

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Leapton Solar (Changshu) Co., Ltd.

No. 9, Sunshine Avenue, Yushan High Technology Industry Zone, Changshu City
Jiangsu Province, 215500
P.R. 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: 2024-07-11
Valid until: 2029-07-10

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	IEC 61215-1:2021 / EN IEC 61215-1:2021; IEC 61215-1-1:2021 / EN IEC 61215-1-1:2021; IEC 61215-2:2021 / EN IEC 61215-2:2021; IEC 61730-1:2023; IEC 61730-2:2023.
Registered No.:	44 780 24 406749 - 269
Manufacturer and factory(-ies):	See Annex 1
Test Report No.:	492013112.001
File No.:	PVP10113/23P-04

A handwritten signature in blue ink, appearing to read 'Rafael N. N. N.'.

TÜV NORD CERT GmbH
Certification Body
Consumer Products



Essen, 2024-07-11

Please also pay attention to the information stated overleaf.

Manufacturer and factory(-ies):

Manufacturer: **Leapton Solar (Changshu) Co., Ltd.**
No. 9, Sunshine Avenue, Yushan High Technology Industry Zone,
Changshu City
Jiangsu Province, 215500, P.R. China

Factory: **Leapton Solar (Changshu) Co., Ltd.**
No. 9, Sunshine Avenue, Yushan High Technology Industry Zone,
Changshu City
Jiangsu Province, 215500, P.R. China

Factory inspection report no.: 862010379.007

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:	PV Modules with Half-cut 210*210mm Mono-crystalline Silicon Solar Cells: 132 cells: LP210*210-M-66-MH-***W (** = 630-665, in increment of 5) 120 cells: LP210*210-M-60-MH-***W (** = 575-605, in increment of 5) 108 cells: LP210*210-M-54-MH-***W (** = 515-545, in increment of 5) 96 cells: LP210*210-M-48-MH-***W (** = 460-480, in increment of 5) 84 cells: LP210*210-M-42-MH-***W (** = 400-420, in increment of 5)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	30A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
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:	PV Modules with Half-cut 182*182/188mm n-type TOPCon Bifacial Silicon Solar Cells: 156 cells: LP182*182-M-78-NH-***W (** = 580-625, in increment of 5) 144 cells: LP182*182-M-72-NH-***W (** = 555-600, in increment of 5) 132 cells: LP182*182-M-66-NH-***W (** = 510-550, in increment of 5) 120 cells: LP182*182-M-60-NH-***W (** = 460-500, in increment of 5) 108 cells: LP182*182-M-54-NH-***W (** = 410-450, in increment of 5)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	25A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
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)



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Module types:	PV Modules with Half-cut 182*210mm n-type TOPCon Bifacial Silicon Solar Cells: 132 cells: LP182*210-M-66-NH-***W (***) = 580-635, in increment of 5) 120 cells: LP182*210-M-60-NH-***W (***) = 530-575, in increment of 5) 108 cells: LP182*210-M-54-NH-***W (***) = 475-520, in increment of 5) 96 cells: LP182*210-M-48-NH-***W (***) = 420-460, in increment of 5)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	25A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
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:	PV Modules with Half-cut 182*199/191mm n-type TOPCon Bifacial Silicon Solar Cells: 144 cells: LP182*199-M-72-NH-***W (***) = 570-655, in increment of 5) 132 cells: LP182*199-M-66-NH-***W (***) = 525-600, in increment of 5) 120 cells: LP182*199-M-60-NH-***W (***) = 475-545, in increment of 5) 108 cells: LP182*199-M-54-NH-***W (***) = 430-490, in increment of 5)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	25A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
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)



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Module types:

PV Modules with Half-cut 210*210mm n-type TOPCon Bifacial Silicon Solar Cells:

132 cells: LP210*210-M-66-NH-***W (** = 675-700, in increment of 5)

120 cells: LP210*210-M-60-NH-***W (** = 615-635, in increment of 5)

108 cells: LP210*210-M-54-NH-***W (** = 555-570, in increment of 5)

96 cells: LP210*210-M-48-NH-***W (** = 490-510, in increment of 5)

84 cells: LP210*210-M-42-NH-***W (** = 430-445, in increment of 5)

Maximum system voltage:

1500V

Maximum overcurrent protection rating:

30A

Electrical protection class:

Class II

Pollution degree:

1

98th percentile module operating temperature (T₉₈)

70°C

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) attached to test report with same file no.



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herewith declares that

Leapton Solar (Changshu) Co., Ltd.

