



上海众晶太阳能科技有限公司

Shanghai Si-Solar Technologies Co.,Ltd

Our company located in Shanghai was founded in 2005 with registered capital of five million RMB. We are a high-tech manufacturer specializing in all kinds of mono-crystalline and poly-crystalline solar panel modules.

Our company has a team of talented technicians and advanced production processes. Our products have been exported to many countries and regions, and have been widely implied in many grilled power systems, independent power stations, and transportation and telecom projects spreading in domestic as well as oversea markets, we have been honored by customers by our excellent product quality and service.

We are willing to make friends with the people who have keen interest in solar panel trading. Let's go ahead together and create a bright future.



Certificate


VERIFICATION OF EMC COMPLIANCE

No: SHEMA10030030905TXC
Applicant: Shanghai Si-Solar Technologies Co.,Ltd
No.4 Lane 99 Shenmei Rd,Pudong District,Shanghai,China
Zip Code:201318
Manufacturer: Shanghai Si-Solar Technologies Co.,Ltd
No.4 Lane 99 Shenmei Rd,Pudong District,Shanghai,China
Zip Code:201318
Product Description: Solar Module
Model No: STPV SERIES
Technical Data: 1W-300W
Sufficient samples of the product have been tested and found to be in conformity with
Test Standard: EN 61000-6-1:2007
EN 61000-6-3:2007
as shown in the
Test Report Number(s): SHEMA10030030905

This verification of EMC Compliance has been granted to the applicant based on the results of the tests, performed by laboratory of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd on the sample of the above-mentioned product in accordance with the provisions of the relevant specific standards and Directive 2004/108/EC. The affixing of the CE marking presumes in addition that the conditions in annex III and V of the Directive are fulfilled.


April 6, 2010

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Member of SGS Group (Société Générale de Surveillance)
Note: You may contact us to validate this document by email address: sa.shanghai@sas.com

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction clauses defined therein.

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SGSPAPER
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ASU-PTL Photovoltaic Module Qualification

Type Test Certificate CI-PUB07001 is awarded to
Manufacturer: Shanghai Pubsolar Company, Ltd.
Type: GYS-180C
Models: GYS-180C, GYS-180S, GYS-180L, GYS-180G, GYS-175G, GYS-175L, GYS-165G

Qualification: 70 monocrystalline silicon cells, Y-type J-box, EVA encapsulant, PET backsheet, tempered glass superstrate, anodized aluminum frame. Maximum system voltage is 1000 V. (See photos on back.)

Test type: GYS-180C Sample: Non-production original semiconductor samples


Design reference: GYS-180C


Test conducted on: PTL 2008, Only Chinese, Plus, Sanyo, Suniva, Suntech
Test conducted at: PTL 2008, Only Chinese, Plus, Sanyo, Suniva, Suntech
Manufacturer's Address: Shanghai Pubsolar Co., Ltd., Building No.10, Lane 99 North Jingang Road, Nanqiao Township, Nantong District, Shanghai, China 201400
Tested and approved design in accordance with: PTL 2008, Only Chinese, Plus, Sanyo, Suniva, Suntech
Certificate Issue Date: October 21, 2008


The Arizona State University Photovoltaic Testing Laboratory (ASU-PTL) acknowledges that the above photovoltaic modules have been subjected to and passed the minimum requirements defined in test standard(s) **I. IEC 61215: Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval [2005-04]**


All data in this certificate are based on the test results and are subject to the conditions of the qualification test protocol. The test results are subject to the conditions of the qualification test protocol. The test results are subject to the conditions of the qualification test protocol.


Dr. Gerdharder, French-head, Director
Certifying Authority: William Strubbe, Quality Manager
Certifying Witness: Dr. Li, Test Manager
Certifying Witness


Connectors


Junction Box


Name Plate


Front


Back

These are photos of the PubSolar GYS-180C design that was tested during project PUB07001-LZ.



AUTHORIZATION TO MARK

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in this Certification Agreement and Listing Report. This authorization also applies to multiple (same model(s)) identified on the certification page of the Listing Report.

This document is the property of Intertek Testing Services and is not transferable. This certification mark(s) may be applied only at the location of the Party Authorized to Apply Mark.

