



# Certificate of Compliance

**Certificate:** 70135642 (LR 17)

**Master Contract:** 270178

**Project:** 80001391

**Date Issued:** 2019-04-25

**Issued to:** Seraphim Energy Group Inc.  
4683 Chabot Drive,  
Suite 110 Pleasanton,, California 94588  
USA

**Attention:** Terry Jin

*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:** Qiang (Sean) Jiang  
Qiang (Sean) Jiang

## PRODUCTS

CLASS - C531190 - POWER SUPPLIES-Photovoltaic Modules and Panels - Certified to US Standards  
CLASS - C531110 - POWER SUPPLIES-Photovoltaic Modules and Panels

Photovoltaic modules with Fire Performance Type 2 or 1 (only for USA), Class C (only for Canada).

Model series SEG-6PA-XXXWW (XXX=245 to 365), SEG-6PA-XXXWB (XXX=245 to 365), SEG-6PA-XXXBW (XXX=245 to 365), SEG-6PA-XXXBB (XXX=245 to 365), SEG-6PB -XXXWW (XXX=205 to 305), SEG-6PB-XXXWB (XXX=205 to 305), SEG-6PB-XXXBW (XXX=205 to 305), SEG-6PB-XXXBB (XXX=205 to 305), SEG-6PC-XXXWW (XXX=210 to 270), SEG-6PC-XXXWB (XXX=210 to 270), SEG-6PC-XXXBW (XXX=210 to 270), SEG-6PC-XXXBB (XXX=210 to 270), SEG-6PD-XXXWW (XXX=185 to 240), SEG-6PD-XXXWB (XXX=185 to 240), SEG-6PD-XXXBW (XXX=185 to 240), SEG-6PD-XXXBB (XXX=185 to 240), SEG-6PE-XXXWW (XXX=140 to 180), SEG-6PE-XXXWB (XXX=140 to 180), SEG-6PE-XXXBW (XXX=140 to 180), SEG-6PE-XXXBB (XXX=140 to 180);

Model series SEG-6MA-XXXWW (XXX=290 to 400), SEG-6MA-XXXWB (XXX=290 to 400), SEG-6MA-XXXBW (XXX=290 to 400), SEG-6MA-XXXBB (XXX=290 to 400), SEG-6MB-XXXWW (XXX=250 to 330), SEG-6MB-XXXWB (XXX=250 to 330), SEG-6MB-XXXBW (XXX=250 to 330), SEG-6MB-XXXBB (XXX=250 to 330), SEG-6MC-XXXWW (XXX=230 to 300), SEG-6MC-XXXWB (XXX=230 to 300), SEG-6MC-XXXBW (XXX=230 to 300), SEG-6MC-XXXBB (XXX=230 to 300), SEG-6MD-XXXWW (XXX=180 to 265), SEG-6MD-XXXWB (XXX=180 to 265), SEG-6MD-XXXBW (XXX=180 to 265), SEG-6MD-XXXBB (XXX=180 to 265)



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265), SEG-6ME-XXXWW (XXX=135 to 200), SEG-6ME-XXXWB (XXX=135 to 200), SEG-6ME-XXXBW (XXX=135 to 200), SEG-6ME-XXXBB(XXX=135 to 200);

Model series SEG-XXX-5MA (XXX=225 to 285), SEG-XXX-5MB (XXX=160 to 210), SEG-XXX-5MC (XXX=80 to 105);

Model series SEG-E11A-XXX(XXX=325-385), SEG-E11B-XXX(XXX=275-320), SEG-E11C-XXX(XXX=220-255), SEG-E11D-XXX(XXX=165-190), SEG-E12A-XXX(XXX=320-370),SEG-E12B-XXX(XXX=270-305), SEG-E12C-XXX(XXX=215-245), SEG-E12D-XXX (XXX=160-180), SEG-E13A-XXX (XXX=305-360),SEG-E13B-XXX(XXX=260-300), SEG-E13C-XXX(XXX=210-240), SEG-E13D-XXX(XXX=155-175),

Model series SEG-E01A-XXX (XXX=325-400), SEG-E02A-XXX (XXX=320-385), SEG-E03A-XXX (XXX=310-375), SEG-E04A-XXX (XXX=300-360), SEG-E05A-XXX (XXX=290-350), SEG-E06A-XXX (XXX=280-340), SEG-E07A-XXX (XXX=270-325), SEG-E08A-XXX (XXX=260-315),SEG-E09A-XXX (XXX=250-305), SEG-E01B-XXX (XXX=275-330), SEG-E02B-XXX (XXX=275-320), SEG-E03B-XXX (XXX=260-310), SEG-E04B-XXX (XXX=250-300), SEG-E05B-XXX (XXX=245-290), SEG-E06B-XXX (XXX=235-280), SEG-E07B-XXX (XXX=225-270), SEG-E08B-XXX (XXX=220-260),SEG-E09B-XXX (XXX=210-250), SEG-E01C-XXX (XXX=220-265), SEG-E02C-XXX (XXX=215-255), SEG-E03C-XXX (XXX=210-250), SEG-E04C-XXX (XXX=200-240), SEG-E05C-XXX (XXX=195-230), SEG-E06C-XXX (XXX=190-225), SEG-E07C-XXX (XXX=180-215), SEG-E08C-XXX (XXX=175-210),SEG-E09C-XXX (XXX=170-200), SEG-E01D-XXX (XXX=165-200), SEG-E02D-XXX (XXX=160-190), SEG-E03D-XXX (XXX=155-185), SEG-E04D-XXX (XXX=150-180), SEG-E05D-XXX (XXX=145-175), SEG-E06D-XXX (XXX=140-170), SEG-E07D-XXX (XXX=135-160), SEG-E08D-XXX (XXX=130-155),SEG-E09D-XXX (XXX=125-150);

