Test Report

NOVASYS GREENERGY PRIVATE LIMITED

REPORT NUMBER: 4790378634.3.1-S1

PROJECT NUMBER: 4790378634.3.1

Select the applicable test locations:

☐**LOCATION 1:**

UL India Private Limited,
Laboratory building, Kalyani Platina Campus, Sy.no.129/4, EPIP Zone, Phase II, Whitefield, Bangalore – 560 066
P:91-80-41384400

☐**LOCATION 2:**

UL India Private Limited,
Oak building, Kalyani Platina Campus, Sy.No.129/4,
EPIP Zone, Phase II, Whitefield, Bangalore, Karnataka – 560 066

☐**LOCATION 3:**

UL India Private Limited, 30/A, I Stage, Vishveshwarya Industrial Estate, Doddanekkundi Industrial Area, Bangalore - 560048

☒**Other:**

(#Refer Page no. 3 for Test lab location)

TEST DISCIPLINE: ELECTRONICS
PRODUCT GROUP: SOLAR PANEL

General details

Customer / Applicant	Novasys Greenergy Private Limited KHASRA NO. 185, MOUZA-MAHALGAON, TAHSIL-KAMPTEE, NAGPUR MAHARASHTRA 441202 INDIA		
Manufacturer	Novasys Greenergy Private Limited KHASRA NO. 185, MOUZA-MAHALGAON, TAHSIL-KAMPTEE, NAGPUR MAHARASHTRA 441202 INDIA		
Program	**Other**		
Item Under Test	Mono crystalline PV modules (PERC)		
Model	NOVA550MP144 (tested Model)		
Number of Samples	03 Nos.		
UL Sample Identification	4915518, 4915519, 4915520	**Refer Summary of Test results for multiple samples**	
Manufacturer Serial Number (if any)	NOVABTMPVD00071, NOVABTMPVD00062, NOVABTMPVD00060, for details refer sample identification table.		
Condition of IUT on receipt	Good		
Date of Receipt	29 April 2022		
Applicable Standard	IEC 61701 Edition 3.0, 2020-06- Photovoltaic (PV) modules – Salt mist corrosion testing(Sev-6).		
Date of Testing (Start date)	30 June 2022	**End Date**	6 September 2022
UL general^ ambient condition	**Temperature in °C**		23 ±5°C
	Relative humidity in %		<70 %
Date of Issue	27 September 2022		
Test In-charge	Yapan Wu (China Telecommunication Technology Labs)		

Fill in the rows with information or add hyphen (-)

Supratik Ghosh Engineer Project Associate	Srimathy N Project Engineer
Reviewed by	**Authorized signatory**

General Remarks (If any)

#Test lab location (Other than UL India Private Limited)

Test Laboratory/Location	
[X] UL or Affiliate	[X] Subcontract Lab
Company Name	**China Telecommunication Technology Labs**
Location	CuiHu Cloud Center,No. 1 Gaolizhang Road,Wenquan Town, Haidian District, Beijing

Test witnessed by: Jason You (Senior Project Engineer, UL China).

Below listed models covered in this test report, on basis of having same construction, design and BOM as declared by manufacturer. No testing was considered necessary to cover below listed models. Only changes are the electrical ratings, number of cells and overall dimension from the tested model.

Models covered	156 cells module: NOVAxxxMP156, xxx stands for power range from 550~600, in step of 5 W; 144 cells module: NOVAxxxMP144, xxx stands for power range from 495~550, in step of 5 W; 132 cells module: NOVAxxxMP132, xxx stands for power range from 455~505, in step of 5 W; 120 cells module: NOVAxxxMP120, xxx stands for power range from 415~460, in step of 5 W; 108 cells module: NOVAxxxMP108, xxx stands for power range from 375~415, in step of 5 W; 96 cells module: NOVAxxxMP96, xxx stands for power range from 325~365, in step of 5 W; 72 cells module: NOVAxxxMP72, xxx stands for power range from 245~275, in step of 5 W.

1) The below got test results in this report will relate only to the items tested.
2) This report shall not be reproduced except in full, without the written approval of the testing laboratory.

Description of Item under Test (IUT)

Mono crystalline PV modules (PERC) of 550Wp was tested for Salt-mist corrosion (Sev-6) Test (Model-NOVA550MP144). Total 3 samples were tested, 1 sample was used as control sample.

Summary of Test Results

After the salt-mist exposure test there is no evidence of major visual defects as described in IEC 61215-2:2016 Ed. 1 including also no mechanical deterioration or corrosion of module components.
After the salt-mist exposure test the maximum power was not decreased by more than 5 % of the initial value.
All the test results fulfil the requirements of standard: IEC 61701 Edition 3.0, 2020-06- Photovoltaic (PV) modules – Salt mist corrosion testing(Sev-6).

Test No.	Test Item	Standard references, clause	Result
1	Visual inspection	IEC 61215, Ed.1, 2016-03, MQT 01	**Refer individual test table**
2	Initial stabilization	IEC 61215, Ed.1, 2016-03, MQT 19.1	**Refer individual test table**
3	Maximum power determination	IEC 61215, Ed.1, 2016-03, MQT 02	**Refer individual test table**
4	Insulation test	IEC 61215, Ed.1, 2016-03, MQT 03	**Refer individual test table**
5	Wet leakage current test	IEC 61730-2-2016, Ed.2, 2016-08, MST 17	**Refer individual test table**
6	Continuity test of equipotential bonding	IEC 61730-2-2016, Ed.2, 2016-08, MST 173	**Refer individual test table**
7	Salt Mist Test (Severity 06)	IEC 61701, 2020, IEC 60068-2-52, Ed.3, 2017-11	**Refer individual test table**
8	Cleaning and recovery	-	**N/A**
9	Visual inspection	IEC 61215, Ed.1, 2016-03, MQT 01	**Refer individual test table**
10	Maximum power determination	IEC 61215, Ed.1, 2016-03, MQT 02	**Refer individual test table**
11	Insulation test	IEC 61215, Ed.1, 2016-03, MQT 03	**Refer individual test table**
12	Wet leakage current test	IEC 61730-2-2016, Ed.2, 2016-08, MST 17	**Refer individual test table**
13	Continuity test of equipotential bonding	IEC 61730-2-2016, Ed.2, 2016-08, MST 173	**Refer individual test table**
14	Bypass diode testing	IEC 61215, Ed.1, 2016-03, MQT 18	**Refer individual test table**

Abbreviations used in the report:

Pmax	– Maximum power
Vmp	– Maximum power voltage
Imp	– Maximum power current
Isc	– Short circuit current
Voc	– Open circuit voltage
FF	– Fill factor
N/A – not apply to the object	