



LETTER REPORT

Sparq

Scope of Works

PV Micro-inverter Q2000-4102 Environmental Testing

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TUV Rheinland of North America, Inc.
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Report No. US22GKNR.001

Project No. 234192166

Mr. Shangzhi Pan
Sparq
945 Princess St. Box 212
Kingston, ON K7L 0E9, Canada

Email: span@sparqsys.com

Subject: PV Micro-inverter Q2000-4102 Environmental Testing

Dear Mr. Shangzhi:

This letter report is to present the results of tests standard for the above equipment in accordance with the following standards with reference to the Intertek report 103902373GRR-001 dated April 23, 2019:

- *IEC 60068-2-1 Environmental Cold*
- *IEC 60068-2-2 Environmental Dry Heat*
- *IEC 60068-2-14 Rapid Change of Temperature*
- *IEC 60068-2-30 Damp Heat Cyclic*

The component replacement shall not adversely affect the test results after TUV engineer reviewed component ratings including storage temperature range and operating temperature range. It is concluded that the following test results still remain valid without any further tests:

- *IEC 60068-2-1 Environmental Cold for storage(non-operating), operating*
- *IEC 60068-2-2 Environmental Dry Heat for storage (non-operating), operating*
- *IEC 60068-2-14 Rapid Change of Temperature*
- *IEC 60068-2-30 Damp Heat Cyclic*

If there are any questions regarding the results contained in this report, or any of the other services offered by TUV Rheinland of North America, Inc., please do not hesitate to contact the undersigned.

Please note, this letter report does not represent authorization for the use of any TUV Rheinland certification marks.

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