

# Certificate

Registration No.: PV 50232048

Page 1

Report No.: 15050583.001

**License Holder:**

**Zhongli Talesun Solar Co., Ltd.**  
No.1 Talesun Road, Changkun Industrial Park,  
Shajiabang Town, Changshu, Suzhou,  
Jiangsu Province, 215542,  
P. R. China

**Product:**

PV Module  
Type:  
With 6" mono cells:  
TP672M-xxx (xxx=265-315, in increment of 5, 72 cells)  
TP660M-xxx (xxx=220-265, in increment of 5, 60 cells)

**Manufacturing Plant:**

Zhongli Talesun Solar Co., Ltd.  
No.1 Talesun Road, Changkun Industrial Park,  
Shajiabang Town, Changshu, Suzhou,  
Jiangsu Province, 215542,  
P. R. China

With 6" poly cells:  
TP672P-xxx (xxx=260-315, in increment of 5, 72 cells)  
TP660P-xxx (xxx=215-260, in increment of 5, 60 cells)

With 5" mono cells:  
TP596M-xxx (xxx=230-275, in increment of 5, 96 cells)  
TP572M-xxx (xxx=170-205, in increment of 5, 72 cells)

**Basis:**

- IEC 61701:2011**  
"Salt mist corrosion testing of photovoltaic (PV) modules"
- Factory Inspection**  
To document the consistent quality of the product factory inspections are performed periodically.



- **Salt corrosion resistance tested**
- **Periodic inspection**

**Remarks:**

The details of the factory inspection are documented in report no. 15048500.001.  
-Valid in conjunction with TÜV Rheinland certificate acc. to IEC 61215 and IEC 61730-1, -2.  
-Only for the material combination as listed in the above mentioned test report.  
-Test performed with **severity 6** of 6.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval. Accordingly the repetition of the tests that are basis of this certificate may be required.

**The certificate is valid until 15 May 2017.**

03 July 2012

Certification body  
  
Dipl.-Ing. Bernd Scheirer  


# Certificate

Registration No.: PV 50232048

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Report No.: 15050583.002

**License Holder:**

Zhongli Talesun Solar Co., Ltd.  
No.1 Talesun Road, Changkun Industrial Park  
Shajiabang Town, Changshu  
Suzhou, Jiangsu Province, 215542  
P. R. China

**Product:**

PV Modules

Type:

Same as Page 1

In addition:

With 6" mono cells:

TP672M-xxx (xxx=320-375, in steps of 5, 72 cells)

TP660M-xxx (xxx=270-315, in steps of 5, 60 cells)

TP654M-xxx (xxx=205-280, in steps of 5, 54 cells)

TP648M-xxx (xxx=185-250, in steps of 5, 48 cells)

With 6" poly cells:

TP672P-xxx (xxx=320-345, in steps of 5, 72 cells)

TP660P-xxx (xxx=265-285, in steps of 5, 60 cells)

TP654P-xxx (xxx=195-255, in steps of 5, 54 cells)

TP648P-xxx (xxx=175-230, in steps of 5, 48 cells)

**Manufacturing Plant:**

Vina Solar Technology Co., Ltd.  
Work shop E12, Lot CN-03  
Van Trung Industrial Zone  
Viet Yen District  
Bac Giang Province  
VietNam

**Basis:**

**IEC 61701:2011**  
"Salt mist corrosion testing of  
photovoltaic (PV) modules "

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



www.tuv.com  
ID 0000035339

**Remarks:**

- Valid in conjunction with TÜV Rheinland certificate PV 50224529 Page 1 - 7 and **only** for the material combination as listed in the above mentioned test report.
- Test performed with **severity 6** of 6.
- Additional manufacturing plant see above.
- New model names were introduced as above.
- This certificate includes further manufacturing plants as listed on Attachment List of Factories.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

**The certificate is valid until 15 May 2017.**

Certification body



Dipl.-Ing. D. Löffler

24 May 2016

# Certificate



Registration No.: PV 50232048

Page 3

Report No.: 15050583.002

**License Holder:**

Zhongli Talesun Solar Co., Ltd.  
No.1 Talesun Road, Changkun Industrial Park  
Shajiabang Town, Changshu  
Suzhou, Jiangsu Province, 215542  
P. R. China

**Product:**

PV Modules  
Type:  
Same as Page 1 - 2

**Manufacturing Plant:**

Zhongli Talesun Solar (Thailand) Co., Ltd.  
7/473 Moo. 6 Mabyangporn, Pluakdaeng  
Rayong 21140  
Thailand

