

# CERTIFICATE

**TÜV NORD CERT GmbH**  
herewith declares that

**Lepton 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: 2024-07-23  
Valid until: 2025-01-02

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	IEC 62716:2013 / EN 62716:2013.
Registered No.:	44 780 20 406749 - 006R4A1M4
Manufacturer and factory(-ies):	See Annex 1
Test Report No.:	492011340.005
File No.:	PVP01197/24P-02



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



Essen, 2024-07-23

Please also pay attention to the information stated overleaf.

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

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

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.



**TÜV NORD CERT GmbH**  
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**Description of product(s):**

Module types:

**PV Modules with 6" Half Cut Mono-crystalline Silicon Solar Cells:**

144 cells: LP158\*158-M-72-H-\*\*\*W (\*\*\*) = 365-400, in increment of 5)  
132 cells: LP158\*158-M-66-H-\*\*\*W (\*\*\*) = 335-365, in increment of 5)  
120 cells: LP158\*158-M-60-H-\*\*\*W (\*\*\*) = 305-330, in increment of 5)  
144 cells: LP158\*158-M-72-MH-\*\*\*W (\*\*\*) = 390-410, in increment of 5)  
132 cells: LP158\*158-M-66-MH-\*\*\*W (\*\*\*) = 360-375, in increment of 5)  
120 cells: LP158\*158-M-60-MH-\*\*\*W (\*\*\*) = 325-340, in increment of 5)  
144 cells: LP166\*166-M-72-MH-\*\*\*W (\*\*\*) = 420-455, in increment of 5)  
132 cells: LP166\*166-M-66-MH-\*\*\*W (\*\*\*) = 385-415, in increment of 5)  
120 cells: LP166\*166-M-60-MH-\*\*\*W (\*\*\*) = 350-380, in increment of 5)

Maximum system voltage:

1500V

Fuse rating:

15A or 20A

Application class:

Class A

Electrical protection class:

Class II

Module types:

**PV Modules with 6" Half Cut Poly-crystalline Silicon Solar Cells:**

144 cells: LP156\*156-P-72-H-\*\*\*W (\*\*\*) = 335-370, in increment of 5)  
120 cells: LP156\*156-P-60-H-\*\*\*W (\*\*\*) = 280-305, in increment of 5)

Maximum system voltage:

1500V

Fuse rating:

15A

Application class:

Class A

Electrical protection class:

Class II



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Module types: **PV Modules with 7" Half Cut Mono-crystalline Silicon Solar Cells:**  
156 cells: LP182\*182-M-78-MH-\*\*\*W (\*\* = 560-605, in increment of 5)  
144 cells: LP182\*182-M-72-MH-\*\*\*W (\*\* = 515-555, in increment of 5)  
132 cells: LP182\*182-M-66-MH-\*\*\*W (\*\* = 475-510, in increment of 5)  
120 cells: LP182\*182-M-60-MH-\*\*\*W (\*\* = 430-465, in increment of 5)  
108 cells: LP182\*182-M-54-MH-\*\*\*W (\*\* = 390-415, in increment of 5)

Maximum system voltage: 1500V

Fuse rating: 25A

Application class: Class A

Electrical protection class: Class II

Module types: **PV Modules with Half-cut 210\*210mm Mono-crystalline Silicon Solar Cells:**

132 cells: LP210\*210-M-66-MH-\*\*\*W (\*\* = 630-670, in increment of 5)

120 cells: LP210\*210-M-60-MH-\*\*\*W (\*\* = 575-610, 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 (\*\* = 460-485, in increment of 5)

84 cells: LP210\*210-M-42-MH-\*\*\*W (\*\* = 400-425, in increment of 5)

110 cells: LP210\*210-M-55-MH-\*\*\*W (\*\* = 520-555, in increment of 5)

100 cells: LP210\*210-M-50-MH-\*\*\*W (\*\* = 475-505, in increment of 5)

90 cells: LP210\*210-M-45-MH-\*\*\*W (\*\* = 425-455, in increment of 5)

80 cells: LP210\*210-M-40-MH-\*\*\*W (\*\* = 380-400, in increment of 5)

Maximum system voltage: 1500V

Fuse rating: 30A

Application class: Class A

Electrical protection class: Class II



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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
Fuse rating:	25A
Application class:	Class A
Electrical protection class:	Class II

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
Fuse rating:	25A
Application class:	Class A
Electrical protection class:	Class II

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
Fuse rating:	25A
Application class:	Class A
Electrical protection class:	Class II



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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

Fuse rating: 30A

Application class: Class A

Electrical protection class: Class II

Remark:

For detailed product information, please refer to CDF (Constructional Data Form).



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

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	IEC 62716:2013 / EN 62716:2013 + AC:2014.
Registered No.:	44 780 23 406749 - 234
Manufacturer:	see Annex 1
Test Report No.:	492012602.001
File No.:	PVP04137/23P-06

Valid until: 2028-07-30



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**Certification Body**  
**Consumer Products**

Essen, 2023-07-31

Please also pay attention to the information stated overleaf.



