

Country:

AUTHORIZATION TO MARK

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to multiple listee model(s) identified on the correlation page of the Listing Report.

This document is the property of Intertek Testing Services and is not transferable. The certification mark(s) may be applied only at the location of the Party Authorized To Apply Mark.

Applicant: PT THORNOVA SOLAR INDONESIA Manufacturer: Yuncheng Solar Technology Co., Ltd

Jalan Brigjen Katamso, Kel. Tanjung

Building H and Building E (production),

Address: Uncang, Kec. Batu Aji, Kota Batam, Address: Phase II of Standard Plant, Runzhou

Provinsi Kepulauan Riau, 29466

Road, Huishan Industrial
Transformation Cluster, Wuxi, Jiangsu

Country:

Party Authorized To Apply Mark: Same as Manufacturer

Indonesia

Report Issuing Office: Intertek Testing Services (Shanghai FTZ) Co., Ltd

Control Number: 5026027 Authorized by:

for L. Matthew Snyder, Certification Manager

China



This document supersedes all previous Authorizations to Mark for the noted Report Number.

This Authorization to Mark is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Authorization to Mark. Only the Client is authorized to permit copying or distribution of this Authorization to Mark and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement and in this Authorization to Mark. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.

AUTHORIZATION TO MARK

Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [UL 61730-1:2022 Ed.2]

Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [UL 61730-2:2022 Ed.2+R:25Apr2023]

Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [CSA C22.2#61730-1:2019 Ed.2]

Standard(s):

Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [CSA C22.2#61730-2:2019 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1: Test Requirements [UL 61215-1:2021 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1-1: Special Requirements for Testing of Crystalline Silicon Photovoltaic (PV) Modules [UL 61215-1-1:2021 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 2: Test Procedures [UL 61215-2:2021 Ed.2]

Product: Crystalline Silicon Photovoltaic (PV) Modules

Brand Name: SUNOVA SOLAR, THORNOVA SOLAR

TS-BG78(followed by 575, 580, 585, 590, 595, 600, 605 or 610; followed by) or)-X.

TS-BG72(followed by 530, 535, 540, 545, 550, 555, 560 or 565; followed by) or)-X.

TS-BG66(followed by 485, 490, 495, 500, 505, 510 or 515; followed by) or)-X.

TS-BG60(followed by 440, 445, 450, 455, 460, 465 or 470; followed by) or)-X.

TS-BG54(followed by 400, 405, 410, 415, 420 or 425; followed by) or)-X.

TS-BG72(followed by 440, 445, 450, 455 or 460; followed by).

TS-BG60(followed by 365, 370, 375, 380 or 385; followed by).

TS-BG54(followed by 330, 335, 340 or 345; followed by) or).

TS-BGT54(followed by 420, 425, 430, 435, 440, 445, 450, 455 or 460; followed by) or)-X.

TS-BGT60(followed by 465, 470, 475, 480, 485, 490, 495, 500, 505 or 510; followed by) or)-X.

TS-BGT66(followed by 515, 520, 525, 530, 535, 540, 545, 550, 555 or 560; followed by) or)-X.

TS-BGT72(followed by 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610 or 615; followed by) or)- X.

TS-BGT78(followed by 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by) or)-X.

TS-BGT66(followed by 680, 685, 690, 695, 700, 705, 710, 715, 720, 725 or 730; followed by)-G12 or)-G12-X.

TS-BGT60(followed by 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by)-G12 or)-G12-X.

TS-BGT48(followed by 435, 440, 445 or 450; followed by)-G11 or)-G11-X.

TS-BGT54(followed by 485, 490, 495, 500 or 505; followed by)-G11 or)-G11-X.

TS-BGT60(followed by 545, 550, 555, 560 or 565; followed by)-G11 or)-G11-X.

TS-BGT66(followed by 595, 600, 605, 610, 615 or 620; followed by)-G11 or)-G11-X.

SS-BG followed by 575, 580, 585, 590, 595, 600, 605 or 610; followed by -78MDH or -78MDH-X.

SS-BG followed by 530, 535, 540, 545, 550, 555, 560 or 565; followed by -72MDH or -72MDH-X.

