

# CERTIFICATE

**TÜV NORD CERT GmbH**  
herewith declares that

**JINNENG CLEAN ENERGY TECHNOLOGY LTD.**  
No.1 Wenshui Economic Development Zone  
Lvliang, Shanxi, 032100  
China

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

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

**Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**



Valid from: 2023-07-13  
Valid until: 2028-07-22

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 - 011R6M10
Manufacturer:	see Annex 1
Test Report No.:	492011072.014
File No.:	PVP11030/22P



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



Essen, 2023-07-13

Please also pay attention to the information stated overleaf.

**Manufacturer:**

Manufacturer 1: **JINNENG CLEAN ENERGY TECHNOLOGY LTD.**  
No.1 Wenshui Economic Development Zone  
Lvliang, Shanxi, 032100, China

Factory inspection report no.: 862010249.009

Manufacturer 2: **Jinneng Photovoltaic Technology Ltd.**  
No. 533, East Guang'an Street, Green-car Park, Jinzhong Development  
Park, Demonstrative Zone of Shanxi Comprehensive Reform,  
Jinzhong City, Shanxi Province, 030600, P.R. China

Factory inspection report no.: 862010378.005

**Remark:**

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



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

**Description of product(s):**

Module types:	<b>Double Glass PV Modules with 6" Mono Heterojunction Bifacial Solar Cells:</b> 72 cells: JNHM72-xxx (xxx = 330-390, in increment of 5) 60 cells: JNHM60-xxx (xxx = 275-325, in increment of 5) Remark: xxx only indicates maximum power output of the front side.
Maximum system voltage:	1500V
Fuse rating:	15A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:	<b>Double Glass PV Modules with 6" Half-cut Mono Heterojunction Bifacial Solar Cells:</b> 144 cells: JNHM144-xxx (xxx = 380-475, in increment of 5) 132 cells: JNHM132-xxx (xxx = 350-435, in increment of 5) 120 cells: JNHM120-xxx (xxx = 315-395, in increment of 5) Remark: xxx only indicates maximum power output of the front side.
Maximum system voltage:	1500V
Fuse rating:	20A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)



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

Module types:	<b>Double Glass PV Modules with 6" Mono Bifacial Solar Cells:</b> 72 cells: JNBM72-xxx (xxx = 360-390, in increment of 5) 60 cells: JNBM60-xxx (xxx = 300-325, in increment of 5) Remark: xxx only indicates maximum power output of the front side.
Maximum system voltage:	1500V
Fuse rating:	15A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:	<b>Double Glass PV Modules with 6" Half-cut Mono Bifacial Solar Cells:</b> 144 cells: JNBM144-xxx (xxx = 365-465, in increment of 5) 120 cells: JNBM120-xxx (xxx = 305-385, in increment of 5) Remark: xxx only indicates maximum power output of the front side.
Maximum system voltage:	1500V
Fuse rating:	20A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	1600Pa / 1600Pa (without frame) 3600Pa / 1600Pa (with frame)
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)



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

Module types:	<b>Double Glass PV Modules with 7" Half-cut Mono Bifacial Solar Cells:</b> 144 cells: JNBM144-xxx (xxx = 520-560, in increment of 5) 132 cells: JNBM132-xxx (xxx = 475-510, in increment of 5) 120 cells: JNBM120-xxx (xxx = 435-465, in increment of 5) 108 cells: JNBM108-xxx (xxx = 390-420, in increment of 5) 96 cells: JNBM96-xxx (xxx = 345-370, in increment of 5) Remark: xxx only indicates maximum power output of the front side.
Maximum system voltage:	1500V
Fuse rating:	30A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:	<b>Double Glass PV Modules with 8" Half-cut Mono Bifacial Solar Cells:</b> 132 cells: JNBM132-xxx (xxx = 630-670, in increment of 5) 120 cells: JNBM120-xxx (xxx = 575-610, in increment of 5) Remark: xxx only indicates maximum power output of the front side.
Maximum system voltage:	1500V
Fuse rating:	35A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)



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

Module types:	<b>Double Glass PV Modules with 7" Half-cut Mono Bifacial Solar Cells:</b> 156 cells: JNBN156-xxx (xxx = 565-635, in increment of 5) 144 cells: JNBN144-xxx (xxx = 520-585, in increment of 5) 132 cells: JNBN132-xxx (xxx = 480-535, in increment of 5) 120 cells: JNBN120-xxx (xxx = 435-485, in increment of 5) 108 cells: JNBN108-xxx (xxx = 390-435, in increment of 5) 96 cells: JNBN96-xxx (xxx = 350-390, in increment of 5) Remark: xxx only indicates maximum power output of the front side.
Maximum system voltage:	1500V
Fuse rating:	30A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:	<b>Double Glass PV Modules with 6" Mono-crystalline Silicon Solar Cells:</b> 72 cells: JNGM72-xxx (xxx = 340-380, in increment of 5) 60 cells: JNGM60-xxx (xxx = 285-315, in increment of 5) 48 cells: JNGM48-xxx (xxx = 225-250, in increment of 5) Remark: xxx only indicates maximum power output of the front side.
Maximum system voltage:	1500V
Fuse rating:	15A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa (without frame) 3600Pa / 2400Pa (with frame)
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)



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

Module types:	<b>Double Glass PV Modules with 6" Poly-crystalline Silicon Solar Cells:</b> 72 cells: JNGP72-xxx (xxx = 305-340, in increment of 5) 60 cells: JNGP60-xxx (xxx = 255-285, in increment of 5) 48 cells: JNGP48-xxx (xxx = 205-225, in increment of 5) Remark: xxx only indicates maximum power output of the front side.
Maximum system voltage:	1500V
Fuse rating:	15A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa
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.



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