
	Guosheng Energy Co., LTD Quality Guarantee of Crystal Silicon Solar Module	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 31

Statement:						
This document is owned by Guosheng Energy and various base companies. Without the approval of the original department, reproduction, disclosure and use are prohibited, and their use within the company is limited to the person on the distribution list or their clients.						
Modify the resume						
Order number	Page numbering	Up-to-date order of the edition	Modify the content to remember	Mender	Date changed	
1	own	A	A new release	WeiYan fu	2022.08.29	
2	3	B	Revised ultra-efficient heterojunction double glass component peak limited warranty	WuPengfei	2023.05.11	
3	3/8	C	New Topcon double glass component peak limited warranty; The new Topcon double glass components are under standard Test conditions and nominal Operating temperature Test conditions.	Zhu Qiang	2024.2.27	
4	4	D	4. Items G and H and the Australian Consumer Law are added to the warranty performance	Zhu Qiang	2024.4.12	
			7. Adthe contact information and contact address of Guosheng.			
5		E	8. Adthe contact information and contact address of Achievers Energy Group Pty	Zhu Qiang	2024.6.17	
Document countersign bar (document department adds countersignature department)						
Department	CTO	SHI AN Quality	HuaiBei Quality	Yuchen Quality		
Surname and personal name	Wen-bin zhang	Zhen-yu wang	Yan Zhihong	Ji Feng		
Department						

	Guosheng Energy Co., LTD Quality Guarantee of Crystal Silicon Solar Module	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 32

Surname and personal name						
Work out	Zhu Qiang	Examine and verify	You Jian Chen	Ratify	Zhong wei zhang	
Date	2024. 2. 27	Date	2024. 2. 27	Date	2024. 2. 29	

Guosheng Energy Co., Ltd (hereinafter referred to as "Guosheng Energy") provides limited warranty for customers who purchase the company's crystalline silicon products. The details are as follows:

1. Limited warranty for repair or replacement within 2 years

The crystal photovoltaic cell modules (hereinafter referred to as the modules) sold by Guosheng Energy include the DC connectors and cables assembled from the factory. If the product has material, process or manufacturing problems (not meeting the requirements of the contract) or failure due to material, process or manufacturing problems, Guosheng Energy will provide free warranty (except for the cost specified in Article 3 of this warranty).

Guosheng Energy will choose by itself, or repair, or replace the products. The remedy for repair or replacement shall be the only measure provided under the limited warranty and shall not extend the aforementioned 12-year warranty period. The warranty clause does not contain warranty specific power output, see clause 2 below (Peak Limited Warranty) for power warranty.


pour:

Normal use and maintenance conditions mean that the installation, use, maintenance, storage and transportation of the products meet the requirements of the use instructions.

Warranty start date: three months after the delivery of the product to the buyer (the customer), or the installation of the product, whichever comes first.

2. Peak value limited warranty

If, under the standard Test conditions, any solar module is sold to the customer with the power output below the percentage of the minimum peak power

 国晟能源 Grand Sunergy	Guosheng Energy Co., LTD Quality Guarantee of Crystal Silicon Solar Module							Document number	GS-HQ-W-QA005
								Order of the edition	D
								A total of 5 pages	Page 33

shown in the table below, this minimum peak power is the minimum peak power specified in the Product Information Book of Guosheng Energy on the date of delivery.

Table 1. PERC Single-glass, Mono-crystalline Silicon Photovoltaic (PV) Module

Year	1	2	3	4	5	6	7	8	9	10	11	12	13
Minimum peak power of%	98	97.45	96.90	96.35	95.80	96.25	94.70	94.15	93.6	93.05	92.5	91.95	91.4
Year	14	15	16	17	18	19	20	21	22	23	24	25	
Minimum peak power of%	90.85	90.30	89.75	89.20	88.65	88.10	87.55	87.00	86.45	85.90	85.35	84.80	

Table 2. PERC Double-glass Mono-crystalline Silicon Photovoltaic (PV) Module


Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Minimum peak power of%	98.00	97.55	97.10	96.66	96.21	95.76	95.31	94.86	94.42	93.97	93.52	93.07	92.62	92.18	91.73
Year	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Minimum peak power of%	91.28	90.83	90.38	89.94	89.49	89.04	88.59	88.14	87.70	87.25	86.80	86.35	85.90	85.46	85.01

