

Technical Report No.: 701262416801-00

Date: 2024-05-23

Client: Toyon Energy Co., Ltd.
No.3966 Qimen Road,
Baohe District,
Hefei, Anhui,
PEOPLE'S REPUBLIC OF CHINA

Manufacturer: Toyon Energy Co., Ltd.
No.3966 Qimen Road,
Baohe District,
Hefei, Anhui,
PEOPLE'S REPUBLIC OF CHINA

Factory: Wuxi Sunket New Energy Technology Co.,
Ltd. (116477) 888# Qinghong Road,
Delin Industry Park, E'hu Town
214117 Wuxi, Jiangsu
PEOPLE'S REPUBLIC OF CHINA

Test object: Product: Photovoltaic modules
Model: See clause 1.4

Test specification: IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Purpose of examination:

- Testing and evaluation (visual / partial) according to the test specification

Test result: The test results show that the presented product is in compliance with the above listed test specifications.

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TUV SUD Certification and Testing (China)
Co., Ltd. Shanghai Branch
TUV SUD Group
No. 151 Heng Tong Road Shanghai 200070
P. R. China

1. Description of the test object

1.1 Picture(s)

N/A

1.2 Function

Manufacturer's specification for intended use:

The PV modules for electricity generation systems with max. voltage of 1500 V DC or 1000 V DC

Manufacturer's specification for predictive use:

N/A

1.3 Consideration of the foreseeable use

- ☐ Not applicable
- ☒ Covered through the applied standard
- ☐ Covered by the following comment*
- ☐ Covered by attached risk analysis

1.4 Technical Data

	SUNxxxM-78HSNS (xxx=590-630, in steps of 5)
	SUNxxxM-72HSNS (xxx=545-585, in steps of 5)
	SUNxxxM-66HSNS (xxx=500-535, in steps of 5)
	SUNxxxM-60HSNS (xxx=455-485, in steps of 5)
	SUNxxxM-54HSNS (xxx=410-440, in steps of 5)
	SUNxxxM-60 (xxx=230-240, in steps of 5)
	SUNxxxM-48 (xxx=180-190, in steps of 5)
	SUNxxxM-36 (xxx=135-145, in steps of 5)
	SUNxxxM-24 (xxx=90-100, in steps of 5)
Model	: SUNxxxM-12 (xxx=45-50, in steps of 5)
	SUNxxxM-72 (xxx=275-290, in steps of 5)
	SUNxxxM-64 (xxx=250-255, in steps of 5)
	SUNxxxM-56 (xxx=215-220, in steps of 5)
	SUNxxxM-40 (xxx=150-160, in steps of 5)
	SUNxxxM-32 (xxx=120-125, in steps of 5)
	SUNxxxM-16 (xxx=60)
	SUNxxxM-28 (xxx=65-75, in steps of 5)
	SUNxxxM-42 (xxx=150-175, in steps of 5)
	xxx is standing for rated output power at STC.
Rated output Power at STC	: Same as above
Max. system voltage	: 1500 V DC or 1000 V DC

2. Order

2.1 Date of Purchase Order, Customer's Reference

The order dated 2024-05-14

2.2 Test Sample(s)

- Reception date(s):
N/A
- Location(s) of reception:
N/A
- Condition of test sample(s):
N/A

2.3 Date(s) of Testing N/A

2.4 Location(s) of Testing N/A

2.5 Points of Non-Compliance or Exceptions of the Test Procedure

N/A

3. Test Results

- “Decision rule according to IEC Guide 115:2023, clause 4.3.3 was applied.”
- “Decision rule (based on ILAC-G8) for an upper specification limit (A lower limit or specification with an up-per and a lower limit is treated similarly.):
 - Compliance with the requirement: If a specification limit is not breached by a measurement result plus the expanded uncertainty with a 95% coverage probability, then compliance with the specification will be stated (e.g. Pass).

3.1 Positive Test Results

Test specification(s)	Report no. / Rev. No.	Date	Remark
Electrical safety:	704062243104-03	2024-04-29	N/A
Mechanical safety:	704062243104-03	2024-04-29	N/A

3.2 Points of Non-Compliance according to the test specification

- None

4. Remarks

4.1 General

Co-license

Apply for co license according to main license certificate No.: Z2 116477 0002 Rev. 03 (Report No.: 704062243104-03)

The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.

4.2 Factory surveillance cycle

Your production facility is currently on a

- ☒ Annual (12 month)
☐ Bi-Annual (6 month)
☐ Quarterly (3 month)
☐ surveillance cycle.

4.3 Additional information for routine tests to be performed by the factory(ies)

Routine tests for electrical appliances / equipment:

Routine test requirements for production are described in 70.197.24.116477.02

5. Documentation

File	File name	Date
Data form (CDF):	701262416801-00 CDF_TUV MARK_E	2024-05-23
Photo documentation:	N/A	N/A
User manual:	N/A	N/A
Installation manual:	701262416801-00 MAN_TUV MARK_E	2024-05-23

6. Summary

"The test specifications are met"

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch

Tested by:

Rui Chen



Approved by:

Gang Huang