No. 9, Sunshine Avenue, Yushan High Technology Industry Zone, Changshu City
Jiangsu Province, 215500
P.R. 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: 2024-07-03

Valid until: 2029-06-25

Certification program:

P12-VA-01 Rev. 17 09.20

Certification fundamental(s):

IEC 61215-1:2021 / EN IEC 61215-1:2021;
IEC 61215-1-1:2021 / EN IEC 61215-1-1:2021;
IEC 61215-2:2021 / EN IEC 61215-2:2021;
IEC 61730-1:2023;
IEC 61730-2:2023.

Registered No.:

44 780 24 406749 - 251R1M1

Manufacturer and factory(-ies):

See Annex 1

Test Report No.:

492013113.002

File No.:

PVP05178/24P-02

A blue ink signature, likely of a representative of TÜV NORD CERT.

TÜV NORD CERT GmbH
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Consumer Products



Essen, 2024-07-03

Please also pay attention to the information stated overleaf.

Manufacturer and factory(-ies):

Manufacturer: **Leapton Solar (Changshu) Co., Ltd.**
No. 9, Sunshine Avenue, Yushan High Technology Industry Zone,
Changshu City
Jiangsu Province, 215500, P.R. China

Factory: **Leapton Solar (Changshu) Co., Ltd.**
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Changshu City
Jiangsu Province, 215500, P.R. China

Factory inspection report no.: 862010379.007

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 210*210mm n-type TOPCon Bifacial Silicon Solar Cells: 132 cells: LP210*210-M-66-NB-***W (** = 665-730, in increment of 5) 120 cells: LP210*210-M-60-NB-***W (** = 610-665, in increment of 5) 108 cells: LP210*210-M-54-NB-***W (** = 550-595, in increment of 5) 96 cells: LP210*210-M-48-NB-***W (** = 490-530, in increment of 5) 84 cells: LP210*210-M-42-NB-***W (** = 430-465, in increment of 5) *** indicates rated output power generated from front side under STC
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	30A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:	Double Glass PV Modules with Half-cut 182*182/188mm n-type TOPCon Bifacial Silicon Solar Cells: 156 cells: LP182*182-M-78-NB-***W (** = 580-620, in increment of 5) 144 cells: LP182*182-M-72-NB-***W (** = 535-600, in increment of 5) 132 cells: LP182*182-M-66-NB-***W (** = 490-550, in increment of 5) 120 cells: LP182*182-M-60-NB-***W (** = 445-500, in increment of 5) 108 cells: LP182*182-M-54-NB-***W (** = 400-450, in increment of 5) *** indicates rated output power generated from front side under STC
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	25A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	3600Pa / 1600Pa



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Safety factors: 1.5
Fire safety class: Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types: **Double Glass PV Modules with Half-cut 182*210mm n-type TOPCon Bifacial Silicon Solar Cells:**

132 cells: LP182*210-M-66-NB-***W (***) = 580-630, in increment of 5)

120 cells: LP182*210-M-60-NB-***W (***) = 530-570, in increment of 5)

108 cells: LP182*210-M-54-NB-***W (***) = 475-515, in increment of 5)

96 cells: LP182*210-M-48-NB-***W (***) = 420-455, in increment of 5)

*** indicates rated output power generated from front side under STC

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 25A

Electrical protection class: Class II

Pollution degree: 1

98th percentile module operating temperature (T_{98}): 70°C

Design load (positive / negative): 3600Pa / 1600Pa

Safety factors: 1.5

Fire safety class: Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types: **Double Glass PV Modules with Half-cut 182*199/191mm n-type TOPCon Bifacial Silicon Solar Cells:**

144 cells: LP182*199-M-72-NB-***W (***) = 570-655, in increment of 5)

132 cells: LP182*199-M-66-NB-***W (***) = 525-600, in increment of 5)

120 cells: LP182*199-M-60-NB-***W (***) = 475-545, in increment of 5)

108 cells: LP182*199-M-54-NB-***W (***) = 430-490, in increment of 5)

*** indicates rated output power generated from front side under STC

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 25A

Electrical protection class: Class II

Pollution degree: 1

98th percentile module operating temperature (T_{98}): 70°C

Design load (positive / negative): 3600Pa / 1600Pa

Safety factors: 1.5



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Anlage 2 zum Zertifikat Nr.: / *Annex 2 to Certificate No.:* **44 780 24 406749 - 251R1M1**

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Aktenzeichen: / *File reference:* **PVP05178/24P-02**

2024-07-03

Fire safety class: Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Remark:

For detailed product information, please refer to CDF (Constructional Data Form) attached to test report with same file no.



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