

Solar Workstation

Solar Simulator
LBIC

Increase your productivity!

Accurate characterization of solar cells requires a good and stable light source, good measurement hardware and software, precise knowledge of the solar cell active area and good protocol. The Solar Workstation is a highly cost efficient platform that allows you to do it all with just one package. This turnkey solution is the best choice for starting up and expanding a 3rd generation PV laboratory, as well as established laboratories that wish to expand and increase productivity.



Solar cell characterization and lifetime testing of Organic Photovoltaics (OPV), Perovskite Solar Cells, Dye Sensitized Solar Cells (DDSC), Kesterites, Quantum Dot Solar Cells, CIGS, Silicon PV

Productivity Platform

ISOSun Solar Simulator

The ISOSun solar simulator provides homogenous light simulation over large area with easy implementation of filters, neutral density filters, cooling and wiring. The ISOSun solar simulator enables reproducible testing of large PV devices up to 25 x 25 cm². The large experimental compartment with ventilation fans enables good access with easy wire routing for external measurement devices. An integrated temperature sensor and photo diode provide instant data acquisition and make adjustments possible.



LBIC

Light beam induced current (LBIC) enables fast high resolution mapping of the photovoltaic response of solar cells over very large areas from single cells to modules. It is the ideal tool for the measurement of photovoltaic active areas, identification of defects, shunts, inactive regions and coating errors. Ultrafast laser scanning enables device testing in seconds over large area, compared to hours in ordinary XY-stage system. The low-noise system is immune to external light input and available in single wavelength or multiwavelength configurations.



Turnkey package

- ISOSun solar simulator
- LBIC (Basic configuration, single wavelength)
- Testing hardware for single cells or modules
- Calibration equipment
- Computer
- SMU
- Software package (IV-data, lifetime data, LBIC imaging)
- Installation

