

# CERTIFICATE

**TÜV NORD CERT GmbH**  
herewith declares that

**Solarspace Technology Co., Ltd.**

No. 29, Gaoxin Road, Economic and Technological Development Zone  
Xuzhou City, Jiangsu Province  
P.R. China

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

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

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



Valid from: 2024-02-06

Valid until: 2026-04-27

|                                 |                                                                                                                                                                                 |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Certification program:          | P12-VA-01 Rev. 17 09.20                                                                                                                                                         |
| Certification fundamental(s):   | IEC / EN 61215-1:2016;<br>IEC / EN 61215-1-1:2016;<br>IEC 61215-2:2016 / EN 61215-2:2017;<br>IEC 61730-1:2016 / EN IEC 61730-1:2018;<br>IEC 61730-2:2016 / EN IEC 61730-2:2018. |
| Registered No.:                 | 44 780 21 406749 - 063R9A5M9                                                                                                                                                    |
| Manufacturer and factory(-ies): | See Annex 1                                                                                                                                                                     |
| Test Report No.:                | 492011640.011                                                                                                                                                                   |
| File No.:                       | PVP01044/24P                                                                                                                                                                    |



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Essen, 2024-02-06

Please also pay attention to the information stated overleaf.

**Manufacturer and factory(-ies):**

|                                |                                                                                                                                                                                       |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer:                  | <b>Solarspace Technology Co., Ltd.</b><br>No. 29, Gaoxin Road, Economic and Technological Development Zone,<br>Xuzhou City, Jiangsu Province, P.R. China                              |
| Factory 1:                     | <b>Solarspace Technology (Xuzhou) Co., Ltd.</b><br>South side of Kunming Road, Peixian Economic Development Zone,<br>Xuzhou City, Jiangsu Province, P.R. China                        |
| Factory inspection report no.: | 862010539.003                                                                                                                                                                         |
| Factory 2:                     | <b>Solarspace Technology (Suqian) Co., Ltd.</b><br>No. 1299, Shanghai Road, Economic and Technological Development<br>Zone, Suqian City, Jiangsu Province, P.R. China                 |
| Factory inspection report no.: | 862010603.002                                                                                                                                                                         |
| Factory 3:                     | <b>SOLARSPACE NEW ENERGY (CAMBODIA) CO., LTD.</b><br>U B E Snoul SEZ, No.1, Plot H1, Trapaing Srer Village, Pi Thnou<br>Commune, Snoul District, Kratie Province, Kingdom of Cambodia |
| Factory inspection report no.: | 862010785.001                                                                                                                                                                         |
| Factory 4:                     | <b>Taoistic Solar Technology (changzhou) Co., Ltd.</b><br>No. 269 Longxi Avenue, Zhulin Town, Jintan District, Changzhou City,<br>Jiangsu Province, P.R. China                        |
| Factory inspection report no.: | 862010816.001                                                                                                                                                                         |

**Remark:**

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



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## Description of product(s):

Module types:

### Double Glass PV Modules with Half-cut 182mm Mono-crystalline Silicon Solar Cells:

144 cells: SS8-72HD-xxxM (xxx = 525 - 565, increments of 5)

132 cells: SS8-66HD-xxxM (xxx = 485 - 515, increments of 5)

120 cells: SS8-60HD-xxxM (xxx = 440 - 470, increments of 5)

108 cells: SS8-54HD-xxxM (xxx = 395 - 420, increments of 5)

96 cells: SS8-48HD-xxxM (xxx = 355 - 375, increments of 5)

72 cells: SS8-36HD-xxxM (xxx = 265 - 280, increments of 5)

144 cells: SS8-72HDT-xxxM (xxx = 525 - 565, increments of 5)

132 cells: SS8-66HDT-xxxM (xxx = 485 - 515, increments of 5)

120 cells: SS8-60HDT-xxxM (xxx = 440 - 470, increments of 5)

108 cells: SS8-54HDT-xxxM (xxx = 395 - 420, increments of 5)

96 cells: SS8-48HDT-xxxM (xxx = 355 - 375, increments of 5)

72 cells: SS8-36HDT-xxxM (xxx = 265 - 280, increments of 5)

144 cells: SS8-72HDB-xxxM (xxx = 525 - 565, increments of 5)

132 cells: SS8-66HDB-xxxM (xxx = 485 - 515, increments of 5)

120 cells: SS8-60HDB-xxxM (xxx = 440 - 470, increments of 5)

