

PI-Berlin Desert Testing

the most powerful sun and the harshest condition

The desert can be a hostile and unfriendly place for PV-Modules. Humans can protect them self with clothing, a skin pigmentation and seek shelter when the eviroment gets too bad. PV-Modules can not run and can not hide so they need to be made out of the best materials to face the harsh nature. The best materials are necessary to deliver the performance they were designed to do. With the PI Berlin on your side, life in the desert gets comfortable and your modules will show excellent performance.

The glass of the PV-Module is its protection and the gateway to the power generation. If the glass looses its properties the generated power will drop significant. PI-Berlin tests the most crucial properties of the module to a successful deployment in the desert.

Dust and Sand Testing

Modules installed in the desert are subjected to sandstorms and other harsh weather conditions. Dust- and Sand tests evaluating the influence on the modules and its components (Glass, junction box, Backsheet etc.)

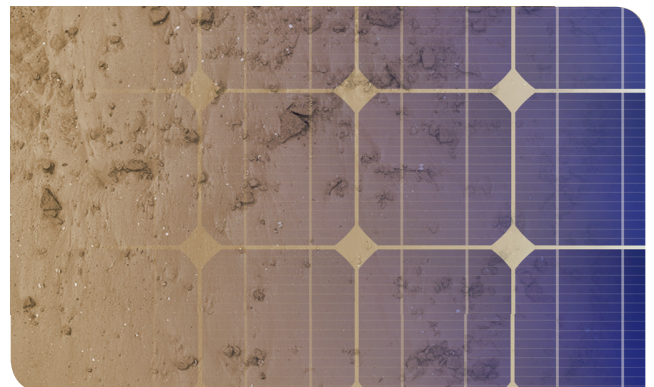
- Standards: NATO-AECTP 300, Method 313; IEC 60068-2-68
- Special test condition for different deserts, variation of particles, their size and geometry
- Module and glass producer: Material selection and epitomizing; EPC and Investors: Evaluation of modules and investigation of long term performance.



Abrasion Test

Little strokes fell big oaks. Investigating the resistance of abrasion of the glass, plastics and their coatings.

- Standard: DIN EN 1096-2:2012
- The reporting of the test is improved to suit the needs of th PV industry.



Soiling Test

When the dirt piles up, the sun is left outside.

- Standard: PR NF EN 1096-5:2011 (Draft)
- The soiling can be adapted to the regional conditions.

Your Contact: Alexander Preiss | Preiss@pi-berlin.com

PI Photovoltaik-Institut Berlin AG

Wrangelstraße 100
D-10997 Berlin, Germany

Tel: +49 30 8145 264 – 0
Fax: +49 30 8145 264 – 101
E-mail: info@pi-berlin.com
Web: www.pi-berlin.com



Services along the entire PV-value chain

September 2013