

1. Name of manufacturer:	Novasys Greenenergy Private Limited
2. Product:	Crystalline Silicon Photovoltaic (PV) Modules
3. Models:	<p><b><u>Mono Crystalline (PERC):</u></b>  <b>NOVA550MP144 (Representative Model)</b></p> <p><b><u>Series Models:</u></b>  <b><u>144 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA545MP144, NOVA540MP144, NOVA535MP144, NOVA530MP144, NOVA525MP144, NOVA520MP144, NOVA515MP144, NOVA510MP144, NOVA505MP144, NOVA500MP144, NOVA495MP144</p> <p><b><u>132 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA505MP132, NOVA500MP132, NOVA495MP132, NOVA490MP132, NOVA485MP132, NOVA480MP132, NOVA475MP132, NOVA470MP132, NOVA465MP132, NOVA460MP132, NOVA455MP132</p> <p><b><u>120 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA460MP120, NOVA455MP120, NOVA450MP120, NOVA445MP120, NOVA440MP120, NOVA435MP120, NOVA430MP120, NOVA425MP120, NOVA420MP120, NOVA415MP120</p> <p><b><u>108 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA415MP108, NOVA410MP108, NOVA405MP108, NOVA400MP108, NOVA395MP108, NOVA390MP108, NOVA385MP108, NOVA380MP108, NOVA375MP108</p> <p><b><u>96 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA365MP96, NOVA360MP96, NOVA355MP96, NOVA350MP96, NOVA345MP96, NOVA340MP96, NOVA335MP96, NOVA330MP96, NOVA325MP96</p> <p><b><u>72 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA275MP72, NOVA270MP72, NOVA265MP72, NOVA260MP72, NOVA255MP72, NOVA250MP72, NOVA245MP72</p>
4. Model differences provided	YES
5. Model differences verified as per MNRE Guidelines for series formulation	YES
6. Test Results:	

**SUMMARY OF TEST REPORTS NO. 4790378653.1.1-BIS-S1 DATED(mm/dd/yyyy): 08/30/2022**  
**ULR No: TC61682210000547F**

SL	TEST REQUIREMENTS	CLAUSE	VERDICT
1	Marking	4	P
2	Visual Inspection	10.1	P
3	Maximum Power Determination	10.2	P
4	Insulation Test	10.3	P
5	Measurement of Temperature Coefficients.	10.4	P
6	Measurement of NOCT	10.5	P
7	Performance at STC and NOCT	10.6	P
8	Performance at low irradiance.	10.7	P
9	Outdoor exposure test	10.8	P
10	Hot-spot endurance test	10.9	P
11	UV preconditioning	10.10	P
12	Thermal cycling test	10.11	P
13	Humidity freeze test	10.12	P
14	Damp heat test	10.13	P
15	Robustness of termination test	10.14	P
16	Wet leakage current test	10.15	P
17	Mechanical load test	10.16	P
18	Hail test	10.17	P
19	Bypass diode thermal test	10.18	P

**General Information:**

1. The conformity certificates of critical components are verified to ensure complete testing of apparatus under test and details regarding harmonized IEC/UL standards (where IS standards are not available) are also provided in the list of critical component.

**CONCLUSION:**

- 1) Sample meets all relevant requirements of IS 14286 : 2010 (First Revision): Yes
- 2) ~~Sample fails to meet the following test requirements:~~

I, hereby, undertake that the verdict stated in the test reports for all the tests matches with the test results. The sample meets all relevant requirements of IS 14286: 2010(First Revision)/~~does not meet the requirements stated above at 2)~~ of conclusion. If any deviation is found, suitable punitive action may be taken by BIS.

