

# HOW DO YOU KNOW WHAT ISSUE YOUR PV MODULE HAS FROM YOUR COUCH?

**S**ustainable Energy: A Crucial Focus in today's Global Economy.

Clean energy is a priority for businesses around the globe. Companies are investing in new ways to generate, use, and store energy as they work towards the goals outlined in the Paris Climate Accords of 2015. These accords set sustainability objectives for 2030 and 2050, and companies are proactively taking steps to meet them.

Moreover, the crisis lead by the Russian-Ukrainian war has made achieving this goal even more challenging.

As a result, the Photovoltaics Industry is experiencing exponential growth, which highlights the importance of maintaining the plants in optimal condition to generate maximum clean energy.

Unfortunately, maintenance tasks are often difficult to perform and can be inefficient, resulting in increased costs and labor risks.

Operations and maintenance (O&M) is a primary challenge for the PV industry, accounting for around 30% of operational expenses. In Europe, the reported annual cost is about \$10/kW, while in the US, it ranges from \$10-18/kW.

Maintenance is a crucial aspect of all PV installations, whether it be a large utility with hundreds of thousands of modules or a residential project with just ten modules on the roof.

Identifying the location, degradation and issue of each PV is challenging in all types of installations.

Conventional manual revisions are time-consuming and expensive (car trips and labor costs), which is why only about 5% of the plant is typically reviewed and only twice a year.



Monitoring Platforms base their analysis in Production Information only, failing to deliver sufficient data for diagnosis. As a result, manual maintenance is required to locate and identify issues. However, manual checks can be dangerous, as they involve risks such as electrical and thermal shock or falls, in cases where installations are on rooftops.



**Clever Solar Devices Introduces a Revolutionary PV Maintenance Solution:**

**Our Photovoltaics 4.0- a cutting-edge diagnostic platform that goes beyond simple monitoring to identify and locate PV module issues without any manual intervention, automatically and remotely. Users can quickly determine which modules are faulty, their location within the installation, the type of issue, and the level of degradation as our patented hardware and our AI technology are constantly diagnosing each module in the installation.**

**This powerful tool saves time and money by allowing for operational planning and efficient business decisions to be made with just 3-clicks from the comfort of your couch.**