SS-BG followed by 485, 490, 495, 500, 505, 510 or 515; followed by -66MDH or -66MDH-X.

SS-BG followed by 440, 445, 450, 455, 460, 465 or 470; followed by -60MDH or -60MDH-X.

 $SS-BG \ followed \ by \ 400, \ 405, \ 410, \ 415, \ 420 \ or \ 425; \ followed \ by \ -54MDH \ or \ -54MDH-X.$

SS-BG followed by 440, 445, 450, 455 or 460; followed by -72MDH.

SS-BG followed by 365, 370, 375, 380 or 385; followed by -60MDH.

ATM Issued: 24-Jan-2025



55-BG followed by 330, 335, 340 or 345; followed by -54MDH.

SS-BG followed by 420, 425, 430, 435, 440, 445, 450, 455 or 460; followed by -54MDH(T) or -54MDH(T)-X.

SS-BG followed by 465, 470, 475, 480, 485, 490, 495, 550, 505 or 510; followed by -60MDH(T) or -60MDH(T)-X.

SS-BG followed by 515, 520, 525, 530, 535, 540, 545, 550, 555 or 560; followed by -66MDH(T) or -66MDH(T)-X.

SS-BG followed by 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610 or 615; followed by -72MDH(T) or -72MDH(T)-X.

SS-BG followed by 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by -78MDH(T) or -78MDH(T)-X.

SS-BG followed by 680, 685, 690, 695, 700, 705, 710, 715, 720, 725 or 730; followed by -66MDH-G12(T) or -66MDH-G12(T)-X.

SS-BG followed by 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by -60MDH-G12(T) or -60MDH-G12(T)-X.

SS-BG followed by 435, 440, 445 or 450; followed by -48MDH-G11(T) or -48MDH-G11(T)-X. SS-BG followed by 485, 490, 495, 500 or 505; followed by -54MDH-G11(T) or -54MDH-G11(T)-X.

SS-BG followed by 545, 550, 555, 560 or 565; followed by -60MDH-G11(T) or -60MDH-G11(T)-X.



Jalan Wiraraja Industrial Estate Building

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to multiple listee model(s) identified on the correlation page of the Listing Report.

This document is the property of Intertek Testing Services and is not transferable. The certification mark(s) may be applied only at the location of the Party Authorized To Apply Mark.

Applicant: PT THORNOVA SOLAR INDONESIA Manufacturer: PT APOLLO SOLAR INDONESIA

Jalan Brigjen Katamso, Kel. Tanjung

Address: Uncang, Kec. Batu Aji, Kota Batam, Address: Blok B No. 7-8, Kel. Kabil, Kec. Nongsa,

Provinsi Kepulauan Riau, 29466 Kota Batam, Kepulauan Riau

Country: Indonesia Country: Indonesia

Party Authorized To Apply Mark: Same as Manufacturer

Report Issuing Office: Intertek Testing Services (Shanghai FTZ) Co., Ltd

Control Number: 5029953 Authorized by:

for L. Matthew Snyder, Certification Manager



Intertek

This document supersedes all previous Authorizations to Mark for the noted Report Number.

This Authorization to Mark is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Authorization to Mark. Only the Client is authorized to permit copying or distribution of this Authorization to Mark and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement and in this Authorization to Mark. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.

AUTHORIZATION TO MARK

Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [UL 61730-1:2022 Ed.2]

Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [UL 61730-2:2022 Ed.2+R:25Apr2023]

Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [CSA C22.2#61730-1:2019 Ed.2]

Standard(s):

Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [CSA C22.2#61730-2:2019 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1: Test Requirements [UL 61215-1:2021 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1-1: Special Requirements for Testing of Crystalline Silicon Photovoltaic (PV) Modules [UL 61215-1-1:2021 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 2: Test Procedures [UL 61215-2:2021 Ed.2]

Product: Crystalline Silicon Photovoltaic (PV) Modules

Brand Name: SUNOVA SOLAR, THORNOVA SOLAR

TS-BG78(followed by 575, 580, 585, 590, 595, 600, 605 or 610; followed by) or)-X.

TS-BG72(followed by 530, 535, 540, 545, 550, 555, 560 or 565; followed by) or)-X.