**Date (mm/dd/yyyy): 08/30/2022**

**(Signature of Authorized person)**




TC- 6168



Test Report issued under the responsibility of:

<b>TEST REPORT</b>	
<b>IS 14286: 2010 First Revision</b>	
<b>Crystalline Silicon Terrestrial Photovoltaic (PV) Modules</b>	
<b>- Design Qualification and Type Approval</b>	
<b>Report Reference No</b> .....:	4790378653.1.1-BIS-S1
<b>ULR No.</b> .....	TC61682210000547F
<b>Test Request No.</b> .....	SC22SPI00364
<b>Bar code</b> .....	106338CRS
<b>Encoded Sample code</b> .....:	22EC5A0N
<b>Date of issue</b> .....(mm/dd/yyyy):	08/30/2022
<b>Total number of pages</b> .....	90
<b>Testing Laboratory</b> .....	UL India Pvt. Ltd.
<b>Address</b> .....:	Laboratory Building, Kalyani Platina Campus, Survey. No. 129/4, EPIP Zone, Phase II, Whitefield, IN-560066, Bangalore, India
<b>Applicant's name</b> .....	Novasys Greenergy Private Limited
<b>Address</b> .....	KHASRA NO. 185, MOUZA: MAHALGAON, TAHSIL-KAMPTTEE, NAGPUR-441202, MAHARASHTRA, India
<b>Test specification</b> .....	
<b>Standard</b> .....	IS 14286: 2010
<b>Test procedure</b> .....	IS 14286: 2010
<b>Non-standard test method</b> .....	N/A
<b>Test Report Form No.</b> .....	IS 14286_V1.0
<b>Test Report Form Originator</b> .....	BIS
<b>Master TRF</b> .....	Dated: 19.02.2018

Test item description .....	Photovoltaic (PV) Module(s)
Trade Mark .....	
Manufacturer .....	Novasys Greenergy Pvt Ltd.
Factory.....	KHASRA NO. 185, MOUZA-MAHALGAON, TAHSIL-KAMPTEE, NAGPUR MAHARASHTRA 441202
Model/Type reference .....	<p><b><u>Mono Crystalline (PERC):</u></b>  <b>NOVA550MP144 (Representative Model)</b></p> <p><b><u>Series Models:</u></b></p> <p><b><u>144 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA545MP144, NOVA540MP144, NOVA535MP144,  NOVA530MP144, NOVA525MP144, NOVA520MP144,  NOVA515MP144, NOVA510MP144, NOVA505MP144,  NOVA500MP144, NOVA495MP144</p> <p><b><u>132 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA505MP132, NOVA500MP132, NOVA495MP132,  NOVA490MP132, NOVA485MP132, NOVA480MP132,  NOVA475MP132, NOVA470MP132, NOVA465MP132,  NOVA460MP132, NOVA455MP132</p> <p><b><u>120 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA460MP120, NOVA455MP120, NOVA450MP120,  NOVA445MP120, NOVA440MP120, NOVA435MP120,  NOVA430MP120, NOVA425MP120, NOVA420MP120, NOVA415MP120</p> <p><b><u>108 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA415MP108, NOVA410MP108, NOVA405MP108,  NOVA400MP108, NOVA395MP108, NOVA390MP108,  NOVA385MP108, NOVA380MP108, NOVA375MP108</p> <p><b><u>96 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA365MP96, NOVA360MP96,  NOVA355MP96, NOVA350MP96,  NOVA345MP96, NOVA340MP96,  NOVA335MP96, NOVA330MP96,  NOVA325MP96</p> <p><b><u>72 Half-cut Cell Family- 182mm Cell (1500V System voltage):</u></b>  NOVA275MP72, NOVA270MP72,  NOVA265MP72, NOVA260MP72,  NOVA255MP72, NOVA250MP72,  NOVA245MP72</p>
Ratings .....	<p>Maximum System Voltage= 1500V</p> <p>Maximum Series Fuse rating= 25A</p> <p>For specific electrical ratings Refer to Annex 5</p>



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**Testing procedure and testing location:**

<input checked="" type="checkbox"/>	<b>Testing Laboratory:</b>	UL India Pvt. Ltd	
Testing location/ address .....		Laboratory Building, Kalyani Platina Campus, Survey. No. 129/4, EPIP Zone, Phase II, Whitefield, IN-560066, Bangalore, India	
Tested by (name + signature) .....		Viswanathan K	
Approved by (name + signature) .:		Srimathy N	
Issued by (name + signature).....:		Supratik Ghosh	