kWh/m²•day)	Low Radiation (3.1 kWh/m²•day)	**Climate →** **Category (T_i-T_a)**	High Radiation (2000 Btu/ft²•day)	Medium Radiation (1500 Btu/ft²•day)	Low Radiation (1000 Btu/ft²•day)
A (-5°C)	15.27	11.56	7.87	**A (-9°F)**	52.09	39.45	26.87
B (5°C)	13.92	10.22	6.53	**B (9°F)**	47.49	34.85	22.27
C (20°C)	11.78	8.17	4.60	**C (36°F)**	40.21	27.88	15.70
D (60°C)	7.93	4.54	1.45	**D (90°F)**	27.05	15.49	4.96
E (80°C)	4.41	1.59	0.00	**E (144°F)**	15.04	5.43	0.00

1. See tested collector details below.

COLLECTOR DESCRIPTION: Glazed Flat Plate Collector





Please verify certification is active on SRCC website www.solar-rating.org

SOLAR RATING & CERTIFICATION CORPORATION

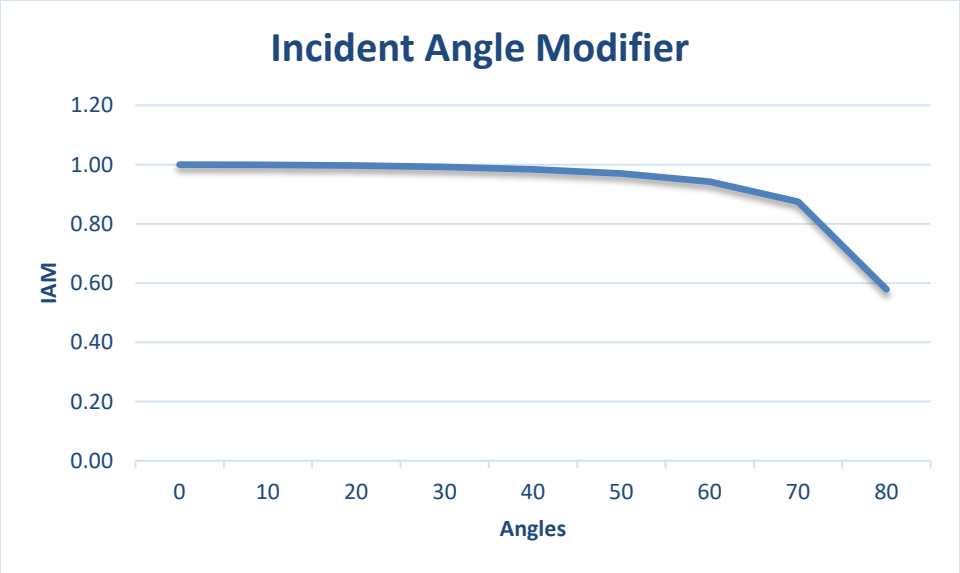
TEST TECHNICAL RESULTS

ISO Efficiency Equation: [Note: Based on gross area and (P)=T_i-T_a, and in accordance with ISO 9806-2013]

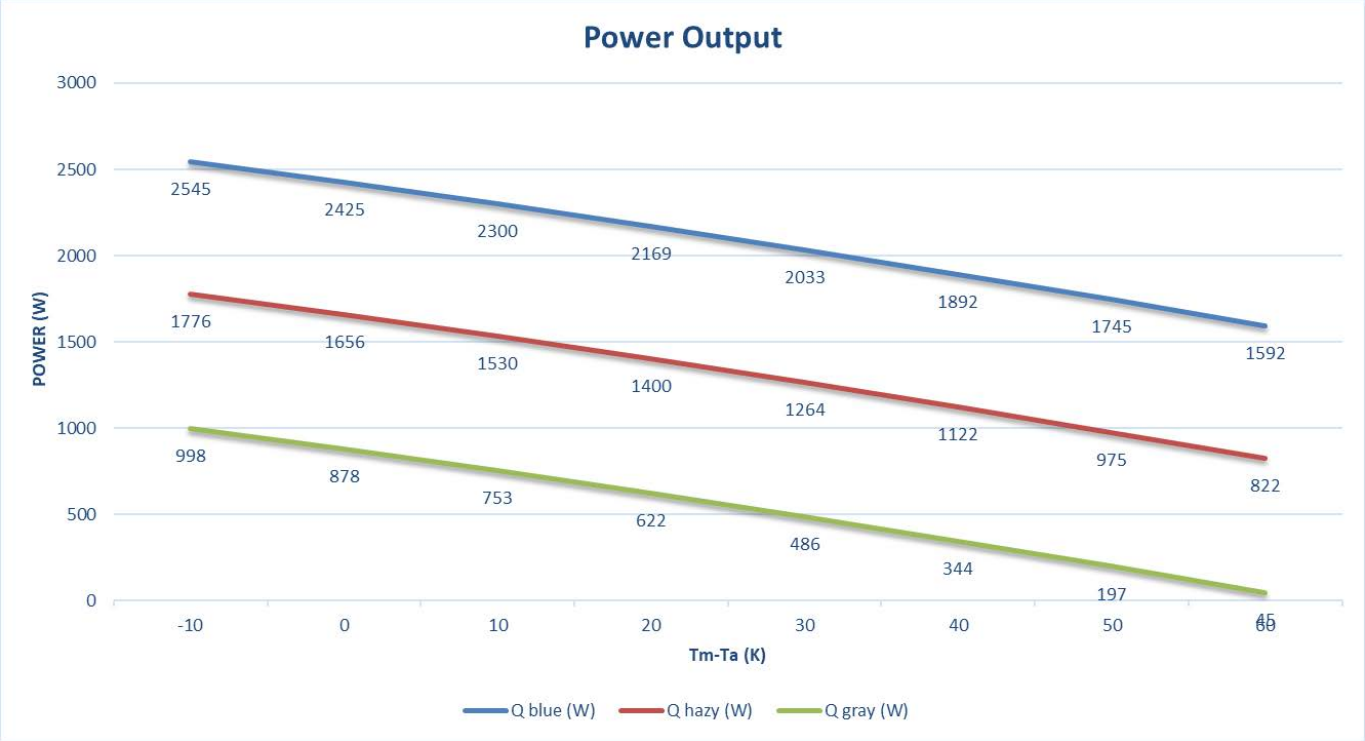
Second Order Thermal Efficiency Equation[1]		Linearized Thermal Efficiency Equation[1]			
SI UNITS	ETA = 0.8440 – 4.1949(P/G) - 0.00931(P^2/G)	**Y Intercept:**	0.8437	**Slope:**	4.2043
IP UNITS	ETA = 0.8440 - 0.7388(P/G) - 0.00091(P^2/G)	**Y Intercept:**	0.8437	**Slope:**	0.7404

