

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

PV Modules with Segmented 8" PERC Mono-crystalline Silicon Solar Cells



Valid from: 2021-07-29

Valid until: 2022-10-19

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	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 - 017R3M4
Manufacturer:	see Annex 1
Test Report No.:	492011300.006
File No.:	PVP05047/21P


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Consumer Products



Essen, 2021-07-29

Please also pay attention to the information stated overleaf.

Anlage 1 zum Zertifikat Nr.: / Annex 1 to Certificate No.: 44 780 20 406749 - 017R3M4

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Aktenzeichen: / File reference: PVP05047/21P

2021-07-29

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 blue ink signature that reads "Robin Miao".

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Description of product(s):

Module types:	PV Modules with Segmented 6" PERC Mono-crystalline Silicon Solar Cells 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 II or I, refer to CDF for details
Design load (positive / negative):	2400Pa / 2400Pa or 3600Pa / 1600Pa, refer to CDF for details
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)



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Module types:	PV Modules with Segmented 8" PERC Mono-crystalline Silicon Solar Cells 408 cells: HiE-SxxxKI (xxx=635-655, in increment of 5) 414 cells: HiE-SxxxKJ (xxx=645-655, in increment of 5) 390 cells: HiE-SxxxKM (xxx=605-625, in increment of 5) 340 cells: HiE-SxxxKG (xxx=530-545, in increment of 5) 345 cells: HiE-SxxxKN (xxx=535-550, in increment of 5) 325 cells: HiE-SxxxKL (xxx=505-520, in increment of 5)
Maximum system voltage:	1500V
Fuse rating:	30A or 25A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	III or II or I, refer to CDF for details
Design load (positive / negative):	3600Pa / 1600Pa, refer to CDF for details
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Remark:

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



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