108 cells: SS8-54HDB-xxxM (xxx = 395 - 420, increments of 5)

96 cells: SS8-48HDB-xxxM (xxx = 355 - 375, increments of 5)

72 cells: SS8-36HDB-xxxM (xxx = 265 - 280, increments of 5)

144 cells: SS8-72HD-xxxM-IND (xxx = 525 - 565, increments of 5)

132 cells: SS8-66HD-xxxM-IND (xxx = 485 - 515, increments of 5)

120 cells: SS8-60HD-xxxM-IND (xxx = 440 - 470, increments of 5)

108 cells: SS8-54HD-xxxM-IND (xxx = 395 - 420, increments of 5)

96 cells: SS8-48HD-xxxM-IND (xxx = 355 - 375, increments of 5)

72 cells: SS8-36HD-xxxM-IND (xxx = 265 - 280, increments of 5)

Remark: xxx indicates output power from the front side under STC only.

Maximum system voltage: 1500V

Fuse rating: 25A

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 A or C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)



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|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| Module types:                      | <b>Double Glass PV Modules with Half-cut 210mm Mono-crystalline Silicon Solar Cells:</b><br>132 cells: SS9-66HD-xxxM (xxx = 645 - 665, increments of 5)<br>120 cells: SS9-60HD-xxxM (xxx = 585 - 605, increments of 5)<br>132 cells: SS9-66HDT-xxxM (xxx = 645 - 665, increments of 5)<br>120 cells: SS9-60HDT-xxxM (xxx = 585 - 605, increments of 5)<br>132 cells: SS9-66HDB-xxxM (xxx = 645 - 665, increments of 5)<br>120 cells: SS9-60HDB-xxxM (xxx = 585 - 605, increments of 5)<br>Remark: xxx indicates output power from the front side under STC only. |
| 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 A or C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Module types: | <b>Double Glass PV Modules with Half-cut 182mm TOPCon Mono-crystalline Silicon Solar Cells:</b><br>156 cells: SS8-78HD-xxxN (xxx = 585 - 625, increments of 5)<br>144 cells: SS8-72HD-xxxN (xxx = 540 - 595, increments of 5)<br>132 cells: SS8-66HD-xxxN (xxx = 495 - 545, increments of 5)<br>120 cells: SS8-60HD-xxxN (xxx = 450 - 495, increments of 5)<br>108 cells: SS8-54HD-xxxN (xxx = 405 - 445, increments of 5)<br>96 cells: SS8-48HD-xxxN (xxx = 360 - 395, increments of 5)<br>72 cells: SS8-36HD-xxxN (xxx = 270 - 295, increments of 5)<br>156 cells: SS8-78HDT-xxxN (xxx = 585 - 625, increments of 5)<br>144 cells: SS8-72HDT-xxxN (xxx = 540 - 595, increments of 5)<br>132 cells: SS8-66HDT-xxxN (xxx = 495 - 545, increments of 5)<br>120 cells: SS8-60HDT-xxxN (xxx = 450 - 495, increments of 5)<br>108 cells: SS8-54HDT-xxxN (xxx = 405 - 445, increments of 5)<br>96 cells: SS8-48HDT-xxxN (xxx = 360 - 395, increments of 5)<br>72 cells: SS8-36HDT-xxxN (xxx = 270 - 295, increments of 5)<br>156 cells: SS8-78HDB-xxxN (xxx = 585 - 625, increments of 5)<br>144 cells: SS8-72HDB-xxxN (xxx = 540 - 595, increments of 5) |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



132 cells: SS8-66HDB-xxxN (xxx = 495 - 545, increments of 5)  
 120 cells: SS8-60HDB-xxxN (xxx = 450 - 495, increments of 5)  
 108 cells: SS8-54HDB-xxxN (xxx = 405 - 445, increments of 5)  
 96 cells: SS8-48HDB-xxxN (xxx = 360 - 395, increments of 5)  
 72 cells: SS8-36HDB-xxxN (xxx = 270 - 295, increments of 5)  
 132 cells: SSA-66HD-xxxN (xxx = 590 - 625, increments of 5)  
 120 cells: SSA-60HD-xxxN (xxx = 535 - 565, increments of 5)  
 108 cells: SSA-54HD-xxxN (xxx = 485 - 510, increments of 5)  
 96 cells: SSA-48HD-xxxN (xxx = 430 - 455, increments of 5)  
 132 cells: SSA-66HDT-xxxN (xxx = 590 - 625, increments of 5)  
 120 cells: SSA-60HDT-xxxN (xxx = 535 - 565, increments of 5)  
 108 cells: SSA-54HDT-xxxN (xxx = 485 - 510, increments of 5)  
 96 cells: SSA-48HDT-xxxN (xxx = 430 - 455, increments of 5)  
 132 cells: SSA-66HDB-xxxN (xxx = 590 - 625, increments of 5)  
 120 cells: SSA-60HDB-xxxN (xxx = 535 - 565, increments of 5)  
 108 cells: SSA-54HDB-xxxN (xxx = 485 - 510, increments of 5)  
 96 cells: SSA-48HDB-xxxN (xxx = 430 - 455, increments of 5)  
 Remark: xxx indicates output power from the front side under STC only.