TS-BG66(followed by 485, 490, 495, 500, 505, 510 or 515; followed by) or)-X.

TS-BG60(followed by 440, 445, 450, 455, 460, 465 or 470; followed by) or)-X.

TS-BG54(followed by 400, 405, 410, 415, 420 or 425; followed by) or)-X.

TS-BG72(followed by 440, 445, 450, 455 or 460; followed by).

TS-BG60(followed by 365, 370, 375, 380 or 385; followed by).

TS-BG54(followed by 330, 335, 340 or 345; followed by) or).

TS-BGT54(followed by 420, 425, 430, 435, 440, 445, 450, 455 or 460; followed by) or)-X.

TS-BGT60(followed by 465, 470, 475, 480, 485, 490, 495, 500, 505 or 510; followed by) or)-X.

TS-BGT66(followed by 515, 520, 525, 530, 535, 540, 545, 550, 555 or 560; followed by) or)-X.

TS-BGT72(followed by 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610 or 615; followed by) or)- X.

TS-BGT78(followed by 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by) or)-X.

or)-X.
TS-BGT66(followed by 680, 685, 690, 695, 700, 705, 710, 715, 720, 725 or 730; followed by)-G12 or)-G12-X.

TS-BGT60(followed by 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by)-G12 or)-G12-X.

TS-BGT48(followed by 435, 440, 445 or 450; followed by)-G11 or)-G11-X.

TS-BGT54(followed by 485, 490, 495, 500 or 505; followed by)-G11 or)-G11-X.

TS-BGT60(followed by 545, 550, 555, 560 or 565; followed by)-G11 or)-G11-X.

TS-BGT66(followed by 595, 600, 605, 610, 615 or 620; followed by)-G11 or)-G11-X.

SS-BG followed by 575, 580, 585, 590, 595, 600, 605 or 610; followed by -78MDH or -78MDH-X.

SS-BG followed by 530, 535, 540, 545, 550, 555, 560 or 565; followed by -72MDH or -72MDH-X.

SS-BG followed by 485, 490, 495, 500, 505, 510 or 515; followed by -66MDH or -66MDH-X.

SS-BG followed by 440, 445, 450, 455, 460, 465 or 470; followed by -60MDH or -60MDH-X.

 $SS-BG \ followed \ by \ 400, \ 405, \ 410, \ 415, \ 420 \ or \ 425; \ followed \ by \ -54MDH \ or \ -54MDH-X.$

SS-BG followed by 440, 445, 450, 455 or 460; followed by -72MDH.

SS-BG followed by 365, 370, 375, 380 or 385; followed by -60MDH.

ATM Issued: 24-Jan-2025



55-BG followed by 330, 335, 340 or 345; followed by -54MDH.

SS-BG followed by 420, 425, 430, 435, 440, 445, 450, 455 or 460; followed by -54MDH(T) or -54MDH(T)- \times .

SS-BG followed by 465, 470, 475, 480, 485, 490, 495, 550, 505 or 510; followed by -60MDH(T) or -60MDH(T)-X.

SS-BG followed by 515, 520, 525, 530, 535, 540, 545, 550, 555 or 560; followed by -66MDH(T) or -66MDH(T)- $\rm X$.

SS-BG followed by 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610 or 615; followed by -72MDH(T) or -72MDH(T)-X.

SS-BG followed by 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by -78MDH(T) or -78MDH(T)-X.

SS-BG followed by 680, 685, 690, 695, 700, 705, 710, 715, 720, 725 or 730; followed by -66MDH-G12(T) or -66MDH-G12(T)-X.

SS-BG followed by 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by -60MDH-G12(T) or -60MDH-G12(T)-X.

SS-BG followed by 435, 440, 445 or 450; followed by -48MDH-G11(T) or -48MDH-G11(T)-X. SS-BG followed by 485, 490, 495, 500 or 505; followed by -54MDH-G11(T) or -54MDH-G11(T)-X.

SS-BG followed by 545, 550, 555, 560 or 565; followed by -60MDH-G11(T) or -60MDH-G11(T)-X.