Applicant: Shanghai Si-Solar Technologies Co., Ltd. Manufacturer: Hangzhou Bokusun solarenergy Tech. Co., Ltd.
Address: No.4 BLD, Lane 99 Shenmei Rd., Address: No.828 Shunfeng Rd., Jiangling
20000 Industry Zone, Qianshan Road, Hangzhou, China
Country: China Country: China
Contact: Mr. Jimmy Zhang Contact: Mr. Jimmy Zhang
Phone: 86-21-33214800 Phone: 86-571-85048888
FAX: 86-21-33214802 FAX: 86-571-85048888
Email: hs_zhang@shsol.com.cn Email: hs_zhang@shsol.com.cn

Party Authorized To Apply Mark: Same as Manufacturer
Reporting/Issuing Office: Intertek Testing Services Shanghai Limited
Control Number: Authorized by: *John Scanlon*
William T. Slain, Certification Manager



This document supersedes all previous Authorizations to Mark for the noted Report Number.

This authorization is issued by Intertek Testing Services and is subject to the terms and conditions of the Certification Agreement and Listing Report. It is not transferable and is valid only for the models and models covered by the certification mark(s) shown on this document. It is not valid for the models and models covered by the certification mark(s) shown on this document. It is not valid for the models and models covered by the certification mark(s) shown on this document.

Intertek Testing Services NA, Inc.
35151 Central Expressway, Suite 100
Fremont, CA 94555-4342
Telephone: 800-368-3881 or 807-783-8711 Fax: 807-788-8880

Standard(s):	UL 1703 2002/03-15 Ed 3 Rev 2004/08/30 UL1004-C1703-01 Second Edition 2010/10/01 UL and Canadian Standard for Safety Flat-Plate Photovoltaic Modules and Panels
Product:	PV Modules
Brand Name:	
Model(s):	TOP: STPV08L/STPV08L/STPV08L/STPV08L/STPV08L/STPV08L; 726; STPV155/STPV155/STPV170/STPV170/STPV170/STPV170/STPV170/STPV170; 69P; STPV220/STPV220/STPV220/STPV220/STPV220/STPV220/STPV220/STPV220/STPV220/STPV220



Certificate

Licensee Holder: Shanghai Pubsolar Co., Ltd.
#3086 Jinghai Road, Nanqiao Town, Fengqiao District,
201400, Shanghai
China

Product: PV Modules
Type: GYS-180C

Manufacturing Plant: Shanghai Pubsolar Co., Ltd.
#3086 Jinghai Road, Nanqiao Town, Fengqiao District
201400 Shanghai
China

Scope: TÜV Spec T2E/2_S12.90
"Utility Class II Test on
Photovoltaic (PV) Modules"

Factory Inspection
To document the consistent quality of
the product factory inspections are
performed periodically.

Remarks:
The above mentioned PV modules may be used in PV plants at a maximum system voltage (Voc at STC) of up to 1000 VDC.
The modules consist of glass (TUV Code: PV-UNT) and frame (TUV Code: PV-FRM). Module junction box: 180C, Y-type solar lead,
Y-type connectors: 175-180 x 175-180 and aluminum frame. The modules are tested in accordance with IEC 61215 and IEC 61701.
The certificate has a validity of 3 years commencing from the date of issue, provided that the testing basis
remains unchanged. The series production is not subject to a control and is not part of the
assessment.

