



Certificate of Compliance

Certificate: 80021505

Master Contract: 266494

Project: 80125870

Date Issued: 2022-05-07

Issued To: Longi Green Energy Technology Co., Ltd.
No. 388, Middle Hangtian Road,
Chang'an District
Chang'an District, Xi'an., Shaanxi, 710100
China

Attention: Fei Zhuang

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: Tom Yang
Tom Yang

PRODUCTS

CLASS - C531110 - POWER SUPPLIES Photovoltaic Modules and Panels

CLASS - C531190 - POWER SUPPLIES Photovoltaic Modules and Panels - Certified to US Standards

Bifacial dual glass photovoltaic modules with maximum system voltage of 1500 V dc, Safety Class II PV modules.

LR6-72BP-xxxM, xxx=350 to 380, in steps of 5W,

LR6-72PD-xxxM, xxx= 345 to 370, in steps of 5W,

LR6-72DG-xxxM, xxx= 330 to 360, in steps of 5W,

LR6-72HBD-xxxM, xxx= 360 to 395, in steps of 5W,

LR6-72HIBD-xxxM, xxx= 360 to 385, in steps of 5W,

LR6-72OPD-xxxM, xxx= 380 to 405, in steps of 5W,



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LR6-72HPD-xxxM, xxx= 360 to 385, in steps of 5W,
LR6-72MBD-xxxM, xxx= 360 to 380, in steps of 5W,
LR6-72MPD-xxxM, xxx= 360 to 380, in steps of 5W,
LR4-72HBD-xxxM, xxx= 415 to 455), in steps of 5W,
LR4-72HIBD-xxxM, xxx= 420 to 450, in steps of 5W,
LR6-60BP-xxxM, xxx=290 to 315, in steps of 5W,
LR6-60PD-xxxM, xxx=285 to 305, in steps of 5W,
LR6-60DG-xxxM, xxx=275 to 300, in steps of 5W,
LR6-60HBD-xxxM, xxx= 300 to 320, in steps of 5W,
LR6-60HIBD-xxxM, xxx= 300 to 320, in steps of 5W,
LR6-60OPD-xxxM, xxx= 315 to 335, in steps of 5W,
LR6-60HPD-xxxM, xxx= 300 to 320, in steps of 5W,
LR6-60MBD-xxxM, xxx= 300 to 320, in steps of 5W,
LR6-60MPD-xxxM, xxx= 300 to 320, in steps of 5W,
LR4-60HBD-xxxM, xxx= 345 to 380, in steps of 5W,
LR4-60HIBD-xxxM, xxx= 350 to 380, in steps of 5W,
LR6-78HBD-xxxM, xxx= 390 to 420, in steps of 5W,
LR6-78OPD-xxxM, xxx= 410 to 435, in steps of 5W,
LR5-72HBD-xxxM, xxx= 520 to 555, in steps of 5W,
LR5-66HBD-xxxM, xxx= 475 to **505**, in steps of 5W,
LR4-78ZBD-xxxM, xxx= 465 to 485, in steps of 5W,
LR5-72HIBD-xxxM, xxx= 520 to **555**, in steps of 5W,
LR5-66HIBD-xxxM, xxx= 475 to **505**, in steps of 5W,
LR4-78HBD-xxxM, xxx= 470 to 500, in steps of 5W,
LR5-78HBD-xxxM, xxx= 570 to 590, in steps of 5W,
LR5-78ZBD-xxxM, xxx= 560 to 580, in steps of 5W.

Note:

1. All electrical data are shown as relative to standard test conditions (STC) (1 000 W/m², (25 ± 2) °C, AM 1,5 according to IEC 60904-3).
2. Manufacturer's stated tolerance is ±3% for Voc and Pm, and Isc.
3. Rated electrical characteristics are only reflected the front side performance, regardless of the back side.
4. All modules model with suffix 'BP' after '72' or '60', are Bifacial PERC modules
5. All modules model with suffix 'PD' after '72' or '60', are modules with PERC Dual Glass.
6. All modules model with suffix 'DG' after '72' or '60', are modules with Dual Glass.
7. All modules model with suffix 'HBD' after '72' or '60' or '78', are modules with Multi-Busbar Bifacial Dual Glass.
8. All modules model with suffix 'OPD' after '72' or '60' or '78', are modules with Overlap Bifacial PERC Dual Glass.
9. All modules model with suffix 'HPD' after '72' or '60', are modules with Half Cell PERC Dual Glass.
10. All modules model with suffix 'MBD' after '72' or '60', are modules with Multi-Busbar Bifacial Dual Glass.
11. All modules model with suffix 'MPD' after '72' or '60', are modules with Multi-Busbar PERC Dual Glass.
12. All modules model with suffix 'HIBD' after '72' or '60', are modules with Half Improved Bifacial Cell Dual Glass.



