

# CERTIFICATE

**TÜV NORD CERT GmbH**  
herewith declares that

**Lepton Energy Co., Ltd.**  
Tousei Bld.6F,1-2-1,Aioicho,Chuo-ku Kobe-shi,Hyogo,Japan

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: 2024-07-29

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 - 299
Manufacturer and factory(-ies):	See Annex 1
Test Report No.:	492013317.001
File No.:	PVP05178/24P-03



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



Essen, 2024-07-29

Please also pay attention to the information stated overleaf.

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

Manufacturer: **Lepton Energy Co., Ltd.**  
Tousei Bld.6F, 1-2-1, Aioicho, Chuo-ku Kobe-shi, Hyogo, Japan

Factory: **Lepton 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:	<b>PV Modules with Half-cut 210*210mm Mono-crystalline Silicon Solar Cells:</b> 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 <sub>98</sub> )	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:	<b>PV Modules with Half-cut 182*182/188mm n-type TOPCon Bifacial Silicon Solar Cells:</b> 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 <sub>98</sub> )	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:	<b>PV Modules with Half-cut 182*210mm n-type TOPCon Bifacial Silicon Solar Cells:</b> 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 <sub>98</sub> )	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:	<b>PV Modules with Half-cut 182*199/191mm n-type TOPCon Bifacial Silicon Solar Cells:</b> 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 <sub>98</sub> )	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:	<b>PV Modules with Half-cut 210*210mm n-type TOPCon Bifacial Silicon Solar Cells:</b> 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 (T <sub>98</sub> )	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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**TÜV NORD CERT GmbH**  
herewith declares that

**Lepton Energy Co., Ltd.**  
Tousei Bld.6F, 1-2-1, Aioicho, Chuo-ku Kobe-shi, Hyogo, Japan

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: 2025-02-14

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 - 300R1M1
Manufacturer and factory(-ies):	See Annex 1
Test Report No.:	492013318.002
File No.:	PVP02018/25P



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Essen, 2025-02-14

Please also pay attention to the information stated overleaf.

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

Manufacturer: **Lepton Energy Co., Ltd.**  
Tousei Bld.6F,1-2-1,Aioicho,Chuo-ku Kobe-shi,Hyogo,Japan

Factory: **Lepton 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:	<b>Double Glass PV Modules with Half-cut 210*210mm n-type TOPCon Bifacial Silicon Solar Cells:</b> 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 <sub>98</sub> )	70°C
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class A according to UL790

Module types:	<b>Double Glass PV Modules with Half-cut 182*182/188mm n-type TOPCon Bifacial Silicon Solar Cells:</b> 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 <sub>98</sub> )	70°C
Design load (positive / negative):	3600Pa / 1600Pa



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Safety factors: 1.5  
Fire safety class: Class A according to UL790

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 (\*\*\* = 580-640, in increment of 5)

120 cells: LP182\*210-M-60-NB-\*\*\*W (\*\*\* = 530-580, in increment of 5)

108 cells: LP182\*210-M-54-NB-\*\*\*W (\*\*\* = 475-520, in increment of 5)

96 cells: LP182\*210-M-48-NB-\*\*\*W (\*\*\* = 420-465, 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<sub>98</sub>): 70°C  
Design load (positive / negative): 3600Pa / 1600Pa  
Safety factors: 1.5  
Fire safety class: Class A according to UL790

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<sub>98</sub>): 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 - 300R1M1

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Aktenzeichen: / File reference: PVP02018/25P

2025-02-14

Fire safety class: Class A according to UL790

Remark:

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



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