Model series SEG-BMA-XXXWW (XXX=330 to 375), SEG-BMA-XXXWB (XXX=330 to 375), SEG-BMA-XXXBW (XXX=330 to 375), SEG-BMA-XXXBB (XXX=330 to 375), SEG-BMB -XXXWW (XXX=275 to 310), SEG-BMB -XXXWB (XXX=275 to 310), SEG-BMB -XXXBW (XXX=275 to 310), SEG-BMB -XXXBB (XXX=275 to 310), SEG-BMC-XXXWW (XXX=300 to 340), SEG-BMC-XXXWB (XXX=300 to 340), SEG-BMC-XXXBW (XXX=300 to 340), SEG-BMC-XXXBB (XXX=300 to 340), SEG-BMD-XXXWW (XXX=245 to 280), SEG-BMD-XXXWB (XXX=245 to 280), SEG-BMD-XXXBW (XXX=245 to 280), SEG-BMD-XXXBB (XXX=245 to 280), SEG-BME-XXXWW (XXX=220 to 250), SEG-BME-XXXWB (XXX=220 to 250), SEG-BME-XXXBW (XXX=220 to 250), SEG-BME-XXXBB (XXX=220 to 250);

Model series SEG-BPA-XXXWW (XXX=310 to 350), SEG-BPA-XXXWB (XXX=310 to 350), SEG-BPA-XXXBW (XXX=310 to 350), SEG-BPA-XXXBB (XXX=310 to 350), SEG-BPB-XXXWW (XXX=255 to 290), SEG-BPB-XXXWB (XXX=255 to 290), SEG-BPB-XXXBW (XXX=255 to 290), SEG-BPB-XXXBB (XXX=255 to 290), SEG-BPC-XXXWW (XXX=280 to 320), SEG-BPC-XXXWB (XXX=280 to 320), SEG-BPC-XXXBW (XXX=280 to 320), SEG-BPC-XXXBB (XXX=280 to 320), SEG-BPD-XXXWW (XXX=230 to 260), SEG-BPD-XXXWB (XXX=230 to 260), SEG-BPD-XXXBW (XXX=230 to 260), SEG-BPD-XXXBB (XXX=230 to 260), SEG-BPE-XXXWW (XXX=205 to 230), SEG-BPE-XXXWB (XXX=205 to 230), SEG-BPE-XXXBW (XXX=205 to 230), SEG-BPE-XXXBB (XXX=205 to 230);

Notes:



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1. Rated electrical characteristics are within +/- 10% of measured values at Standard Test Conditions of 100 mW/cm<sup>2</sup> irradiance, AM 1.5 spectrums, and 25°C, NOCT: 45 +/-2°C. Fuse rating 15 or 20A.
2. SEG-6PA-XXXWW/WB/BW/BB are identical on the construction except the color of substrate and frame, see detail information as following: WW -whitebacksheet, Whiteframe; WB - whitebacksheet, black frame; BW–black backsheet, whiteframe; BB–black backsheet, blackframe.
3. Photovoltaic modules with maximum system voltage of 1000 V dc (All series) or 1500V dc (SEG-6PA/6PB/6MA/6MB-XXXWW/WB/BW/BB, SEG –BMA/BMB/BMC/BMD/BME/-XXXWW/WB/BW/BB, SEG –BPA/BPB/BPC/BPD/BPE/-XXXWW/WB/BW/BB series).

### **APPLICABLE REQUIREMENTS**

ULC/ORD- C1703-01 - Flat-Plate Photovoltaic Modules and Panels

UL 1703-3rd Edition - Flat-Plate Photovoltaic Modules and Panels



## 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
80001391	2019-04-25	Update report 70135642 to extend the power rating for 6MA, 6MB, 6MC, 6MD and 6ME series, add a new cell size based on previous design, increase the module size for 6MA, 6MB, 6MC, 6MD and 6ME series.
70218248	2019-03-27	Update report 70135642 to add a new Vietnam manufacturer.
70191514	2018-09-14	Update report 70135642 to add two new cell (EE6E5C and EE6E4C).
70191516	2018-07-27	Update report 70135642 to add new half-cell series, add two junction boxes, add new ribbon.
70172888	2018-05-22	Update report 70135642 to add a new Vina manufacturer, correct and expend the electrical rating for SEG-6PA, SEG-6PB, SEG-6PC, SEG-6PD, SEG-6PE, SEG-6MC, SEG-6MD, SEG-6ME, SEG-XXX-5MA/B/C, SEG-E02B, SEG-E07B, SEG-E07C series, add a new frame, WMTC lab capacity expending.
70167866	2018-01-08	Update report 70135642 to add two 5BB cell and new ribbons
70162770	2017-11-14	Update report 70135642 to add two new connectors, two new cables, a new diode, a new potting material for junction box SD-901.
70145208	2017-10-31	Update report 70135642 to add three new manufacture, add a new substrate, add a new EVA.
70161375	2017-10-30	Update report 70135642 to add a new Korea manufacturer.
70148577	2017-07-25	Update report 70135642 to expend the eclips model and mechanical loading rating, add a new sealing component. (Test result based report 70018242, project 70145199 & 70145201)
70135642	2017-06-21	Copy file (MC:262723, Report No.: 70018242)