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13. All modules model with suffix 'ZBD' after '72' or '60', are modules with Zero Clearance Bifacial Dual Glass.
14. LR6 is for models with 156mm cells, LR4 is for models with 166mm cells, and LR5 is for models with 182mm.
15. The operating ambient temperature of these devices may exceed 40°C at full load for all wire sizes if it is determined suitable in the field use application.
16. For details related to rating, size, configuration, etc. reference should be made to CSA Certification Record or the descriptive report.

APPLICABLE REQUIREMENTS

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|------------------------------------|---|
| CSA C22.2 No. 61730-1:19 | Photovoltaic (PV) module safety qualification - Part 1: Requirements for construction, 2019-12 |
| CSA C22.2 No. 61730-2:19 | Photovoltaic (PV) module safety qualification - Part 2: Requirements for testing, 2019-12 |
| UL 61730-1 1 st Edition | Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction, 2017-12-04, revision date 2020-04-30 |
| UL 61730-2 1 st Edition | Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing, 2017-12-04, revision date 2020-04-30 |

Notes:

Products certified under Class C531110 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

| Project | Date | Description |
|----------|------------|---|
| 80125870 | 2022-05-07 | Update report 80021505 to revise the 182 mm cells dimension with little change, enlarge power range to 555W for model series LR5-72HIBD, enlarge power range to 505W for model series LR5-66HBD and LR5-66HIBD, revise the triangle cells connectors description, add the manufacturers name for the strings & cells Interconnector change the manufacturers name from MULTI-CONTACT ESSEN GMBH to Staubli Electrical Connectors AG as acquisition. |
| 80100720 | 2022-01-14 | Update report 80021505 to include reflective string connection 0.3mm x 4mm, 0.3mm x 7mm, include new installation methods and designed loads, 9 in total, include new size with little change for model series LR5-72HBD-xxxM and LR5-66HBD-xxxM, Requalification for CCIC Southern Testing Co., Ltd, under APT program. |
| 80108451 | 2021-12-31 | Update report 80021505 to include alternative superstrate and substrate glass 2.0 mm thickness by Ningxia Jinjin Technology Co., Ltd, include alternative output wiring system PV-LR07A complied with IEC 62790, base on TÜV SÜD Test Report No.: 70.407.21.168.01-01A1, 70.407.21.168.01-01 with additional evaluation requirement by CSA Group. |
| 80105635 | 2021-12-01 | Update report to enlarge power range for model series LR5-72HBD-xxxM to 555W, add alternate superstrate/substrate glass by CHANGZHOU HONGXIE SAFETY GLASS CO.,LTD, multiple listing information for encapsulation LET02/LRPT02 by LONGi, Co-license for Tesla Inc, type JB-TS03, and Co-license for SolarEdge Technologies Ltd, type PV-SE05A, add alternative frame adhesive RS-3316, and potting RS-3200 by ZHENJIANG RAYBOND HEW MATERIAL TECHIIOLOGY CO.LTD, new design for approved cells M6B9B, M6D9B, M10B9B, M10D9B, alternative fixing tape 9966 by Shanghai Hyperion Adhesive Material Co., Ltd.. |
| 80096054 | 2021-09-13 | Update report 80021505 to include alternate superstrate and substrate glass 2.0mm and 2.5mm thickness by Anhui Shengshi New Energy Materials Technology Co.,Ltd, add alternative encapsulation combination LRPT03/LRPT03 by Longi Green Energy Technology Co., Ltd, supplement encapsulation LRPT01/LRPT01 as included in project 80084260. |



