

PV Sprint.

PV Sprint is an energy yield performance benchmark assessment that provides fast results for increased confidence and market competitiveness through a compact and fast testing.



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PV SPRINT BENCHMARK TESTING

Providing thorough measurements, a precise analysis and effective marketing materials, our three-month PV Sprint outdoor energy yield benchmark assessment offers a sound alternative to longer, in-depth module performance testing and certification packages for faster implementation and time-to-market. The assessment is a chance to compare the performance of your PV modules with other, state-of-the-art modules.

Manufacturers, EPC authorities, solar power plant operators, governmental bodies and potential investors rely on outdoor <u>energy yield assessment</u> to boost confidence in and add value to projects dependent on highly efficient PV modules.

We conduct comprehensive PV module testing in the laboratory and in the field at various locations worldwide to help you ensure the reliable operation and optimal performance of your solar power plant products and projects.

THE PROGRAM – 3 MONTHS

MEASUREMENTS

- Initial measurements
- Light soaking
- Meteorological data

ANALYSIS

- Monthly outdoor performance
- Monthly irradiance and ambient temperature

MARKETING

- Benchmark charts & ranking amongst state of the art PV modules (only MPR)
- Publication in white paper

THE PROCESS

Two randomly selected PV modules are sent to the TÜV Rheinland laboratory. After initial measurements, one PV module will be selected to undergo outdoor exposure, while the other will be kept as a backup. Our rapid PV Sprint benchmark testing process is divided into the following steps:

1. PV sampling

Random selection of two PV modules

- 2. Shipment to laboratory Shanghai, Bangalore or Cologne
- 3. Initial laboratory measurements

Visual inspection, electroluminescence image, maximum power determination under Standard Testing Conditions (STC)

- Output power stabilization (LID) Prior to outdoor exposure, one of the two modules will be stabilized according to IEC 61215-2
- 5. Shipment to outdoor test location
 - Sample shipped to selected sites:
 - Thuwal, Saudi Arabia (coastal desert, sand storm impact)
 - Tempe, USA (desert arid)
 - Cologne, Germany (moderate)
- 6. Three-month outdoor exposure

Energy yield monitoring by maximum power tracking (MPP)

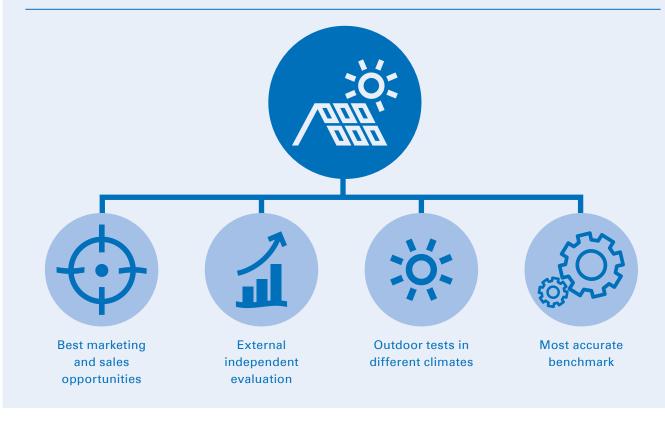
7. Report and publication Individual customer report and MPR diagram in public whitepaper

PV SPRINT PROVIDES YOU:

- Valuable data at a low price
- Effective marketing material
- Support data for investors, EPC authorities, bank officers and other decision makers in bid evaluation for various climate zones

PV Sprint is a voluntary, unrated benchmark. <u>Speak to a</u> <u>service representative</u> for further information regarding this and other outdoor certification programs and the Energy Yield Rating Label.

OUR ADVANTAGES. YOUR BENEFITS



Our clear and precise PV Sprint: laboratory and outdoor benchmark testing, provides you the transparent proof you need to demonstrate your commitment to quality and reliability to your customers and business partners. With a 3-months duration, our PV Sprint program is designed to streamline testing requirements and get you to market fast with independent, globally recognized energy yield performance assessment. Learn more about our PV sprint testing! Speak with an expert today!

ONLINE CONTACT

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