

Beat: Technology

## SERAPHIM 210mm MODULES Pass TUV SUD HIGH-GRADE HAILSTONE IMPACT TEST

BY SERAPHIM ENERGY GROUP CO

PARIS - BEIJING, 16.03.2022, 08:55 Time

**USPA NEWS** - Seraphim Energy Group Co., Ltd. (Seraphim), a leading global solar product manufacturer, has recently announced that its 210mm large photovoltaic (PV) modules have passed the high-grade hailstone impact test, with performance degradation rate as low as 0.2 percent. Due to global climate change, there is a tendency for an increasing number of extreme weather events, such as hail storms, which can affect the PV modules used as outdoor power-generating devices.

Seraphim Energy Group Co., Ltd. (Seraphim), a leading global solar product manufacturer, has recently announced that its 210mm large photovoltaic (PV) modules have passed the high-grade hailstone impact test, with performance degradation rate as low as 0.2 percent. Due to global climate change, there is a tendency for an increasing number of extreme weather events, such as hail storms, which can affect the PV modules used as outdoor power-generating devices.

Under such circumstances, a hailstone impact test is commonly introduced to ensure the safety and performance of these PV systems.

Normally, hailstones used in the hailstone impact test are only 25 millimeters in diameter and strike the PV modules at a speed of only 23 meters per second.

However, for Seraphim's 210mm modules, during the test, hailstones with a diameter of 45 millimeters strike the glass surface of the modules at a speed of 30.7 meters per second (about 110.5 kilometers per hour). The test results show that the anti-kinetic energy impact performance of the 210mm modules is ten times the original industry standard.

According to the lab staff, the test was very thorough, which included strikes to 11 defined impact points on the collector surface. After the test, the appearance, safety and power output of the modules have proven to be only slightly affected. Notably, the performance degradation was as low as 0.2 percent.

"Passing the hailstone impact test proves that Seraphim's PV products are highly reliable. This is a result of our dedication in improving product performance, introducing innovation and conducting strict quality control," said Polaris Li, President of Seraphim.

The test was conducted by qualified experts from TUV SUD, a premium quality, safety, and sustainability solutions provider, in Seraphim's world-class research center.

Founded in 2013, the center boasts a complete ability to conduct research and tests of PV modules, already having several qualifications awarded by global renowned institutions.

Moving forward, Seraphim stated they will continue to conduct additional performance and safety tests with stricter requirements than the IEC Standard, in order to prove the high efficiency and reliability of its 210mm large modules.

Source: Xinhua Silk Road

Ruby BIRD

<http://www.portfolio.uspa24.com/>

Yasmina BEDDOU

<http://www.yasmina-beddou.uspa24.com/>

**Article online:**

<https://www.uspa24.com/bericht-20220/seraphim-210mm-modules-pass-tuv-sud-high-grade-hailstone-impact-test.html>

**Editorial office and responsibility:**

V.i.S.d.P. & Sect. 6 MDStV (German Interstate Media Services Agreement): Ruby BIRD & Yasmina BEDDOU (Journalists/Directors)

**Exemption from liability:**

The publisher shall assume no liability for the accuracy or completeness of the published report and is merely providing space for the submission of and access to third-party content. Liability for the content of a report lies solely with the author of such report. Ruby BIRD & Yasmina BEDDOU (Journalists/Directors)

**Editorial program service of General News Agency:**

United Press Association, Inc.  
3651 Lindell Road, Suite D168  
Las Vegas, NV 89103, USA  
(702) 943.0321 Local  
(702) 943.0233 Facsimile  
[info@unitedpressassociation.org](mailto:info@unitedpressassociation.org)  
[info@gna24.com](mailto:info@gna24.com)  
[www.gna24.com](http://www.gna24.com)