

Freiberg Instruments





## FAST EVALUATION OF LONG-TERM DEGRADATION MODES

- Potential-induced degradation (PID) and recovery tests with high voltage between cells and surface
- Light-induced degradation (LeTID, LID) tests with current injection
- In-situ real-time estimation of electrical losses possible through periodic dark I-V curve acquisition
- Based on existing laboratory test standards
- Acceleration with a heating mat on module surface (85 °C)
- Small footprint, no infrastructure needed

## NO DEGRADATION SO FAR?

- Stress and recovery test for indication of degradation vulnerability
- Quality check after installation or prior to purchase of PV power plants

## **DEGRADATION SUSPECTED?**

- Recovery test as proof of existing degradation
- Power and yield forecast with proceeding degradation
- Evaluation of degradation countermeasures

## CONTACT

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