Table 3 HJT Double-glass Mono-crystalline Silicon Photovoltaic (PV) Module

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Minimum peak power of%	99.00	98.63	98.26	97.89	97.52	97.15	96.78	96.41	96.04	95.67	95.30	94.93	94.56	94.19	93.82
Year	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Minimum peak power of%	93.45	93.08	92.71	92.34	91.97	91.60	91.23	90.86	90.49	90.12	89.75	89.38	89.01	88.64	88.27

Table 4 Topcon Double-glass Mono-crystalline Silicon Photovoltaic (PV) Module

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Minimum peak power of%	99.00	98.6	98.2	97.8	97.4	97.0	96.6	96.2	95.8	95.4	95.0	94.6	94.2	93.8	93.4
Year	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Minimum peak power of%	93.0	92.6	92.2	91.8	91.4	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8	87.4

	Guosheng Energy Co., LTD Quality Guarantee of Crystal Silicon Solar Module	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 34

If the sheng technology confirm the lack of power (the sheng technology reserves the right to decide, and the sheng technology judgment) is caused by the material or process defects, the sheng new can will to provide additional photovoltaic modules to compensate the lack of power or replace defective photovoltaic modules, or repair or replace the components. The above method is chosen by Guosheng Energy.


The compensation method in clause 2 above is the only compensation method provided under the limited peak warranty.

pour:

A、Under the standard Test conditions and nominal working temperature Test conditions, the factory peak power of single crystal components meets the following correspondence relationship:

Model Test condition	GSM-MP3/132-M650	GSM-MP3/132-M655	GSM-MP3/132-M660	GSM-MP3/132-M665	GSM-MP3/132-M670
STC	650	655	660	665	670
NOCT	483	485	490	494	497
Model Test condition	GSM-MP3/120-M590	GSM-MP3/120-M595	GSM-MP3/120-M600	GSM-MP3/120-M605	GSM-MP3/120-M610
STC	590	595	600	605	610
NOCT	438	442	445	449	453

Model Test condition	GSM-MP4/156-M580	GSM-MP4/156-M585	GSM-MP4/156-M590	GSM-MP4/156-M595	GSM-MP4/156-M600
STC	580	585	590	595	600
NOCT	431	434	437	442	446
Model-type Test conditions	GSM-MP4/144-M530	GSM-MP4/144-M535	GSM-MP4/144-M540	GSM-MP4/144-M545	GSM-MP4/144-M550
STC	530	535	540	545	550
NOCT	394	397	401	404	408
Model Test conditions	GSM-MP4/132-M485	GSM-MP4/132-M490	GSM-MP4/132-M495	GSM-MP4/132-M500	GSM-MP4/132-M505
STC	485	490	495	500	505
NOCT	361	364	367	371	375
Model Test conditions	GSM-MP4/120-M440	GSM-MP4/120-M445	GSM-MP4/120-M450	GSM-MP4/120-M455	GSM-MP4/120-M460
STC	440	445	450	455	460
NOCT	327	330	334	338	341
Model-type Test conditions	GSM-MP4/108-M395	GSM-MP4/108-M400	GSM-MP4/108-M405	GSM-MP4/108-M410	GSM-MP4/108-M415

	Guosheng Energy Co., LTD Quality Guarantee of Crystal Silicon Solar Module	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 35

STC	395	400	405	410	415
NOCT	294	297	300	304	308

Peak power: refers to the peak watt of the photovoltaic module at the highest power point.


Standard Test conditions (STC): (a) spectra of AM 1.5, (b) irradiation of 1000W / m², (c) cell temperature of 25°C and at the correct illumination angle.

Nominal operating temperature Test condition (NOCT): (a) spectrum of AM 1.5, (b) irradiation of 800W / m², (c) cell temperature of NOCT ± 2°C and at the correct angle of illumination.

