



National Institute of Solar Energy

(An Autonomous Institution of MNRE, GOI)

19 K.m Stone, Gurgaon-Faridabad Road, Gwal Phari, Gurgaon (Haryana)-122003

File No: 55/2017-18 /CSC/NISE/374

Dated: 19-07-17

To,
M/s RiHka Systems Private Limited.
C-25, Sector-65
Noida - 201301 U.P

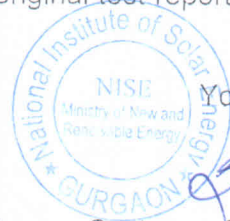
Subject: Issue of Test Report by National Institute of Solar Energy ('NISE')

Dear Sir,

Please refer to your letter No./Order Form No. 10 Dated 12-05-10. In this connection, I am directed to enclose herewith the Test Report No : 5500/34/2017-18/PID/NISE Dated 18-07-17. In respect of your submitted samples in original, for ready reference and record.

- Discrepancies, if any observed, in respect of any of the entries contained in the above report should be brought to the notice of this office within 30 days from the date of issue of this letter, falling which it will be presumed that the entries therein are in order and no further correspondence will be entertained thereafter on this particular report.
- We would like to solicit your views and therefore enclosing a Feedback Form with a request to be filled up by you and then send as soon as possible. Your suggestions are valuable for us to make our further improvements and take corrective action in improving our quality of service.
- Further, You are also requested to collect your samples at your cost within 30 days, from the date of issue of this letter falling which NISE will dispose of the sample in best possible manner and NISE will not be responsible in any manner for this sample.

Kindly acknowledge the receipt of this letter along with original test report and original Invoice.



Yours faithfully

Shweta
10/7/2017
(In-charge, Customer Service Cell)
(National Institute of Solar Energy)

Encl:

- Test Report-Total Page 04
- Feedback Form

Copy forwarded for Information to:

- PA to Director General-NISE
- Guard File
- Office Copy



National Institute of Solar Energy

(Formerly known as Solar Energy Centre)

(An autonomous Institute of Ministry of New & Renewable Energy)

Gurgaon-Faridabad Road, Gwalpahari, Gurgaon-122003
✉ csc.nise@gmail.com ☎ 0124-2579251; FAX: 0124-2579207

2017-2018

TEST REPORT ON POTENTIAL INDUCED DEGRADATION TEST OF PV MODULE

Service Request No.: 55 (1)/34/2017-18/PID/NISE

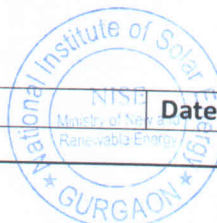
Manufactured by: M/s Ritika systems private limited, Noida

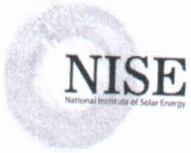
Submitted by: M/s Ritika systems private limited, C-25, Sector-65, Noida 201301

NOTE

This is a report on measurements carried out on PV module (Service Request No: 55 (1)/34/2017-18/PID/NISE) submitted to the National Institute of Solar Energy as per MNRE specifications. The data reported in this TEST REPORT are valid at the time of and under the stipulated conditions of measurement and the test results are applicable to those items of product which have been tested and do not apply to other products even though declared to be identical. The data contents in this report do not constitute a qualification certificate under any set of specifications. NISE does not accept any liability for any consequences including commercial or otherwise arising out of the utilization of the information contained in this report. The Test Report, if reproduced for any purpose, commercial or otherwise, should be reproduced in full. The contents of the report can be published only after a written approval from the Director General, NISE. This report consists of **03 pages**.

Chirpal Kumar
18/07/2017





NATIONAL INSTITUTE OF SOLAR ENERGY

(FORMERLY KNOWN AS SOLAR ENERGY CENTRE)
(An autonomous institute of Ministry of New & Renewable Energy, Government of India)
Village & Post-Gwalpahari, Dist-Gurugram, (Haryana), Pin - 122003.
Ph. 0124-2579251 (CSC), Fax: 0124-2579207

A. SCOPE

1.	Service Request No.	55 (1)/34/2017-18/PID/NISE
2.	Requested By (Name & Address of the organization)	M/s Ritika systems private limited, C-25, Sector-65, Noida 201301
3.	Details of the test item	
	a. Nomenclature	PV Module
	b. Manufactured By	M/s Ritika systems private limited
	c. Model / Type No.	RSPL24P300
	d. Serial No.	RSPLE17PD-000005, RSPLE17PD-000006 RSPLE17PD-000007, RSPLE17PD-000008.
4.	Date of Submission of Samples	11/05/2017
6.	Date of Completion of Tests	04/07/2017
7.	Applicable test specifications	Potential induced degradation test as per MNRE specifications
9.	Test parameters	Biased 2(+V), 2(-V) modules at 1000 V. Testing in environmental chamber for 3 cycles at 85% relative humidity and 85°C temperature for 96 hours (test procedure as per IEC TS62804-12015)

B. MAJOR EQUIPMENTS USED

S.No.	NOMENCLATURE	MAKE	MODEL
1.	SUN SIMULATOR	ENDEAS	QUICKSUN 700A
2.	Environmental chamber	CTS	CT 60/10
3.	High voltage DC power supply	EA	EA-PS 81500-30

Test Report No. 55 (1)/2017-18/PID/NISE

Date: 17/07/2017

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Group Kumar
18/07/2017





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C. Test results


1.
Make : **Ritika systems private limited**
Model No. : Multi Crystalline Si/ **RSPL24P300**
Cell Area : 243.36 Sq.cm.
Module Area : 19433.51Sq.cm

Sr. No	Module Sr. No	Applied Voltage V dc	Initial Pmax (W)	Final Pmax (W)	Deviation in Pmax (Δ %)	Degradation allowed	Remarks
1	RSPLE17PD-000005	-1000	309	303	1.9%	5%	Pass the PID test
2	RSPLE17PD-000007	-1000	308	304	1.29%	5%	Pass the PID test
3	RSPLE17PD-000006	+1000	308	297	3.5%	5%	Pass the PID test
4	RSPLE17PD-000008	+1000	306	300	1.9%	5%	Pass the PID test

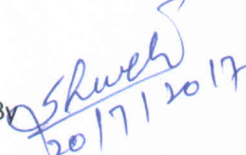
All the modules meets the criterion of visual inspection, wet leakage current test and ground continuity test as per IEC TS 62804-1:2015 before and after the PID test.


Prepared by
Gopal Kumar
(Senior Research Scientist)

Date: 18/07/2017.


Authorized Signatory
Dr. Rajesh Kumar
(D.D.G, NISE)

Date.....

Issued By 
20/7/2017

Date.....