**Basis:**

**IEC 61701:2011**  
"Salt mist corrosion testing of  
photovoltaic (PV) modules"

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



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ID 0000035339

**Remarks:**

- Valid in conjunction with TÜV Rheinland certificate PV 50224529 Page 1 - 7 and **only** for the material combination as listed in the above mentioned test report.
- Test performed with **severity 6** of 6.
- Additional manufacturing plant see above.
- This certificate includes further manufacturing plants as listed on Attachment List of Factories.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

**The certificate is valid until 15 May 2017.**

Certification body



Dipl.-Ing. D. Löffler

24 May 2016

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg, Germany / Contact: + 49 221 806 2477 email: enertest@de.tuv.com

# Attachment of Certificate

## PV 50232048 002 - 003



### List of factories:

1. Zhongli Talesun Solar Co., Ltd. (Factory)  
No.1 Talesun Road, Changkun Industrial Park  
Shajiabang Town, Changshu  
Suzhou, Jiangsu Province, 215542  
P. R. China

Inspection report no.: 15048500.004

2. Vina Solar Technology Co., Ltd.  
Work shop E12, Lot CN-03  
Van Trung Industrial Zone  
Viet Yen District  
Bac Giang Province  
VietNam

Inspection report no.: 11043283.001

3. Zhongli Talesun Solar (Thailand) Co., Ltd.  
7/473 Moo. 6 Mabyangporn, Pluakdaeng  
Rayong , 21140  
Thailand

Inspection report no.: 15092978.001

24 May 2016

Certification body



Dipl.-Ing. D. Löffler



Product Service

# CERTIFICATE

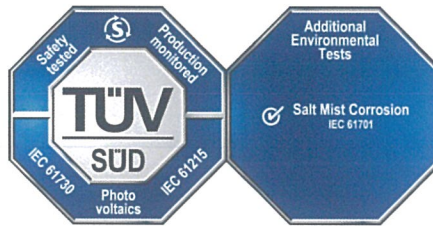
No. Z2 16 10 78488 042

**Holder of Certificate:** **Zhongli Talesun Solar Co., Ltd.**

No. 1 Talesun Road  
 Changkun Industrial Park  
 Shajiang Town, Changshu  
 215542 Suzhou, Jiangsu Province  
 PEOPLE'S REPUBLIC OF CHINA



**Certification Mark:**



**Product:**

**Crystalline Silicon Terrestrial Photovoltaic (PV) Modules  
 Mono-Crystalline Silicon Photovoltaic Module**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

**Test report no.:** 704061617103-00

**Valid until:** 2021-10-26



**Date,** 2016-11-07

( Zhulin Zhang )

Page 1 of 2



Product Service

# CERTIFICATE

No. Z2 16 10 78488 042

## Model(s):

TP672M-275, TP672M-280, TP672M-285, TP672M-290,  
 TP672M-295, TP672M-300, TP672M-305, TP672M-310,  
 TP672M-315, TP672M-320, TP672M-325, TP672M-330,  
 TP672M-335, TP672M-340, TP672M-345, TP672M-350,  
 TP672M-355, TP672M-360, TP672M-365, TP672M-370,  
 TP672M-375, TP660M-230, TP660M-235, TP660M-240,  
 TP660M-245, TP660M-250, TP660M-255, TP660M-260,  
 TP660M-265, TP660M-270, TP660M-275, TP660M-280,  
 TP660M-285, TP660M-290, TP660M-295, TP660M-300,  
 TP660M-305, TP660M-310, TP660M-315, TP654M-205,  
 TP654M-210, TP654M-215, TP654M-220, TP654M-225,  
 TP654M-230, TP654M-235, TP654M-240, TP654M-245,  
 TP654M-250, TP654M-255, TP654M-260, TP654M-265,  
 TP654M-270, TP654M-275, TP654M-280, TP648M-185,  
 TP648M-190, TP648M-195, TP648M-200, TP648M-205,  
 TP648M-210, TP648M-215, TP648M-220, TP648M-225,  
 TP648M-230, TP648M-235, TP648M-240, TP648M-245,  
 TP648M-250.