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 A or C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types: **Double Glass PV Modules with Half-cut 183.75mm TOPCon Monocrystalline Silicon Solar Cells:**  
 156 cells: SS7-78HD-xxxN (xxx = 585 - 625, increments of 5)  
 144 cells: SS7-72HD-xxxN (xxx = 540 - 595, increments of 5)  
 132 cells: SS7-66HD-xxxN (xxx = 495 - 545, increments of 5)  
 120 cells: SS7-60HD-xxxN (xxx = 450 - 495, increments of 5)  
 108 cells: SS7-54HD-xxxN (xxx = 405 - 445, increments of 5)  
 96 cells: SS7-48HD-xxxN (xxx = 360 - 395, increments of 5)  
 72 cells: SS7-36HD-xxxN (xxx = 270 - 295, increments of 5)  
 156 cells: SS7-78HDT-xxxN (xxx = 585 - 625, increments of 5)



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144 cells: SS7-72HDT-xxxN (xxx = 540 - 595, increments of 5)  
 132 cells: SS7-66HDT-xxxN (xxx = 495 - 545, increments of 5)  
 120 cells: SS7-60HDT-xxxN (xxx = 450 - 495, increments of 5)  
 108 cells: SS7-54HDT-xxxN (xxx = 405 - 445, increments of 5)  
 96 cells: SS7-48HDT-xxxN (xxx = 360 - 395, increments of 5)  
 72 cells: SS7-36HDT-xxxN (xxx = 270 - 295, increments of 5)  
 156 cells: SS7-78HDB-xxxN (xxx = 585 - 625, increments of 5)  
 144 cells: SS7-72HDB-xxxN (xxx = 540 - 595, increments of 5)  
 132 cells: SS7-66HDB-xxxN (xxx = 495 - 545, increments of 5)  
 120 cells: SS7-60HDB-xxxN (xxx = 450 - 495, increments of 5)  
 108 cells: SS7-54HDB-xxxN (xxx = 405 - 445, increments of 5)  
 96 cells: SS7-48HDB-xxxN (xxx = 360 - 395, increments of 5)  
 72 cells: SS7-36HDB-xxxN (xxx = 270 - 295, increments of 5)  
 Remark: xxx indicates output power from the front side under STC only.

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 A or C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types: **Double Glass PV Modules with Half-cut 166mm Mono-crystalline Silicon Solar Cells:**  
 144 cells: SS6-72HD-xxxM (xxx = 430 - 455, increments of 5)  
 120 cells: SS6-60HD-xxxM (xxx = 360 - 380, increments of 5)  
 144 cells: SS6-72HDB-xxxM (xxx = 430 - 455, increments of 5)  
 120 cells: SS6-60HDB-xxxM (xxx = 360 - 380, increments of 5)  
 Remark: xxx indicates output power from the front side under STC only.

Maximum system voltage: 1500V  
 Fuse rating: 20A  
 Electrical protection class: Class II  
 Pollution degree: 1  
 Material group: I  
 Design load (positive / negative): 3600Pa / 1600Pa

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|                                    |                                                                                                                                                                                                                                        |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety factors:                    | 1.5                                                                                                                                                                                                                                    |
| Fire safety class:                 | Class A or C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)                                                                                                                                                                  |
| Module types:                      | <b>Double Glass PV Modules with 1/3-cut 210mm TOPCon Mono-crystalline Silicon Solar Cells:</b><br>88 cells: SS9-88TD-xxxN (xxx = 290 - 310, increments of 5)<br>Remark: xxx indicates output power from the front side under STC only. |
| Maximum system voltage:            | 1500V                                                                                                                                                                                                                                  |
| Fuse rating:                       | 25A                                                                                                                                                                                                                                    |
| 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 A or 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).



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