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| 80084260 | 2021-07-05 | Update report 80021505 to include model series LR5-78HBD-xxxM, LR5-78ZBD-xxxM, new flux. |
| 80075688 | 2021-06-17 | Update report 80021505 to add: (1) Alternative superstrate 2.0 or 2.5mm coating tempered glass by Henan Ancai Hi-Tech Co., Ltd.; (2) Alternative substrate 2.0 or 2.5mm embossed coating tempered glass or floating coating tempered glass, with white gridding mask by Henan Ancai Hi-Tech Co., Ltd.; (3) Alternative encapsulation combination LRET/LRPT by Longi Green Energy Technology Co., Ltd. |
| 80063327 | 2021-05-21 | Update report 80021505 to add new model series LR4-78HBD-xxxM. |
| 80075686 | 2021-03-25 | Update report 80021505 to include superstrate and substrate glass 2.0mm and 2.5mm thickness by Changli glass Honghu Co., Ltd, add alternate adhesive and potting GUIBAO 888N for junction box PV-LR04A, and PV-LR05A, alternate junction box adhesive GUIBO 4808. |
| 80070016 | 2021-01-26 | Update report 80021505 to include new model series LR5-72HIBD-xxxM and LR5-66HIBD-xxxM, using new cell M10D9B, also enlarge the power range to 545W for model series LR5-72HBD-xxxM, update the naming code to make it clearer, add new connectors for Junction box PV-LR04B, refer to CSA report 70176715. |
| 80057350 | 2021-01-05 | Update report 80021505 to add alternate superstrate/substrate 2.5mm and 2.0mm thickness glass by CAI HONG GROUP NEW ENERGY COMPANY LIMITED, alternate fixing tape DT-9609 by Yantai Darbond Technology Co., Ltd. |
| 80057346 | 2020-12-25 | Update report 80021505 to include alternate cell M6B6B by JIANGSU RUNERGY YUEDA PV TECHNOLOGY CO.,LTD, alternate flux GOLF703-C by YIK SHING TAT INDUSTRIAL CO.,LTD. |
| 80055318 | 2020-12-14 | Update report 800215055 to add new designed model series LR4-78ZBD-xxxM. |
| 80063164 | 2020-11-27 | Update report to include new model series LR5-72HBD-xxxM and LR5-66HBD-xxxM, using halved cut cell M10B9B, output wiring system PV-LR05A. |
| 80062314 | 2020-11-20 | Update report 80021505 to include new superstrate and substrate 2.0mm/2.5mm glass by Shanxi RiShengDa New Energy Group Co.,Ltd, new POE by CHANGZHOU BBETTER FILM TECHNOLOGIES CO., LTD, and encapsulation SV15926/SE-556 by Changzhou Sveck Photovoltaic New Material Co., Ltd. |
| 80055162 | 2020-10-16 | Update report 80021505 to add alternate superstrate/substrate 2.5mm glass by Shaanxi Topray Solar Co., Ltd. |
| 80055161 | 2020-10-16 | Update report 80021505 to add alternate superstrate/substrate 2.5mm glass by Shenzhen New Kibing Technology Co., Ltd. Cell manufactures update as client's declaration. |



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| 80055163 | 2020-09-11 | Update report 80021505 to add alternate superstrate 2.0mm by Shenzhen New Kibing Technology Co., Ltd, and alternate encapsulation ISARD2180&ISARD1180 by Crown Advanced material Co., Ltd, revise the power range of model series LR6-72HBD to 390W, supplemented the missing cell M2B6B and Jbox PV-LR03B. |
| 80055164 | 2020-09-11 | Update report 80021505 to add alternate superstrate 2.0mm by Shaanxi Topray Solar Co., Ltd, and alternate encapsulation B601HP&B602 by Changzhou BBETTER FILM TECHNOLOGY CO.,LTD, add fixing tap UV-T. |
| 80052562 | 2020-08-21 | Update report to add alternate cell M6D9B and cell-connectors $\phi 0.32$ mm, update output wiring system configuration base on the TÜV SÜD Test IEC 62790 Report and manufacturer's statement, and enlarge the power range of model series LR4-72HIBD-xxxM and LR4-60HIBD-xxxM, add alternate lamination designs which have no clearance and creepage changed. |
| 80042753 | 2020-05-28 | Update report to add encapsulation combination F606PS/TF4, and glazed tempered glass. |
| 80040323 | 2020-04-14 | Update report to add Embossed Tempered glass or Floating Tempered Glass, and update information for output wiring system. |
| 80037990 | 2020-04-02 | Update report to add alternate cell M6B6B by Vina Cell Technology Co., Ltd, and flux SF105. |
| 80035967 | 2020-03-25 | Update report to add alternate cells interconnectors, and alternate output wiring compartments PV-LR02A, PV-LR03A, PV-LR04A. |
| 80027423 | 2020-03-25 | Update report to add alternate cells M6B9B and M6E9B, interconnectors, and alternate module sizes for models with 9bb M6 cells. |
| 80034138 | 2020-02-27 | Update report to add models LR4-72HBD-xxxM and LR4-60HBD-xxxM for new bifacial cell type M6B6B manufactured by LONGi. |
| 80023865 | 2020-02-21 | Update report to add alternate cell M2D5B. |
| 80023861 | 2020-02-19 | Update report to add new model series LR6-72HIBD-xxxM, LR6-60HIBD-xxxM, with cell M2D6B, and LR4-60HIBD-xxxM, LR4-72HIBD-xxxM, with cell M6D6B. |
| 80030667 | 2020-01-10 | Update report to add combinations of materials and new model series, as a reference of Test Report No. 704061700509-09 by TÜV SÜD Certification and Testing (China) Co., Ltd and previous CSA projects. |
| 80021505 | 2019-11-28 | Original certification. |