

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

DualSun SAS
2 rue Marc Donadille 13013 Marseille
FRANCE

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: 2022-07-27

Valid until: 2025-11-22

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 22 406749 - 172
Manufacturer:	see Annex 1
Test Report No.:	492012113.001
File No.:	PVP01027/22P-28



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Consumer Products



Essen, 2022-07-27

Please also pay attention to the information stated overleaf.

Description of product(s):

Module types:

Double Glass PV Modules with Mono-crystalline Silicon Half-Cut Bifacial Solar Cells (156.75mm to 166mm):

144 cells: DSxxx-144G1B-01 (xxx=390-410, in steps of 5)

144 cells: DSxxx-144G1B-02 (xxx=390-410, in steps of 5)

144 cells: DSxxx-144G1B-03 (xxx=390-410, in steps of 5)

144 cells: DSxxx-144G1B-04 (xxx=390-410, in steps of 5)

120 cells: DSxxx-120G1B-01 (xxx=325-340, in steps of 5)

120 cells: DSxxx-120G1B-02 (xxx=325-340, in steps of 5)

120 cells: DSxxx-120G1B-03 (xxx=325-340, in steps of 5)

120 cells: DSxxx-120G1B-04 (xxx=325-340, in steps of 5)

144 cells: DSxxx-144M6B-01 (xxx=420-450, in step of 5)

144 cells: DSxxx-144M6B-02 (xxx=420-450, in step of 5)

144 cells: DSxxx-144M6B-03 (xxx=420-450, in step of 5)

144 cells: DSxxx-144M6B-04 (xxx=420-450, in step of 5)

120 cells: DSxxx-120M6B-01 (xxx=350-375, in step of 5)

120 cells: DSxxx-120M6B-02 (xxx=350-375, in step of 5)

120 cells: DSxxx-120M6B-03 (xxx=350-375, in step of 5)

120 cells: DSxxx-120M6B-04 (xxx=350-375, in step of 5)

44 cells: DSxxx-44M6B-01 (xxx=130-135, in step of 5)

44 cells: DSxxx-44M6B-02 (xxx=130-135, in step of 5)

44 cells: DSxxx-44M6B-03 (xxx=130-135, in step of 5)

44 cells: DSxxx-44M6B-04 (xxx=130-135, in step of 5)

Remark: The power parameter included in the module types only indicates maximum power output of front side.

Maximum system voltage: 1500V

Fuse rating: 25A

Electrical protection class: Class II

Pollution degree: 1

Material group: I

Design load (positive / negative): 3600Pa / 2400Pa

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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Module types:

Double Glass PV Modules with 182mm Mono-crystalline Silicon Half-Cut Bifacial Solar Cells:

144 cells: DSxxx-144M10B-01 (xxx=525-550, in step of 5)

144 cells: DSxxx-144M10B-02 (xxx=525-550, in step of 5)

144 cells: DSxxx-144M10B-03 (xxx=525-550, in step of 5)

144 cells: DSxxx-144M10B-04 (xxx=525-550, in step of 5)

132 cells: DSxxx-132M10B-01 (xxx=475-500, in step of 5)

132 cells: DSxxx-132M10B-02 (xxx=475-500, in step of 5)

132 cells: DSxxx-132M10B-03 (xxx=475-500, in step of 5)

132 cells: DSxxx-132M10B-04 (xxx=475-500, in step of 5)

120 cells: DSxxx-120M10B-01 (xxx=440-455, in step of 5)

120 cells: DSxxx-120M10B-02 (xxx=440-455, in step of 5)

120 cells: DSxxx-120M10B-03 (xxx=440-455, in step of 5)

120 cells: DSxxx-120M10B-04 (xxx=440-455, in step of 5)

108 cells: DSxxx-108M10B-01 (xxx=395-410, in step of 5)

108 cells: DSxxx-108M10B-02 (xxx=395-410, in step of 5)

108 cells: DSxxx-108M10B-03 (xxx=395-410, in step of 5)

108 cells: DSxxx-108M10B-04 (xxx=395-410, in step of 5)

Remark: The power parameter included in the module types only indicates maximum power output of 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 A or C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Remark: For detailed information on classification of Fire Safety and Design load (positive / negative) for different combination of raw materials, please refer to CDF (Constructional Data Form) in Annex 1 of test report.



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