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

\square LOCATION 2:

P:91-80-41384400

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

\square LOCATION 3:

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

\boxtimes Other:

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

Report Number: 4790378634.3.1-S1



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	Temperature in °C		23 ±5°C	
condition	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	Srimathy N
Engineer Project Associate	Project Engineer
Reviewed by	Authorized signatory

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CIN: U74200KA1997PTC023189

Report Number: 4790378634.3.1-S1



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
	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.

Report Number: 4790378634.3.1-S1



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