B. Under the standard Test conditions and nominal working temperature Test conditions, the factory peak power of double-glass single crystal components meets the following correspondence relationship:

Model Test condition	GSM-MP3/132-BMDG650	GSM-MP3/132-BMDG655	GSM-MP3/132-BMDG660	GSM-MP3/132-BMDG665	GSM-MP3/132-BMDG670
STC	650	655	660	665	670
NOCT	483	485	490	494	497
Model Test condition	GSM-MP3/120-BMDG590	GSM-MP3/120-BMDG595	GSM-MP3/120-BMDG600	GSM-MP3/120-BMDG605	GSM-MP3/120-BMDG610
STC	590	595	600	605	610
NOCT	438	442	445	449	453

Model Test condition	GSM-MP4/144-BMDG530	GSM-MP4/144-BMDG535	GSM-MP4/144-BMDG540	GSM-MP4/144-BMDG545	GSM-MP4/144-BMDG550
STC	530	535	540	545	550
NOCT	394	397	401	404	408
Model Test condition	GSM-MP4/132-BMDG485	GSM-MP4/132-BMDG490	GSM-MP4/132-BMDG495	GSM-MP4/132-BMDG500	GSM-MP4/132-BMDG505
STC	485	490	495	500	505
NOCT	361	364	367	371	375
Model Test condition	GSM-MP4/120-BMDG440	GSM-MP4/120-BMDG445	GSM-MP4/120-BMDG450	GSM-MP4/120-BMDG455	GSM-MP4/120-BMDG460
STC	440	445	450	455	460
NOCT	327	330	334	338	341
Model Test condition	GSM-MP4/108-BMDG395	GSM-MP4/108-BMDG400	GSM-MP4/108-BMDG405	GSM-MP4/108-BMDG410	GSM-MP4/108-BMDG415
STC	395	400	405	410	415

	Guosheng Energy Co., LTD Quality Guarantee of Crystal Silicon Solar Module	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 36

NOCT	294	297	300	304	308
------	-----	-----	-----	-----	-----

Peak power: refers to the peak watt of the photovoltaic module at the highest power point.


Standard Test conditions (STC): (a) spectra of AM 1.5, (b) irradiation of 1000W / m², (c) cell temperature of 25°C and at the correct illumination angle.

Nominal operating temperature Test condition (NOCT): (a) spectrum of AM 1.5, (b) irradiation of 800W / m², (c) cell temperature of NOCT ± 2°C and at the correct angle of illumination.

C. Under the standard Test conditions and double-sided standard Test conditions, the factory peak power of ultra-efficient heterojunction single crystal components meets the following correspondence relationship:

Model Test condition	GSM-MH3/132-BHDG680	GSM-MH3/132-BHDG685	GSM-MH3/132-BHDG690	GSM-MH3/132-BHDG695	GSM-MH3/132-BHDG700
STC	680	685	690	695	700
BSTC	752	757	762	767	772
Model Test condition	GSM-MH3/120-BHDG615	GSM-MH3/120-BHDG620	GSM-MH3/120-BHDG625	GSM-MH3/120-BHDG630	GSM-MH3/120-BHDG635
STC	615	620	625	630	635
BSTC	680	685	690	695	700

Model Test condition	GSM-MH 4/156-BHDG620	GSM-MH 4/156-BHDG 625	GSM-MH 4/156-BHDG 630	GSM-MH 4/156-BHDG 635	GSM-MH 4/156-BHDG 640
STC	620	625	630	635	640
BSTC	682	688	694	698	705
Model Test condition	GSM-MH 4/144-BHDG 580	GSM-MH 4/144-BHDG 585	GSM-MH 4/144-BHDG 590	GSM-MH 4/144-BHDG 595	GSM-MH 4/144-BHDG 600
STC	580	585	590	595	600
BSTC	642	646	651	656	661
Model Test condition	GSM-MH 4/132-BHDG 530	GSM-MH 4/132-BHDG 535	GSM-MH 4/132-BHDG 540	GSM-MH 4/132-BHDG 545	GSM-MH 4/132-BHDG 550
STC	530	535	540	545	550
BSTC	587	591	596	601	605
Model Test condition	GSM-MH 4/120-BHDG 480	GSM-MH 4/120-BHDG 485	GSM-MH 4/120-BHDG 490	GSM-MH 4/120-BHDG 495	GSM-MH 4/120-BHDG 500
STC	480	485	490	495	500
BSTC	532	536	541	546	550

	Guosheng Energy Co., LTD Quality Guarantee of Crystal Silicon Solar Module	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 37

Model Test condition	GSM-MH 4/108- BHDG420	GSM-MH 4/108- BHDG425	GSM-MH 4/108- BHDG430	GSM-MH 4/108- BHDG435	GSM-MH 4/108- BHDG440
STC	420	425	430	435	440
BSTC	466	471	476	480	485

Peak power: refers to the peak watt of the photovoltaic module at the highest power point.