Address:

AUTHORIZATION TO MARK

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to multiple listee model(s) identified on the correlation page of the Listing Report.

This document is the property of Intertek Testing Services and is not transferable. The certification mark(s) may be applied only at the location of the Party Authorized To Apply Mark.

Address:

PT THORNOVA SOLAR INDONESIA PT Atelier Solar Indonesia Applicant: Manufacturer:

Jalan Brigjen Katamso, Kel. Tanjung

Uncang, Kec. Batu Aji, Kota Batam,

Provinsi Kepulauan Riau, 29466

Wiraraja Industrial Park I, Blok A No. 2

& 3A, Jalan Wiraraja, Kelurahan Kabil, Kecamatan Nongsa, Kota Batam,

Provinsi Kepulauan Riau, 29467

Country: Indonesia Country: Indonesia

Party Authorized To Apply Mark: Same as Manufacturer

Intertek Testing Services (Shanghai FTZ) Co., Ltd Report Issuing Office:

Control Number: *5030631* Authorized by:

for L. Matthew Snyder, Certification Manager



This document supersedes all previous Authorizations to Mark for the noted Report Number.

This Authorization to Mark is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Authorization to Mark. Only the Client is authorized to permit copying or distribution of this Authorization to Mark and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement and in this Authorization to Mark. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.

AUTHORIZATION TO MARK

Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [UL 61730-1:2022 Ed.2]

Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [UL 61730-2:2022 Ed.2+R:25Apr2023]

Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [CSA C22.2#61730-1:2019 Ed.2]

Standard(s):

Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [CSA C22.2#61730-2:2019 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1: Test Requirements [UL 61215-1:2021 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1-1: Special Requirements for Testing of Crystalline Silicon Photovoltaic (PV) Modules [UL 61215-1-1:2021 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 2: Test Procedures [UL 61215-2:2021 Ed.2]

Product: Crystalline Silicon Photovoltaic (PV) Modules

Brand Name: SUNOVA SOLAR, THORNOVA SOLAR

TS-BG78(followed by 575, 580, 585, 590, 595, 600, 605 or 610; followed by) or)-X.

TS-BG72(followed by 530, 535, 540, 545, 550, 555, 560 or 565; followed by) or)-X.

TS-BG66(followed by 485, 490, 495, 500, 505, 510 or 515; followed by) or)-X.

TS-BG60(followed by 440, 445, 450, 455, 460, 465 or 470; followed by) or)-X.

TS-BG54(followed by 400, 405, 410, 415, 420 or 425; followed by) or)-X.

TS-BG72(followed by 440, 445, 450, 455 or 460; followed by).

TS-BG60(followed by 365, 370, 375, 380 or 385; followed by).

TS-BG54(followed by 330, 335, 340 or 345; followed by) or).

TS-BGT54(followed by 420, 425, 430, 435, 440, 445, 450, 455 or 460; followed by) or)-X.

TS-BGT60(followed by 465, 470, 475, 480, 485, 490, 495, 500, 505 or 510; followed by) or)-X.

TS-BGT66(followed by 515, 520, 525, 530, 535, 540, 545, 550, 555 or 560; followed by) or)-X.

TS-BGT72(followed by 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610 or 615; followed by) or)- X.

TS-BGT78(followed by 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by) or)-X.

or)-X.
TS-BGT66(followed by 680, 685, 690, 695, 700, 705, 710, 715, 720, 725 or 730; followed by)-G12 or)-G12-X.

TS-BGT60(followed by 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by)-G12 or)-G12-

TS-BGT48(followed by 435, 440, 445 or 450; followed by)-G11 or)-G11-X.

TS-BGT54(followed by 485, 490, 495, 500 or 505; followed by)-G11 or)-G11-X.

TS-BGT60(followed by 545, 550, 555, 560 or 565; followed by)-G11 or)-G11-X.

TS-BGT66(followed by 595, 600, 605, 610, 615 or 620; followed by)-G11 or)-G11-X.

SS-BG followed by 575, 580, 585, 590, 595, 600, 605 or 610; followed by -78MDH or -78MDH-X.

SS-BG followed by 530, 535, 540, 545, 550, 555, 560 or 565; followed by -72MDH or -72MDH-X.

