

PI Berlin Desert Testing

Verify your Modules under the Harshest Conditions

The desert can be a hostile and inhospitable place for PV modules. Humans can protect themselves with clothing, skin pigmentation and seek shelter when the environment is too intense. PV modules cannot run and hide so they need to be made from the best materials to withstand nature's harshest conditions and to deliver the performance for which they were designed. With **PI Berlin** on your side, life in the desert gets comfortable and your modules will show excellent performance.

The glass of the PV module serves as both protection and the gateway to power generation. If the glass degrades, the generated power will drop significantly. **PI Berlin** tests the most crucial properties of the modules for successful deployment in the desert.

Dust and Sand Testing

Modules installed in the desert are subjected to sandstorms and other harsh weather conditions. The Dust- and Sand tests evaluate their influence on the modules and its components (e.g. glass, junction box, backsheet etc.)

- Standards: NATO-AECTP 300, Method 313; IEC 60068-2-68
- Special test conditions for different deserts by variation of particle size and geometry
- For module and glass producers, selection and optimization of materials
- For EPCs and investors, evaluation and verification of module long term performance.



Abrasion Test

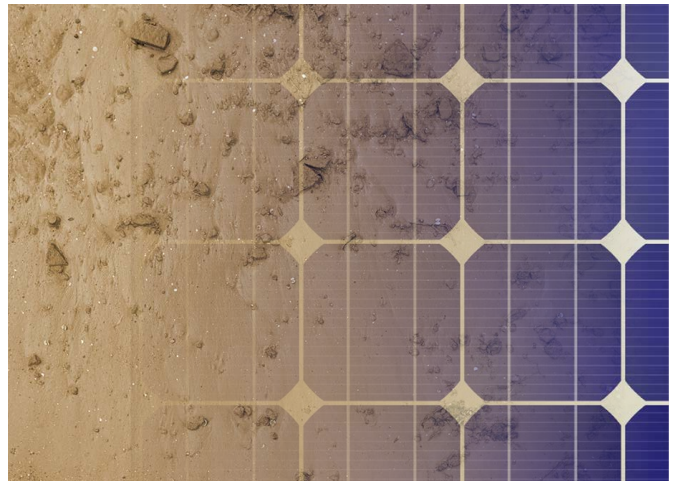
Investigations into the resistance of abrasion of the glass, plastics and their coatings are particularly relevant for desert conditions.

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

Soiling Test

Accumulation of sand and dirt can lead to significant power losses. Simulate and verify the module's performance under site specific conditions

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



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