



Certificate of Compliance

Certificate: 70216168

Master Contract: 274817

Project: 80034796

Date Issued: 2020-02-24

Issued To: Peimar Inc
309 Fellowship Road, Suite 115
East Gate Center
Mount Laurel, New Jersey, 08054
United States

Attention: Stefano Caruso

The products listed below are eligible to bear the CSA Mark shown with adjacent indicator 'US'



Issued by: *Uday Singh*
Uday Singh

PRODUCTS

CLASS 5311 90 - POWER SUPPLIES - Photovoltaic Modules and Panels (Certified to U.S. Standards)

Photovoltaic Modules

- Model SGXXXM Series, mono-crystalline silicon, 72 Cell, where xxx is the power output from 380 W to 305 W.

Electrical data:

Model	Rated Max @ STC (Watts)	Voltage at Rated @ Max Power (V)	Current at Rated Max Power @ STC (A)	Open Circuit Voltage @ STC (A)	Short Circuit Current @ STC (A)
	(Pmax)	(Vmp)	(Imp)	(Voc)	(Isc)



SG380M	380	38.70	9.83	47.21	10.45
SG375M	375	38.50	9.75	47.10	10.31
SG370M	370	38.40	9.65	46.90	10.24
SG365M	365	38.30	9.54	46.80	10.12
SG360M	360	38.20	9.47	46.70	10.09
SG355M	355	38.10	9.35	46.60	10.00
SG350M	350	38.00	9.22	46.20	9.94
SG345M	345	37.90	9.12	45.80	9.90
SG340M	340	37.86	9.00	45.31	9.86
SG335M	335	37.82	8.87	45.25	9.73
SG330M	330	37.80	8.74	45.20	9.58
SG325M	325	37.60	8.65	45.00	9.54
SG320M	320	37.50	8.54	44.80	9.50
SG315M	315	37.46	8.43	44.70	9.40
SG310M	310	37.40	8.31	44.60	9.28
SG305M	305	37.31	8.22	44.40	9.18
Max Series Fuse Rating (A)	20				
Max System Voltage (V)	1500				
Fire Performance Rating	Type 1				

- Model SGXXXP Series, multi-crystalline silicon, 72 Cell, where xxx is the power output from 350 W to 305 W.

Model	Rated Max @ STC (Watts)	Voltage at Rated @ Max Power (V)	Current at Rated Max Power @ STC (A)	Open Circuit Voltage @ STC (A)	Short Circuit Current @ STC (A)
	(Pmax)	(Vmp)	(Imp)	(Voc)	(Isc)
SG350P	350	37.81	9.27	46.57	9.85
SG345P	345	37.69	9.16	46.41	9.74
SG340P	340	37.58	9.05	46.26	9.63
SG335P	335	37.48	8.94	46.10	9.54
SG330P	330	37.38	8.83	45.98	9.42
SG325P	325	37.28	8.72	45.87	9.31
SG320P	320	37.17	8.61	45.75	9.19
SG315P	315	37.06	8.50	45.64	9.07
SG310P	310	36.95	8.39	45.52	8.95
SG305P	305	36.84	8.28	45.41	8.84
Max Series Fuse Rating (A)	20				
Max System Voltage (V)	1500				
Fire Performance Rating	Type 1				

- Model SGXXXM Series, mono-crystalline silicon, 60 Cell, where xxx is the power output from 320 W to 255 W.



Model	Rated Max @ STC (Watts)	Voltage at Rated @ Max Power (V)	Current at Rated Max Power @ STC (A)	Open Circuit Voltage @ STC (A)	Short Circuit Current @ STC (A)
	(Pmax)	(Vmp)	(Imp)	(Voc)	(Isc)
SG320M	320	33.24	9.63	41.20	9.85
SG315M	315	33.00	9.57	40.93	9.82
SG310M	310	32.60	9.51	40.70	9.80
SG310M	310	33.45	9.27	40.81	9.92
SG305M	305	32.30	9.45	40.32	9.76
SG300M	300	32.00	9.40	40.20	9.71
SG295M	295	31.76	9.30	39.64	9.68
SG290M	290	31.73	9.17	39.50	9.57
SG285M	285	31.71	8.99	39.00	9.54
SG280M	280	31.50	8.90	38.90	9.40
SG275M	275	31.30	8.80	38.70	9.34
SG270M	270	31.00	8.72	38.40	9.26
SG265M	265	30.90	8.60	38.24	9.21
SG260M	260	30.70	8.50	38.20	9.10
SG255M	255	30.60	8.35	37.80	8.97
Max Series Fuse Rating (A)	20				
Max System Voltage (V)	1500				
Fire Performance Rating	Type 1				

- Model SGXXXP Series, multi-crystalline silicon, 60 Cell, where xxx is the power output from 300 W to 260 W.