SS-BG followed by 485, 490, 495, 500, 505, 510 or 515; followed by -66MDH or -66MDH-X.

SS-BG followed by 440, 445, 450, 455, 460, 465 or 470; followed by -60MDH or -60MDH-X.

 $SS-BG \ followed \ by \ 400, \ 405, \ 410, \ 415, \ 420 \ or \ 425; \ followed \ by \ -54MDH \ or \ -54MDH-X.$

SS-BG followed by 440, 445, 450, 455 or 460; followed by -72MDH. SS-BG followed by 365, 370, 375, 380 or 385; followed by -60MDH.

00 DO fallannad bir 000, 000, 040 au 040, fallannad bir - EAMDLL



55-BG followed by 330, 335, 340 or 345; followed by -54MDH.

SS-BG followed by 420, 425, 430, 435, 440, 445, 450, 455 or 460; followed by -54MDH(T) or -54MDH(T)- \times .

SS-BG followed by 465, 470, 475, 480, 485, 490, 495, 550, 505 or 510; followed by -60MDH(T) or -60MDH(T)-X.

SS-BG followed by 515, 520, 525, 530, 535, 540, 545, 550, 555 or 560; followed by -66MDH(T) or -66MDH(T)- $\rm X$.

SS-BG followed by 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610 or 615; followed by -72MDH(T) or -72MDH(T)-X.

SS-BG followed by 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by -78MDH(T) or -78MDH(T)-X.

SS-BG followed by 680, 685, 690, 695, 700, 705, 710, 715, 720, 725 or 730; followed by -66MDH-G12(T) or -66MDH-G12(T)-X.

SS-BG followed by 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by -60MDH-G12(T) or -60MDH-G12(T)-X.

SS-BG followed by 435, 440, 445 or 450; followed by -48MDH-G11(T) or -48MDH-G11(T)-X. SS-BG followed by 485, 490, 495, 500 or 505; followed by -54MDH-G11(T) or -54MDH-G11(T)-X.

SS-BG followed by 545, 550, 555, 560 or 565; followed by -60MDH-G11(T) or -60MDH-G11(T)-X.



Jalan Brigjen Katamso, Kel. Tanjung

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to multiple listee model(s) identified on the correlation page of the Listing Report.

This document is the property of Intertek Testing Services and is not transferable. The certification mark(s) may be applied only at the location of the Party Authorized To Apply Mark.

Applicant: PT THORNOVA SOLAR INDONESIA Manufacturer: PT THORNOVA SOLAR INDONESIA

Jalan Brigjen Katamso, Kel. Tanjung

Address: Uncang, Kec. Batu Aji, Kota Batam, Address: Uncang, Kec. Batu Aji, Kota Batam,

Provinsi Kepulauan Riau, 29466 Provinsi Kepulauan Riau, 29466

Country: Indonesia Country: Indonesia

Party Authorized To Apply Mark: Same as Manufacturer

Report Issuing Office: Intertek Testing Services (Shanghai FTZ) Co., Ltd

Control Number: 5030618 Authorized by:

for L. Matthew Snyder, Certification Manager



This document supersedes all previous Authorizations to Mark for the noted Report Number.

This Authorization to Mark is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Authorization to Mark. Only the Client is authorized to permit copying or distribution of this Authorization to Mark and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement and in this Authorization to Mark. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.

AUTHORIZATION TO MARK

Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [UL 61730-1:2022 Ed.2]

Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [UL 61730-2:2022 Ed.2+R:25Apr2023]

Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [CSA C22.2#61730-1:2019 Ed.2]

Standard(s):

Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [CSA C22.2#61730-2:2019 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1: Test Requirements [UL 61215-1:2021 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1-1: Special Requirements for Testing of Crystalline Silicon Photovoltaic (PV) Modules [UL 61215-1-1:2021 Ed.2]

Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 2: Test Procedures [UL 61215-2:2021 Ed.2]

Product: Crystalline Silicon Photovoltaic (PV) Modules

Brand Name: SUNOVA SOLAR, THORNOVA SOLAR

TS-BG78(followed by 575, 580, 585, 590, 595, 600, 605 or 610; followed by) or)-X.