1: Thermal efficiency equations per ISO 9806-2013 provided in curve forms. The curve or second order fit efficiency equation should be considered to be a more representative representation of the collector performance test. The linearized efficiency equation is provided for use with incentive programs, regulations and software that require the "slope" and "intercept" terms to describe collector performance.

Longitudinal Incident Angle Modifier (IAM)							
θ	10°	20°	30°	40°	50°	60°	70°
Κτά	1.00	1.00	0.99	0.98	0.97	0.94	0.87



COLLECTOR POWER OUTPUT (W)			
Note: Based on Standard Rating Conditions (SRC) and T_m-T_a in accordance with ISO 9806-2017			
Tm-Ta (K)	**Blue sky**	**Hazy sky**	**Grey sky**
-10	2545	1776	998
0	2425	1656	878
10	2300	1530	753
20	2169	1400	622
30	2033	1264	486
40	1892	1122	344
50	1745	975	197
60	1592	822	45
Q peak	**2425 W**		



LABORATORY TEST INFORMATION			
Test Lab:	Institute of Thermodynamics and Thermal Engineering (ITW)	**Test Report No.**	510COLL911
Tested in Accordance With:	EN ISO 12975-2:2006 & ICC 901/SRCC 100:2015	**Test Report Issue Date:**	October 20, 2016

TESTED COLLECTOR SPECIFICATIONS					
Gross Area:	2.92 m²	31.43 ft²	**Gross Depth:**	0.085 m	0.278 ft
Gross Length:	2.006 m	6.58 ft	**Gross Width:**	1.457 m	4.78 ft
Maximum Design Pressure*:	1600 KPa	232 psi	**Design Flow:**	72 L/m²h	3.2 gpm
Standard Stagnation Temp	102˚C	216˚F	**Dry Weight:**	41.4 kg	91.27 lbs
HT Fluid Compatibility	Water, Water-Glycol Mixture		**Fluid Capacity:**	5.0 L	1.32 gal
Impact Safety Rating:	11- No testing required since tempered glass cover used				

ICC-SRCC OG100 Certification Label:

This product certified by the
Solar Rating & Certification Corporation™
www.solar-rating.org

OG-100 Certification Number:	10002143
Certification Standard:	ICC 901/SRCC 100-2020
Model:	ENERGY+ARGO 29
Certification Holder:	Dimas SA
Manufactured in:	Greece
Serial Number:	123456

Collector Type:	Glazed Flat Plate
Dimensions:	2006x1457x85 mm (6.58x4.78x0.28 ft)
Gross Area:	2.92 m² (31.43 ft²)
Max Operating Pressure:	1600 kPa (232 psi)
Standard Stagnation Temperature:	102°C (216°F)
Empty Weight:	41.4 kg (91.2 lbs)
Fluid Volume:	5 L (1.32 gal)
Fluid(s):	Water or Water-Glycol Mixture

Please verify certification is active on SRCC website www.solar-rating.org

REMARKS AND CONDITIONS OF CERTIFICATION:

1. The collector listed in this ICC-SRCC OG-100 certification has been evaluated to the ICC 901/SRCC100-2020 standard and has been found to be in compliance.
2. OG-100 Standard Performance Ratings have been calculated for the tested components at the standardized conditions established by the OG-100 program. Actual results will vary based on the specific usage, installation and local environmental conditions.
3. Collectors listed in this ICC-SRCC OG-100 certification must display a label within the installation and operation manual(s) in accordance with the *ICC-SRCC Certification, Trademark and Certificate Policy*, which is available on the ICC-SRCC website.
4. The listed collector must be installed in accordance with the manufacturer's published installation instructions and applicable codes. OG-100 certifications do not include mounting hardware and appurtenances. Solar thermal collectors must be mounted in accordance with the requirements of the collector and mounting hardware manufacturers to comply with local codes for structural loading for wind, seismic, snow and other loads.
5. Solar thermal collectors and mounting hardware and appurtenances must comply with all local codes and requirements for fire resistance.
6. Solar thermal collectors must be used with the heat transfer fluids listed in this document.
7. Solar thermal collector manufactured by Dimas SA in Greece under a quality control program subjected to periodic evaluation in accordance with the requirements of ICC-SRCC.

Shawn Martin
Vice President of Technical Services, ICC-SRCC