



All-in Panel Sensor

APS is an original **clamp-on** device that, **without interrupting the string continuity**, delivers real-time measurements of the **PV panel string current, temperature, and tracked PV panel tilt.**

Reactive O&M practices with a correct diagnosis and localization of anomalies at the panel level and a tracker level is crucial in order to improve performance and maximize the return on investment of solar assets.

Its measurements lead a precise diagnosis of the faults origins (i.e. broken fuse, wire rust, connector faults, local shading, local soiling, tracking misalignments, early degradation in solar panels) overcoming the difficulty of finding and locating anomalies at the panel and tracker level.



PV panel and tracker monitoring made agile, precise, low-cost

- ✓ Small and lightweight
- ✓ Highly versatile
- ✓ Extremely easy to install
- ✓ Usable under any weather conditions
- ✓ Maintenance-free
- ✓ High reliability (MTBF ~10 years)

Fault Diagnosis, cut O&M costs, grow profits

APS is profitably employed within **Sibyl Solar**, the top-class cloud, real-time and predictive solution, based on the most advanced **Machine Learning, Deep Learning and Quantum algorithms**, to increase the performance ratio, to forecast the production of the solar plants and to optimise the O&M interventions across several solar assets.

Applications

- Local diagnosis of PV (fixed and tracked) panel anomalies
- Local diagnosis of tracker anomalies
- O&M interventions optimisation
- PV plant performance monitoring and optimisation
- PV production forecasting

APS has been tested

- by Enel Green Power

APS is a **sunto** proprietary technology. Patent pending.