Standard Test conditions (STC): (a) spectra of AM 1.5, (b) irradiation of 1000W / m², (c) cell temperature of 25°C and at the correct illumination angle.

Double-sided standard Test conditions (BSTC): (a) AM 1.5 spectrum, (b) (1+0.135BIFI) 1000W / m², (c) cell temperature of 25°C and at the correct angle of illumination.

D. Topcon Under the standard Test conditions and the nominal working temperature Test conditions, the factory peak power meets the following correspondence relationship:


Model Test condition	GSM - MT4/156- BTDG605	GSM - MT4/156- BTDG610	GSM - MT4/156- BTDG615	GSM - MT4/156- BTDG620	GSM - MT4/156- BTDG625
STC	605	610	615	620	625
NOCT	453	457	462	466	470
Model Test condition	GSM - MT4/144- BTDG560	GSM - MT4/144- BTDG565	GSM - MT4/144- BTDG570	GSM - MT4/144- BTDG575	GSM - MT4/144- BTDG580
STC	560	565	570	575	580
NOCT	421	425	429	432	435
Model Test condition	GSM - MT4/108- BTDG410	GSM - MT4/108- BTDG415	GSM - MT4/108- BTDG420	GSM - MT4/108- BTDG425	GSM - MT4/108- BTDG430
STC	410	415	420	425	430
NOCT	302	306	310	314	318

Peak power: refers to the peak watt of the photovoltaic module at the highest power point.

Standard Test conditions (STC): (a) spectra of AM 1.5, (b) irradiation of 1000W / m², (c) cell temperature of 25°C and at the correct illumination angle.

Nominal operating temperature Test condition (NOCT): (a) spectrum of AM 1.5, (b) irradiation of 800W / m², (c) cell temperature of NOCT ± 2°C and at the correct angle of illumination.

3. Exclusivity and limitation

	<p style="text-align: center;">Guosheng Energy Co., LTD</p> <p style="text-align: center;">Quality Guarantee of Crystal Silicon Solar Module</p>	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 38

A. In any case the duration of the claim is within the applicable warranty in accordance with the component warranty instructions outlined in clause 4 of the Limited Warranty.

B. The limited warranty is not applicable to the photovoltaic modules judged by Guosheng Energy in the following conditions:

Misuse, abuse, negligence or accident;

Change, improper installation, or use;

Do not comply with the user installation and maintenance guidelines of Guosheng Energy;

Maintenance or modification by maintenance technical personnel not recognized or authorized by Guosheng Energy;

Faults caused by equipment around components;

Not installation and use according to product specifications and installation manual under special conditions or environment;

Not being used for power generation purposes;

Connect to photovoltaic modules of other manufacturers, or to modules of different types or different output power specifications of Guosheng Energy;

Damage caused by transportation and storage after delivery to the user;


Guosheng Energy believes that the natural scratches, stains, mechanical wear, rust, degradation, and fading have no impact on the power generation performance or the mechanical strength of the components, but occur after shipment;

Damage caused by overpressure, lightning, flood, fire, accidental damage or other irresistible and unanticipated natural disasters and other uncontrollable effects of Guosheng Energy;

C. The limited warranty does not include the transportation cost of any PV module returns, the reshipment of repaired or replaced PV modules, or the installation, removal or reinstallation of PV modules.

D. If the type or serial number of the photovoltaic module has been replaced, removed, or difficult to identify, the limited warranty will not be honored.

E. Guosheng Energy shall not bear the liabilities or bear the relevant legal liabilities for the following matters:

	Guosheng Energy Co., LTD Quality Guarantee of Crystal Silicon Solar Module	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 39

Any personnel injury or property loss, or other loss or injury, including any liability or legal liability arising from any cause, including, but not limited to, the defect, use or installation of the components;

In any case, Guosheng Energy is not liable for the use, profit, income, production or special loss; the accumulated compensation or other compensation shall not exceed the invoice amount of the affected components paid by the customer.