Responsible Engineer: *W. Völkner*
Dep. Ing. W. Völkner

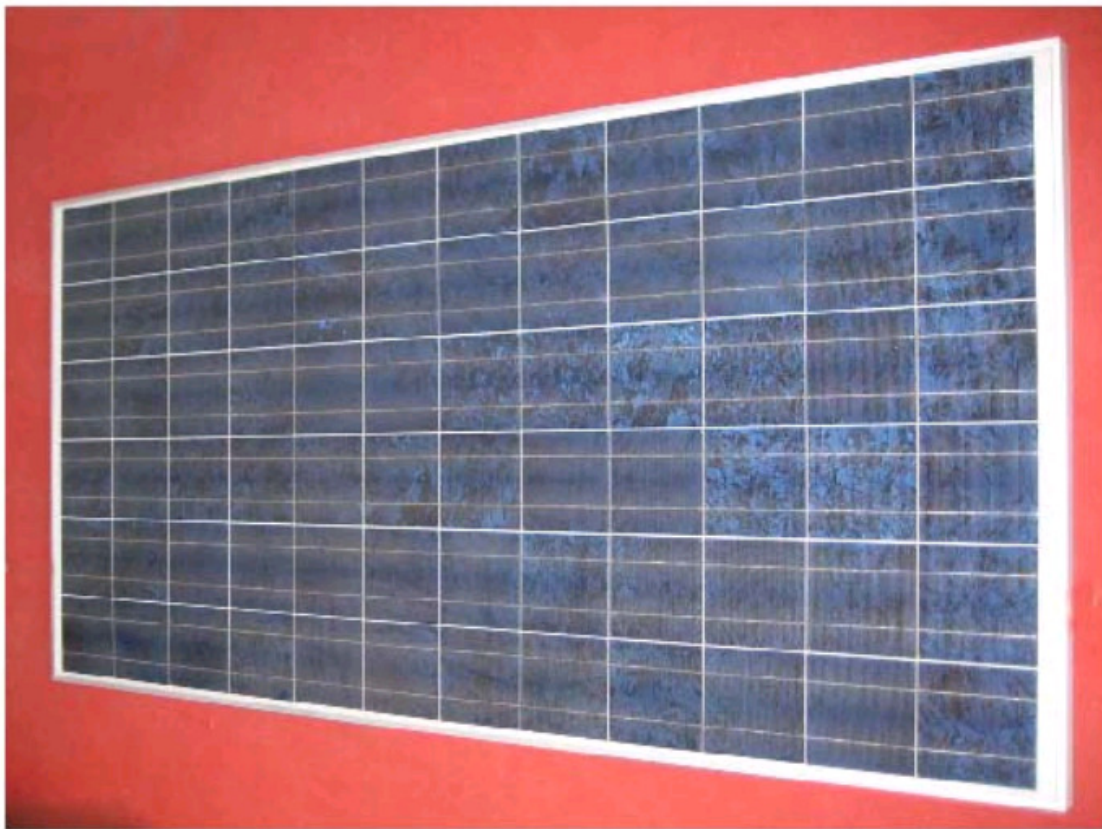
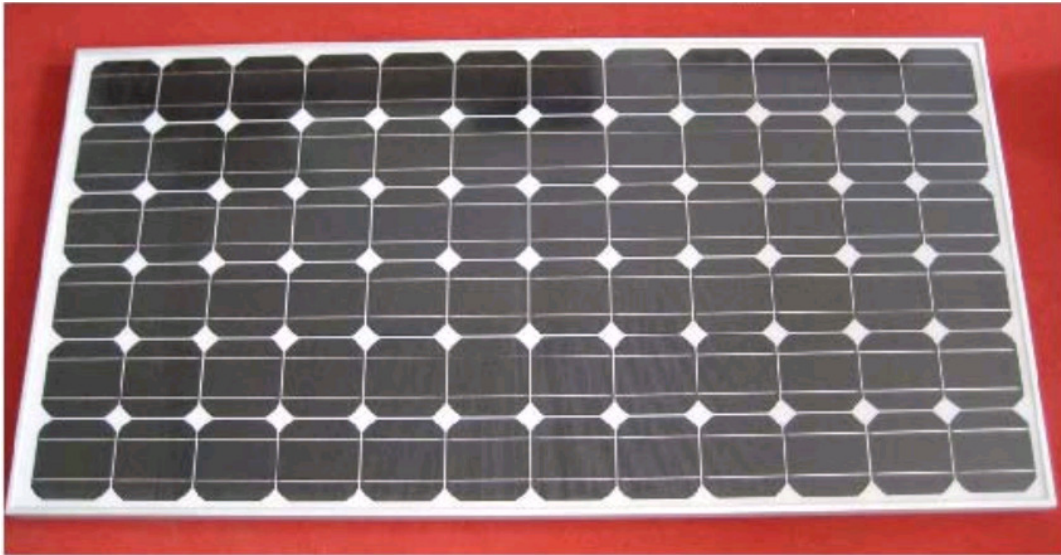
Production equipment

