

## **INSIGHTS**

No.4

## **On-site PV plant inspections**

In case of **suspected PV plant underperformance**, we are fully equipped to perform multiple on-site testing verifications to formulate a diagnosis and rapidly plan the most appropriate and cost-effective solutions.

Similarly, let a trustable and third-party opinion assist you during the **commissioning phase of your new PV project**.

#### 1. Electrical characterization

- Current-voltage IV curve tracing
- Verification of module/string insulation resistance
- Inverter performance verification
- Plant commissioning and performance verification

### 2. Imaging techniques

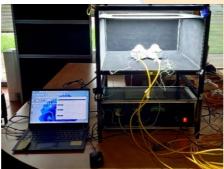
Many defects that are not visible to the human eye become visible with:

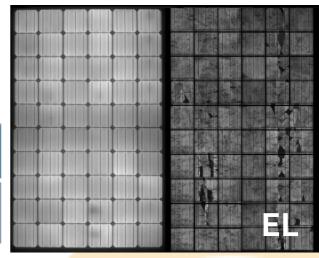
- Electroluminescence (EL)
- UV-Fluorescence analysis (UV-F)
- Thermography or infra-red (IR), including drone-assisted inspections.

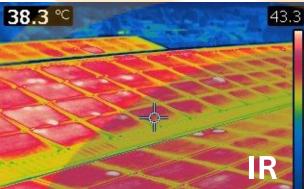
## 3. Pyranometer & radiometric sensors

- **On-site recalibration** of pyranometers with portable Cal-Kit (oSole's own development, **patented**).
- A regular maintenance and recalibration of radiometric sensors is key in having reliable monitoring data and analyzing PV plant performance.









# AT A GLANCE

#### **CHALLENGES**

- PV plant commissioning
- Optimal PV plant operation
- Understand root causes of underperformance

#### BENEFITS

- Rapidly detect nonvisible failures
- Classify and prioritize failures
- Restore PV system's performance
- Avoid safety hazards



### **OFFICINA DEL SOLE**

TESTING | ANALYSIS | SOLUTIONS

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