Module types:	<b>Double Glass PV Modules with half-cut 7" n-type TOPCon Bifacial Mono Solar Cells:</b> 156 cells: LP182*182-M-78-NB-***W (***) = 580-625, in increment of 5) 144 cells: LP182*182-M-72-NB-***W (***) = 555-605, in increment of 5) 132 cells: LP182*182-M-66-NB-***W (***) = 510-555, in increment of 5) 120 cells: LP182*182-M-60-NB-***W (***) = 460-505, in increment of 5) 108 cells: LP182*182-M-54-NB-***W (***) = 410-450, in increment of 5)
Maximum system voltage:	1500V
Fuse rating:	25A or 30A
Application class:	Class A
Electrical protection class:	Class II

Module types:	<b>Double Glass PV Modules with half-cut 8" n-type TOPCon Bifacial Mono Solar Cells:</b> 132 cells: LP210*210-M-66-NB-***W (***) = 675-705, in increment of 5) 120 cells: LP210*210-M-60-NB-***W (***) = 615-640, in increment of 5) 108 cells: LP210*210-M-54-NB-***W (***) = 555-575, in increment of 5) 96 cells: LP210*210-M-48-NB-***W (***) = 490-510, in increment of 5) 84 cells: LP210*210-M-42-NB-***W (***) = 430-445, in increment of 5)
Maximum system voltage:	1500V
Fuse rating:	30A or 35A
Application class:	Class A
Electrical protection class:	Class II

Remark:

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



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**Description of product(s):**

Module types:

**Double Glass PV Modules with 7" Half Cut Mono-crystalline Silicon Solar Cells:**

144 cells: LP182\*182-M-72-MB-\*\*\*W (\*\*\*) = 520-550, in increment of 5)

132 cells: LP182\*182-M-66-MB-\*\*\*W (\*\*\*) = 475-505, in increment of 5)

120 cells: LP182\*182-M-60-MB-\*\*\*W (\*\*\*) = 435-455, in increment of 5)

108 cells: LP182\*182-M-54-MB-\*\*\*W (\*\*\*) = 390-410, in increment of 5)

Maximum system voltage:

1500V

Fuse rating:

25A

Application class:

Class A

Electrical protection class:

Class II

Module types:

**Double Glass PV Modules with 8" Half Cut Mono-crystalline Silicon Solar Cells:**

132 cells: LP210\*210-M-66-MB-\*\*\*W (\*\*\*) = 630-670, in increment of 5)

120 cells: LP210\*210-M-60-MB-\*\*\*W (\*\*\*) = 575-610, in increment of 5)

108 cells: LP210\*210-M-54-MB-\*\*\*W (\*\*\*) = 515-545, in increment of 5)

96 cells: LP210\*210-M-48-MB-\*\*\*W (\*\*\*) = 460-485, in increment of 5)

84 cells: LP210\*210-M-42-MB-\*\*\*W (\*\*\*) = 400-425, in increment of 5)

110 cells: LP210\*210-M-55-MB-\*\*\*W (\*\*\*) = 520-555, in increment of 5)

100 cells: LP210\*210-M-50-MB-\*\*\*W (\*\*\*) = 475-505, in increment of 5)

90 cells: LP210\*210-M-45-MB-\*\*\*W (\*\*\*) = 425-455, in increment of 5)

80 cells: LP210\*210-M-40-MB-\*\*\*W (\*\*\*) = 380-400, in increment of 5)

Maximum system voltage:

1500V

Fuse rating:

30A or 35A

Application class:

Class A

Electrical protection class:

Class II



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Module types: **Double Glass PV Modules with half-cut 7" n-type TOPCon Bifacial Mono Solar Cells:**  
156 cells: LP182\*182-M-78-NB-\*\*\*W (\*\*\*) = 580-625, in increment of 5)  
144 cells: LP182\*182-M-72-NB-\*\*\*W (\*\*\*) = 555-605, in increment of 5)  
132 cells: LP182\*182-M-66-NB-\*\*\*W (\*\*\*) = 510-555, in increment of 5)  
120 cells: LP182\*182-M-60-NB-\*\*\*W (\*\*\*) = 460-505, in increment of 5)  
108 cells: LP182\*182-M-54-NB-\*\*\*W (\*\*\*) = 410-450, in increment of 5)

Maximum system voltage: 1500V  
Fuse rating: 25A or 30A  
Application class: Class A  
Electrical protection class: Class II

Module types: **Double Glass PV Modules with half-cut 8" n-type TOPCon Bifacial Mono Solar Cells:**  
132 cells: LP210\*210-M-66-NB-\*\*\*W (\*\*\*) = 675-705, in increment of 5)  
120 cells: LP210\*210-M-60-NB-\*\*\*W (\*\*\*) = 615-640, in increment of 5)  
108 cells: LP210\*210-M-54-NB-\*\*\*W (\*\*\*) = 555-575, in increment of 5)  
96 cells: LP210\*210-M-48-NB-\*\*\*W (\*\*\*) = 490-510, in increment of 5)  
84 cells: LP210\*210-M-42-NB-\*\*\*W (\*\*\*) = 430-445, in increment of 5)

Maximum system voltage: 1500V  
Fuse rating: 30A or 35A  
Application class: Class A  
Electrical protection class: Class II

Remark:

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



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