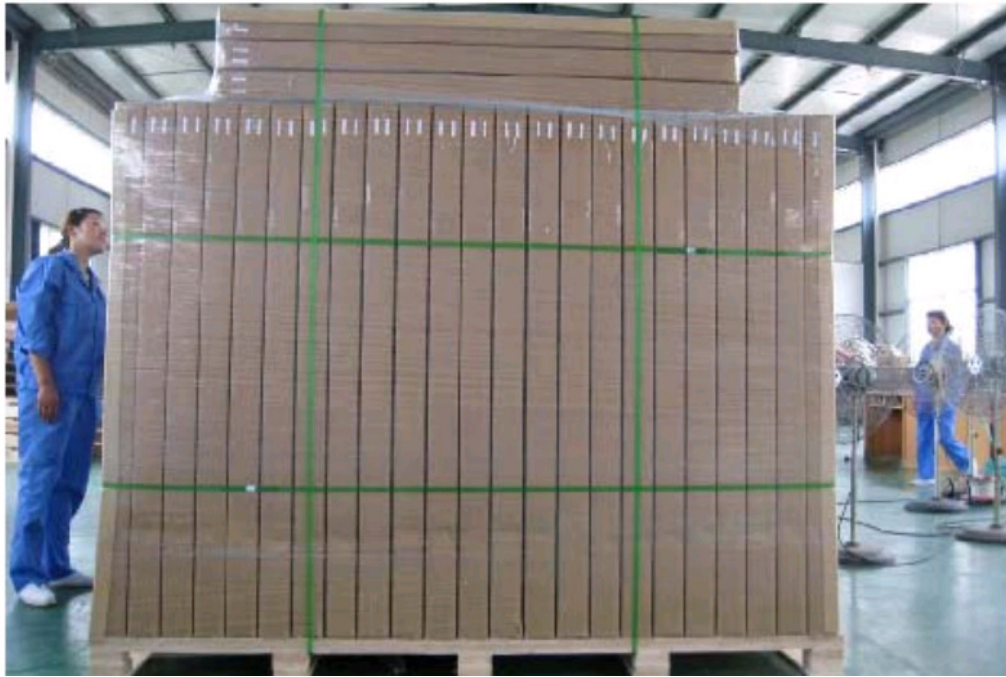


Project



Product and Packing





SOLAR MODULES

Modules consist of 72(96)pcs 125 x 125mm mono-crystalline silicon solar cells which are in high efficiency, individually characterized and electronically matched before interconnection. Laminated with high quality toughened glass, EVA and TPT, the operating characteristics of solar cells can be ensured under any climatic conditions.

Parameters of solar modules:

Peak power output (W)	160	165	170	175	180	185	190
Maximum power voltage (V)	35.0	35.0	35.6	35.8	36.0	36.2	36.4
Maximum power current (A)	4.57	4.71	4.77	4.88	5.00	5.11	5.20
Short circuit current (A)	5.10	5.36	5.41	5.43	5.48	5.51	5.62
Open circuit voltage (V)	44.0	44.0	44.4	44.6	44.8	44.8	44.6
Module size Weight No of the cells	1580mm*808mm*50mm 16kg 72pcs						
Quality guarantee	Normal power keep more than 90% in 10 years and 80% in 25 years						

Parameters of solar modules (96pcs cells)

Peak power output (W)	200	205	210	215	220	225	230	235	240
Maximum power voltage (V)	43.6	43.9	44.3	44.7	45.2	45.8	46.4	46.6	46.9
Maximum power current (A)	4.58	4.67	4.74	4.81	4.87	4.91	4.96	5.04	5.11
Short circuit current (A)	5.12	5.18	5.20	5.34	5.43	5.44	5.47	5.48	5.50
Open circuit voltage (V)	59.0	59.0	59.2	59.2	59.2	59.2	59.5	59.5	59.5
Module size Weight No of the cells	1580mm*1060mm*50mm 21kg 96pcs								
Quality guarantee	Normal power keep more than 90% in 10 years and 80% in 25 years								

Modules consist of 60(72)pcs 156 x 156mm poly-crystalline silicon solar cells which are in high efficiency, individually characterized and electronically matched before interconnection. Laminated with high quality toughened glass, EVA and TPT, the operating characteristics of solar cells can be ensured under any climatic conditions.

Parameters of solar modules:

Peak power output (W)	200	205	210	215	220	225	230	235	240
Maximum power voltage (V)	28.6	28.8	29.0	29.3	29.5	29.6	29.8	30.0	30.2
Maximum power current (A)	6.98	7.12	7.24	7.34	7.45	7.60	7.73	7.83	7.95
Short circuit current (A)	7.65	7.71	7.88	8.03	8.10	8.17	8.22	8.29	8.33
Open circuit voltage (V)	36.5	36.5	36.5	36.5	37.0	37.0	37.0	37.0	37.2
Module size Weight No of the cells	1640mm*990mm*50mm 21kg 60pcs								
Quality guarantee	Normal power keep more than 90% in 10 years and 80% in 25 years								

Parameters of solar modules (72pcs cells)

Peak power output (W)	245	250	255	260	265	270	275	280
Maximum power voltage (V)	34.5	34.6	34.7	34.8	34.9	35.0	35.1	35.2
Maximum power current (A)	7.10	7.23	7.35	7.47	7.59	7.71	7.83	7.95
Short circuit current (A)	7.78	7.87	7.98	8.09	8.15	8.20	8.28	8.33
Open circuit voltage (V)	43.6	43.8	43.8	44.0	44.3	44.5	44.6	44.8
Module size Weight No of the cells	1950mm*990mm*50mm 24kg 72pcs							
Quality guarantee	Normal power keep more than 90% in 10 years and 80% in 25 years							