## Parameters:

Rated Output Power  
at STC:

275 W, 280 W, 285 W, 290 W,  
 295 W, 300 W, 305 W, 310 W,  
 315 W, 320 W, 325 W, 330 W,  
 335 W, 340 W, 345 W, 350 W,  
 355 W, 360 W, 365 W, 370 W,  
 375 W, 230 W, 235 W, 240 W,  
 245 W, 250 W, 255 W, 260 W,  
 265 W, 270 W, 275 W, 280 W,  
 285 W, 290 W, 295 W, 300 W,  
 305 W, 310 W, 315 W, 205 W,  
 210 W, 215 W, 220 W, 225 W,  
 230 W, 235 W, 240 W, 245 W,  
 250 W, 255 W, 260 W, 265 W,  
 270 W, 275 W, 280 W, 185 W,  
 190 W, 195 W, 200 W, 205 W,  
 210 W, 215 W, 220 W, 225 W,  
 230 W, 235 W, 240 W, 245 W,  
 250 W.

Test Laboratory:

Yangzhou Opto-Electrical  
 Products Testing Institute;  
 No. 10 West Kaifa Road, Yangzhou,  
 225009 Jiangsu, P. R. China

Construction:

Framed, with Junction box,  
 Cable and Connectors.

Application Class:

Class A

Maximum System Voltage:

1000 V DC

Severity of salt

mist test:

Level 6

Fire Safety Class:

Class C

## Tested according to:

IEC 61215(ed.2)  
 IEC 61730-1(ed.1);am1;am2  
 IEC 61730-2(ed.1);am1  
 IEC 61701(ed.2)

## Production Facility(ies):

78488, 96715

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証証書 ◆ CERTIFICADO ◆ CERTIFICAT



Product Service

# CERTIFICATE

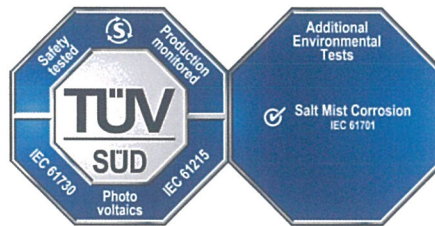
No. Z2 16 10 78488 041

**Holder of Certificate:** Zhongli Talesun Solar Co., Ltd.

No. 1 Talesun Road  
 Changkun Industrial Park  
 Shajiang Town, Changshu  
 215542 Suzhou, Jiangsu Province  
 PEOPLE'S REPUBLIC OF CHINA



**Certification Mark:**



**Product:**

**Crystalline Silicon Terrestrial Photovoltaic (PV) Modules  
 Poly-Crystalline Silicon Photovoltaic Module**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

**Test report no.:** 704061617104-00

**Valid until:** 2021-10-26



**Date,** 2016-11-07 ( Zhulin Zhang )

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**CERTIFICATE**

No. Z2 16 10 78488 041

**Model(s):**

TP672P-285, TP672P-290, TP672P-295, TP672P-300,  
 TP672P-305, TP672P-310, TP672P-315, TP672P-320,  
 TP672P-325, TP672P-330, TP672P-335, TP672P-340,  
 TP672P-345, TP660P-240, TP660P-245, TP660P-250,  
 TP660P-255, TP660P-260, TP660P-265, TP660P-270,  
 TP660P-275, TP660P-280, TP660P-285, TP654P-215,  
 TP654P-220, TP654P-225, TP654P-230, TP654P-235,  
 TP654P-240, TP654P-245, TP654P-250, TP654P-255,  
 TP648P-195, TP648P-200, TP648P-205, TP648P-210,  
 TP648P-215, TP648P-220, TP648P-225, TP648P-230.

**Parameters:**

Rated Output Power  
 at STC: 285 W, 290 W, 295 W, 300 W,  
 305 W, 310 W, 315 W, 320 W,  
 325 W, 330 W, 335 W, 340 W,  
 345 W, 240 W, 245 W, 250 W,  
 255 W, 260 W, 265 W, 270 W,  
 275 W, 280 W, 285 W, 215 W,  
 220 W, 225 W, 230 W, 235 W,  
 240 W, 245 W, 250 W, 255 W,  
 195 W, 200 W, 205 W, 210 W,  
 215 W, 220 W, 225 W, 230 W.

Test Laboratory: Yangzhou Opto-Electrical  
 Products Testing Institute;  
 No. 10 West Kaifa Road, Yangzhou,  
 225009 Jiangsu, P. R. China

Construction: Framed, with Junction box,  
 Cable and Connectors.

Application Class: Class A  
 Maximum System Voltage: 1000 V DC  
 Severity of salt  
 mist test: Level 6  
 Fire Safety Class: Class C

**Tested  
 according to:**

IEC 61215(ed.2)  
 IEC 61730-1(ed.1);am1;am2  
 IEC 61730-2(ed.1);am1  
 IEC 61701(ed.2)

**Production  
 Facility(ies):**

78488, 96715