4. Quality assurance and performance

A. The shelf life claim shall be applied in writing. The written application for the shelf life claim shall be sent to (a) the distributor of Guosheng Energy, or (b) the authorized component distributor of Guosheng Energy, within twenty (20) days from the date of the occurrence of the warranty matters.


B. A written application for a shelf life claim must be made by registered mail or express mail. This application must include the product serial number of the modules, with the product invoice and a copy of the purchase contract, and must state that " I hereby accept and agree that clause 6 claims a limited warranty right through law, expert identification and arbitration." The notice of notice shall be accompanied by proof of the date of sale, the date of purchase of the solar products. Claims that do not meet the deadline of Article 4 C will not be accepted.

C. If the right to claim will be lost: A, the Customer fails to notify the Company or the distributor in writing, or still use the defect during the warranty period; b, the Customer does not conduct court or arbitration proceedings within six months after receiving the notice of the claim from the Company.

D. If the warranty application is received, if this type of component is no longer produced, Guosheng Energy reserves the right to replace another type of component (different in size, specification, color, or power).

E. Repair, replacement, or additional components are neither replaced nor extended under warranty after delivery.

F. Any defective components announced or replaced will become the property of Guosheng Energy. The defective products shall be returned or handled at the

	<p style="text-align: center;">Guosheng Energy Co., LTD</p> <p style="text-align: center;">Quality Guarantee of Crystal Silicon Solar Module</p>	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 310

customer's own expense according to the instructions of Guosheng Energy. If appropriate, the customer's distributor or distributor will provide advice when handling the claims. If the need for further help, please request to Guosheng Energy in writing. Any photovoltaic module return requirements will not be accepted unless pre-approved by Guosheng Energy.

G. When a batch of components is found to have a safety risk or do not meet mandatory standards or bans, it will be recalled in accordance with the ACC Product Safety Recall Guidelines (see website: <http://www.productsafety.gov.au/publication/consumer-safety-recall-guidelines>).

H. In addition to other rights and remedies legally available to consumers, the following warranty are provided. Our goods come with warranties which cannot be excluded under Australian Consumer Law. The consumer is entitled to a alternative refund for material failure and any compensation for any other reasonably foreseeable loss or damages. Consumers shall also have the right to request repair or replacement of the goods if they are not qualified and do not constitute a major failure.

5. Partiability


If a partial provision or provision of this limited warranty is invalid, useless or impossible to the application of the person or environment, such circumstances will not affect the application of all other provisions and provisions, and the application of other provisions and provisions of the limited warranty shall be regarded as divisible.

6. Disputes

Any complaint action related to the limited warranty, regardless of its form, is only valid for six months.

In the case of warranty claim dispute, Fraunhofer ISE or TUV, a first-class international testing agency designated by Guosheng Energy, will participate in the claim judgment. All expenses and expenses shall be borne by the losing party (responsible party), unless otherwise stated.

The final interpretation of this warranty is owned by [Guosheng Energy Co., LTD.](#)

	<p style="text-align: center;">Guosheng Energy Co., LTD</p> <p style="text-align: center;">Quality Guarantee of Crystal Silicon Solar Module</p>	Document number	GS-HQ-W-QA005
		Order of the edition	D
		A total of 5 pages	Page 311

7. Guosheng contact information

Tel.: 18081931268

Contacts: Micro You

Email address: youjiancheng@grandsunergy.com

Address: 7th floor, ChengTourism Building, the intersection of National Highway 206 and Pengcheng Avenue, Xuzhou, Jiangsu Province, China.

Website: www.grandsunergy.com

8. Contact detail for importer

Company: Achievers Energy Group Pty Ltd.

Address: Unit4, 29 Bellrick Street, Acacia Ridge, QLD 4110, Australia

Register Number: 600860133

ACN: 600860133

ABN: 87600860133

Contacts: Sunil Patel

Email address: purchase@achieversenergy.com.au

Website: www.achieversenergy.com.au