

Technical Report No.: 704062345801-00

Date: 2023-05-11

Client: Shenzhen Aiko Digital Energy Technology Co., Ltd.
Room 607, Building B, Tengfei Industrial Building, No.6 taohua Road
Fubao Community, Fubao Street, Futian District, Shenzhen

Factory: Guangdong Aiko Solar Energy Technology Co., Ltd.
No.3, South Qili Avenue, Leping town, Sanshui District, Foshan,
Guangdong, P.R.CHINA

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

Test specification: IEC 61215:2016 clause 4.2 Maximum power determination

Purpose of examination: Testing and evaluation (visual / partial) according to the test specification

Test result: The test result show that the presented product is in compliance with the specific requirements.

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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

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

Sample No.	Serial number	Model
HA2023TL-0482-001X	M01230427E1240007	AIKO-A620-MAH72Mw
HA2023TL-0482-002X	M01230427E1240005	AIKO-A620-MAH72Mw

2. Order

2.1 Date of Purchase Order, Customer's Reference

2023-05-09

2.2 Test Sample(s)

- Reception date(s):
2023-05-09

- Location(s) of reception:
Changzhou HuaYang Inspection and Testing Technology Co., Ltd.
NO.8 Lanxiang Road, Wujin Economic Development Zone, Changzhou, Jiangsu,
China.
- Condition of test sample(s):
In good condition

2.3 Date(s) of Testing

2023-05-09

2.4 Location(s) of Testing

Changzhou HuaYang Inspection and
Testing Technology Co., Ltd.
NO.8 Lanxiang Road, Wujin
Economic Development Zone,
Changzhou, Jiangsu, China

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

- N/A

3. Test Results

3.1 Positive Test Results

3.1.1	TABLE: I-V characteristic						—
Test Date [MM/DD/YYYY].....:	05/09/2023						—
Radiant Source.....:	<input checked="" type="checkbox"/> Solar simulator <input type="checkbox"/> Natural sunlight						—
Module temperature [°C].....:	25±1						—
Irradiance [W/m²].....:	1000						—
Sample No.	Voc [V]	Isc [A]	Vmp [V]	Imp [A]	Pmp [W]	FF[%]	
HA2023TL-0482-001X	53.733	13.929	46.352	13.425	622.262	83.14	
HA2023TL-0482-002X	53.759	13.938	46.454	13.416	623.211	83.18	
Supplementary information: Module dimensions:2278 X 1134mm; Module Efficiency: HA2023TL-0482-001X: 24.088%; HA2023TL-0482-002X: 24.125%;							

3.2 Points of Non-Compliance according to the test specification

- None

4. Remarks

N/A

4.1 Factory surveillance cycle

N/A

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

N/A

5. Documentation

Appendix 1 Equipments list

Description	Equipment ID	Calibration due date
Pulsed Solar Simulator	HYJC-YS-021	2024.01.04

Appendix 2 Statement of the estimated uncertainty of the test results

Pmax measurement uncertainty: 2.16% (K=2)

Voc measurement uncertainty: 1.00% (K=2)

Isc measurement uncertainty: 2.40% (K=2)

6. Summary

The test specification is met.

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

Tested by:

Yang Xu
Printed name,function & signature



Approved by:

Guangxia Fu
Print ed name,function & signature