Model	Rated Max @ STC (Watts)	Voltage at Rated @ Max Power (V)	Current at Rated Max Power @ STC (A)	Open Circuit Voltage @ STC (A)	Short Circuit Current @ STC (A)
	(Pmax)	(Vmp)	(Imp)	(Voc)	(Isc)
SG300P	300	32.21	9.32	39.14	9.79
SG295P	295	32.07	9.21	39.03	9.67
SG290P	290	31.92	9.09	38.92	9.57
SG285P	285	31.74	8.98	38.79	9.46
SG280P	280	31.61	8.86	38.68	9.35
SG275P	275	31.47	8.74	38.57	9.24
SG270P	270	31.36	8.61	38.45	9.11
SG265P	265	31.26	8.48	38.31	8.99
SG260P	260	31.14	8.35	38.19	8.85



Max Series Fuse Rating (A)	20
Max System Voltage (V)	1500
Fire Performance Rating	Type 1

Notes:

1. Rated electrical characteristics are within +/-10% of measured values at Standard Test Conditions of 100 mW/cm² irradiance, AM 1.5 spectrum, and 25°C.
2. 1500V maximum system voltage can only be used with 1500V rated components (Junction box, connector and cable)

APPLICABLE REQUIREMENTS

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

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.

Additional markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent 'US' indicator for US only (indicating that products have been manufactured to the requirements of U.S. Standards).

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The following markings appear on the enclosure by silk-screening, permanent ink stamping, on adhesive labels that appear on the CSA List of Accepted Adhesive Nameplates, or by other permanent method:

1. Submitter's name and/or CSA Master Contract number "274817";
2. Model designation;
3. Complete electrical ratings (as per product description above);
4. Date code or date-traceable serial number;
5. The products listed are eligible to bear the CSA Mark shown with adjacent 'US' indicator for US only (indicating that products have been manufactured to the requirements of U.S. Standards).
6. The output power wiring leads, connector, or other connection means of a module or panel are identified with one of the following marking statements: "+" and "-" or "POS" and "NEG" or "POSITIVE" and "NEGATIVE";
7. The following marking is provided near the points where field connections will be made, and located so that it will be readily visible during installation: "For field connections, use No. 12AWG wires insulated for a minimum of 90°C";
8. The panel is marked relative to the maximum electrical rating of an acceptable series fuse (for protection against back feed): 20 A, Maximum System Voltage rating 1500 V dc;
9. Module Fire Performance Rating: Type 1
10. Installation and Assembly Instructions: The panel is supplied with installation instructions describing the methods of electrical and mechanical installation and the electrical ratings of the panel. When the fire rating is dependent upon a specific mounting structure, specific spacings, or specific means of attachment to the roof or structure, details of the specific parameter or parameters are included in the instructions.



- (a) The electrical installation instructions include a detailed description of the wiring method to be used in accordance with the National Electrical Code. This description includes:
 - (i) The size, type, and temperature rating of the conductors to be used;
 - (ii) The type of overcurrent protection to be used;
 - (iii) The minimum and maximum cable diameters when the wiring method is cable.
- (b) The mechanical installation instructions for roof mounting include:
 - (i) A statement indicating the minimum mechanical means to be used for securement of the module or panel to the roof;
 - (ii) A statement that the assembly is to be mounted over a fire-resistant roof covering rated for the application, and
- (c) The electrical ratings include following statement or the equivalent: "The electrical characteristics are within ± 10 percent of the indicated values of ISC, VOC, and Pmax under standard test conditions (irradiance of 100 mW/cm², AM 1.5 spectrum, and a cell temperature of 25°C (77°F))."

Exception: The tolerance may be either smaller than ± 10 percent or omitted, provided the values measured during the production line tests are:

 - (i) Within a tolerance indicated in the instructions when a smaller tolerance is indicated, or
 - (ii) the same as the values indicated in the instructions when the tolerance is omitted.
- (d) The installation instructions include a statement advising that artificially concentrated sunlight shall not be directed on the module or panel.
- (e) "Under normal conditions, a photovoltaic module is likely to experience conditions that produce more current and/or voltage than reported at standard test conditions. Accordingly, the values of ISC and VOC marked on this module should be multiplied by a factor of 1.25 when determining component voltage ratings, conductor ampacities, fuse sizes, and size of controls connected to the PV output. Refer to Section 690-8 of the National Electrical Code for an additional multiplying factor of 125 percent (80 percent de-rating) which may be applicable."

Nameplate adhesive label material approval information:

Ritrama's RI-Cote product "RI-COTE 36 PET MATT SILVER UL RECOGNIZED AP900 WG90", UL File Number: MH18669



Supplement to Certificate of Compliance

Certificate: 70216168

Master Contract: 274817

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
80034796	2020-02-24	Updated report 70216168 to add additional ratings for 310 W, 60 cell monocrystalline module, SG310M. No testing required.
80011096	2019-10-08	Updated report 70216168 to add 2 cells to the components. Added model number SGXXXP to the report. Testing was compliant to UL1703 3 rd edition.
70216168	2019-06-17	New certification for 72/60 cell monocrystalline module. Testing was compliant to UL1703 3 rd edition.