TS-BG72(followed by 530, 535, 540, 545, 550, 555, 560 or 565; followed by) or)-X.

TS-BG66(followed by 485, 490, 495, 500, 505, 510 or 515; followed by) or)-X.

TS-BG60(followed by 440, 445, 450, 455, 460, 465 or 470; followed by) or)-X.

TS-BG54(followed by 400, 405, 410, 415, 420 or 425; followed by) or)-X.

TS-BG72(followed by 440, 445, 450, 455 or 460; followed by).

TS-BG60(followed by 365, 370, 375, 380 or 385; followed by).

TS-BG54(followed by 330, 335, 340 or 345; followed by) or).

TS-BGT54(followed by 420, 425, 430, 435, 440, 445, 450, 455 or 460; followed by) or)-X.

TS-BGT60(followed by 465, 470, 475, 480, 485, 490, 495, 500, 505 or 510; followed by) or)-X.

TS-BGT66(followed by 515, 520, 525, 530, 535, 540, 545, 550, 555 or 560; followed by) or)-X.

TS-BGT72(followed by 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610 or 615; followed by) or)- X.

TS-BGT78(followed by 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by) or)-X.

or)-X.
TS-BGT66(followed by 680, 685, 690, 695, 700, 705, 710, 715, 720, 725 or 730; followed by)-G12 or)-G12-X.

TS-BGT60(followed by 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by)-G12 or)-G12-

TS-BGT48(followed by 435, 440, 445 or 450; followed by)-G11 or)-G11-X.

TS-BGT54(followed by 485, 490, 495, 500 or 505; followed by)-G11 or)-G11-X.

TS-BGT60(followed by 545, 550, 555, 560 or 565; followed by)-G11 or)-G11-X.

TS-BGT66(followed by 595, 600, 605, 610, 615 or 620; followed by)-G11 or)-G11-X.

SS-BG followed by 575, 580, 585, 590, 595, 600, 605 or 610; followed by -78MDH or -78MDH-X.

SS-BG followed by 530, 535, 540, 545, 550, 555, 560 or 565; followed by -72MDH or -72MDH-X.

SS-BG followed by 485, 490, 495, 500, 505, 510 or 515; followed by -66MDH or -66MDH-X.

SS-BG followed by 440, 445, 450, 455, 460, 465 or 470; followed by -60MDH or -60MDH-X. SS-BG followed by 400, 405, 410, 415, 420 or 425; followed by -54MDH or -54MDH-X.

SS-BG followed by 440, 445, 450, 455 or 460; followed by -72MDH.

SS-BG followed by 365, 370, 375, 380 or 385; followed by -60MDH.



55-BG followed by 330, 335, 340 or 345; followed by -54MDH.

SS-BG followed by 420, 425, 430, 435, 440, 445, 450, 455 or 460; followed by -54MDH(T) or -54MDH(T)- \times .

SS-BG followed by 465, 470, 475, 480, 485, 490, 495, 550, 505 or 510; followed by -60MDH(T) or -60MDH(T)-X.

SS-BG followed by 515, 520, 525, 530, 535, 540, 545, 550, 555 or 560; followed by -66MDH(T) or -66MDH(T)- $\rm X$.

SS-BG followed by 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610 or 615; followed by -72MDH(T) or -72MDH(T)-X.

SS-BG followed by 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by -78MDH(T) or -78MDH(T)-X.

SS-BG followed by 680, 685, 690, 695, 700, 705, 710, 715, 720, 725 or 730; followed by -66MDH-G12(T) or -66MDH-G12(T)-X.

SS-BG followed by 620, 625, 630, 635, 640, 645, 650, 655, 660 or 665; followed by -60MDH-G12(T) or -60MDH-G12(T)-X.

SS-BG followed by 435, 440, 445 or 450; followed by -48MDH-G11(T) or -48MDH-G11(T)-X. SS-BG followed by 485, 490, 495, 500 or 505; followed by -54MDH-G11(T) or -54MDH-G11(T)-X.

SS-BG followed by 545, 550, 555, 560 or 565; followed by -60MDH-G11(T) or -60MDH-G11(T)-X.