

# CERTIFICATE

**TÜV NORD CERT GmbH**  
herewith declares that

**HYUNDAI ENERGY SOLUTIONS CO., LTD.**  
55, Bundang-ro, Bundang-gu,  
Seongnam-si, Gyeonggi-do, 13591  
Rep. of Korea

is authorized to provide the product mentioned below with the mark as illustrated:

**Description of product (details see Annex 2):**

**PV Modules with Segmented 6" PERC Mono-crystalline Silicon Solar Cells**



Valid from: 2021-02-04  
Valid until: 2022-10-19

Tested according to: IEC / EN 61215-1:2016;  
IEC / EN 61215-1-1:2016;  
IEC 61215-2:2016 / EN 61215-2:2017 + AC:2017 + AC:2018;  
IEC 61730-1:2016 / EN IEC 61730-1:2018 + AC:2018;  
IEC 61730-2:2016 / EN IEC 61730-2:2018 + AC:2018.

Registered No.: 44 780 20 406749 - 017R2M3  
Manufacturer: see Annex 1  
Test Report No.: 492011300.005  
File No.: PVP01074/21P



**TÜV NORD CERT GmbH**  
Certification Body  
Consumer Products



Essen, 2021-02-04

Please also pay attention to the information stated overleaf.

Anlage 1 zum Zertifikat Nr.: / Annex 1 to Certificate No.: 44 780 20 406749 - 017R2M3

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Aktenzeichen: / File reference: PVP01074/21P

2021-02-04

**Manufacturer:**

Manufacturer: **Tongwei Solar (Hefei) Co., Ltd.**  
No.888, Changning Road, High-tech District,  
Hefei City, Anhui Province, 230088, P.R. China

Factory inspection report no.: 862010358.004

**Remark:**

Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

A handwritten signature in blue ink, appearing to read "Rohr Aliao".

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**Certification Body**  
**Consumer Products**

**Description of product(s):**

Module types:	<b>PV Modules with Segmented 6" PERC Mono-crystalline Silicon Solar Cells:</b> 432 cells: HiE-SxxxUH (xxx = 445-480, in increment of 5) 408 cells: HiE-SxxxSI (xxx = 395-455, in increment of 5) 408 cells: HiE-SxxxUI (xxx = 420-455, in increment of 5) 408 cells: HiE-SxxxVI (xxx = 460-500, in increment of 5) 408 cells: HiE-SxxxSI (xxx = 395-435, in increment of 5) 360 cells: HiE-SxxxUF (xxx = 370-400, in increment of 5) 340 cells: HiE-SxxxSG (xxx = 325-380, in increment of 5) 340 cells: HiE-SxxxUG (xxx = 350-380, in increment of 5) 340 cells: HiE-SxxxVG (xxx = 380-415, in increment of 5) 340 cells: HiE-SxxxSG (xxx = 325-360, in increment of 5)
Maximum system voltage:	1500V
Fuse rating:	20A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	III or I, refer to CDF for detail
Design load (positive / negative):	2400Pa / 2400Pa or 3600Pa / 1600Pa, refer to CDF for detail
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018

**Remark:**

For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.



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